Minninup Pool Precinct Project

Aboriginal Heritage Assessment

Report prepared for:

Shire of Collie

Report prepared by:

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February 2019

EXECUTIVE SUMMARY

Objective

The objective of the overall project is to achieve a local Noongar vision for Minninup Pool that protects and celebrates the cultural heritage values of the place and considers opportunities for nature-based tourism. The visioning report is a separate but related document. The two reports are intended to be read together.

The objective of this Aboriginal Heritage Assessment is to identify the range of ethnographic and archaeological values, which may be impacted by on-ground actions at Minninup Pool and to develop management recommendations to mitigate or lessen the impacts.

Archaeological Results

The archaeological survey did not identify any places of archaeological significance in Reserve 34343, which would be considered a site under Section 5a of the Aboriginal Heritage Act. A single quartz backed blade was found within the survey area at location 420367mE 6306359mN (Zone 50).

Ethnographic Results

The ethnographic survey resulted in the identification of a range of spiritual, social, ecological and cultural values associated with the place, primarily focussed around the Collie River (see significance statement). This previously registered place warrants continued protection under Section 5 (b) of the *Aboriginal Heritage Act*, based on its association with the Ngarngungudditj Walgu Nyitting Yarn (dreaming story) and a range of other heritage values. The results of the ethnographic survey are consistent with those of previous heritage surveys.

Conclusions

In summary, Minninup Pool is a high-profile heritage place that has been extensively documented as a place of high spiritual and social significance for Noongar people past and present. The results of this Aboriginal Heritage Assessment and community visioning process support and build-upon the existing literature and documentation about the place. Based on the community visioning process and the ethnographic survey, there is a clear consensus among the Traditional Owners and the Collie Noongar community that they support a project to upgrade the day-use facilities and to consider eco-camping options within the prescribed area, outlined through the visioning process. The community visioning report provides details about what on-ground actions are supported by the community. Ongoing involvement of the Noongar community in the project is integral to its success.

Recommendations

It is recommended that the Shire of Collie and their partners, including the Collie Noongar community, proceed with the planning and installation of day-use and eco-camping facilities within Reserve 34343 at Minninup Pool, subject to the following recommendations.

1. **It is recommended** that any on-ground works at Minninup are consistent with the Noongar vision for the place, as documented in the accompanying report.
2. **It is recommended** that the Shire of Collie seek Section 18 approval to undertake the works from the Department of Planning Lands and Heritage, before any on ground actions are taken. This document and the accompanying Visioning Report can be used as the basis for a Section 18 application.

3. **It is recommended** that the Shire of Collie undertakes consultation with the Noongar Elders about the final plans, before proceeding with the on-ground works. This is due to the fact that the current plans are only conceptual in nature and do not provide specific details. Another formal Aboriginal heritage assessment is not required. The results of the consultation about the final plans can be added as an addendum to this report.
4. **It is recommended** that the felled tree on the riverbank is not removed, due to its cultural significance.
5. **It is recommended** that Noongar monitors are to be engaged for any ground disturbing works taking place in or around the river.
6. **It is recommended** that the Shire of Collie work toward stopping illegal camping in and around the precinct.
7. **It is recommended** that female and male toilets with disabled access be installed on site.
8. **It is recommended** that every effort is made to protect the flora within construction activities, and that boardwalks be considered as an option for protecting flora from increased visitor numbers.

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1.1. Objective

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The objective of this Aboriginal Heritage Assessment is to identify the range of ethnographic and archaeological values, which may be impacted by on-ground actions at Minninup Pool and to develop management recommendations to mitigate or lessen the impacts.

Figure 1. Project team at Minninup Pool

1.2. Personnel

Core Project Group
Joe Northover
James Kahn
Shirley Hayward
Norm Hayward

Consultant Team
Dr Myles Mitchell
Rosie Halsmith

Ethnographic Survey Team
Joe Northover
James Kahn
Shirley Hayward
Norm Hayward
Lynette Winmar
Irene Khan
Phyllis Ugle
Kristina Ugle

Community Visioning Meeting 1
Donna Turvey
Lynette Winmar
Shirley Hayward
Norm Hayward
Joe Northover
James Khan
Dianne Barron
Joy Ugle
Dulcie Hart
Eddy Barron
Phillip Ugle
Natasha Ugle
Tayt Oden
Ellen Corbin
Dedrea Winmar

Community Visioning Meeting 2
TBA

One-on-One Conversations
Elaine Chitty
Donna Turvey
Phillip Ugle

Project Management Group
Shire of Collie

South West Development Commission
Tourism WA
Ngalang Boodja Council
Parks and Wildlife
Hon. Mick Murray Member for Collie Preston
Dept. Sport and Recreation

1.3. Location

Minninup Pool is located on a bend in the Collie River (Figure 2), approximately 3km from the Collie Town Centre. It is a well-known recreation place for local people and visitors. The area that is the subject of this heritage assessment is part of the Shire managed Reserve 34343 (Figure 3)

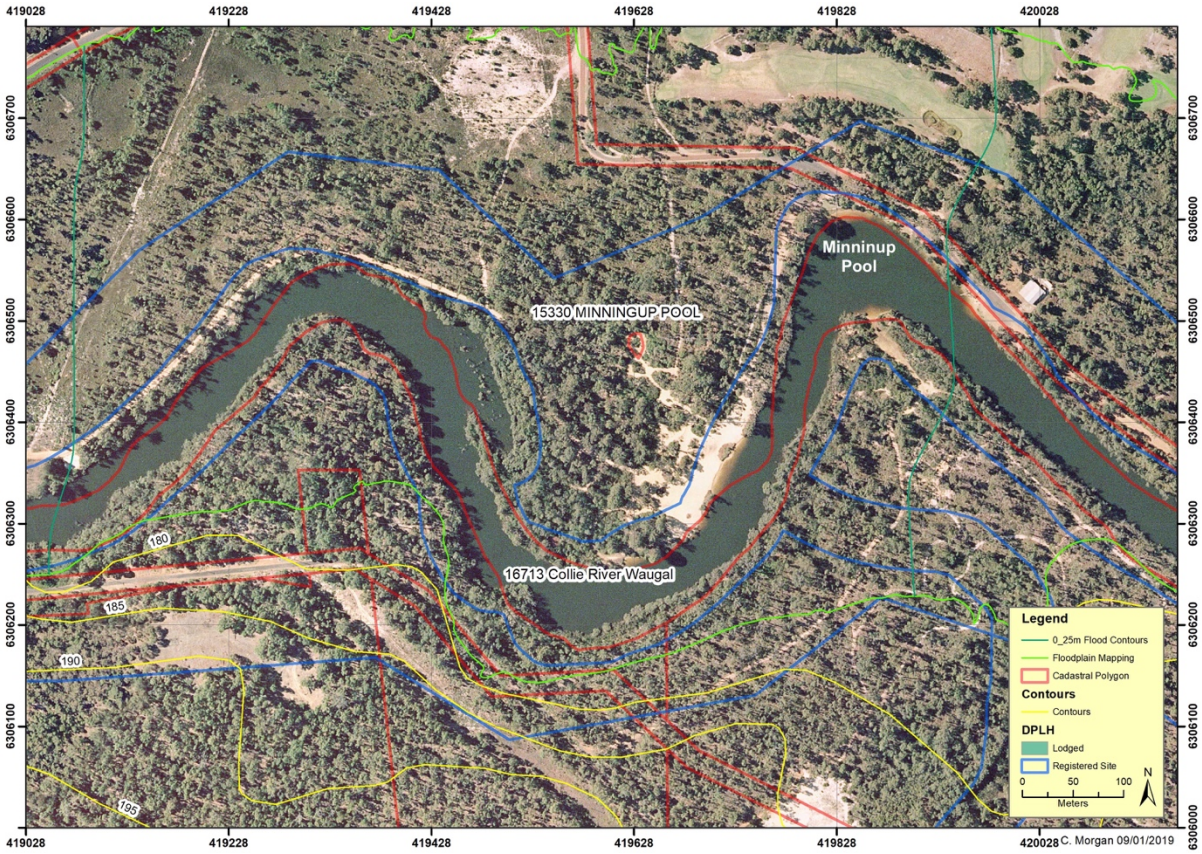

Figure 2. Map showing section of Collie River on which Minninup Pool is situated.

THE PROJECT SITE

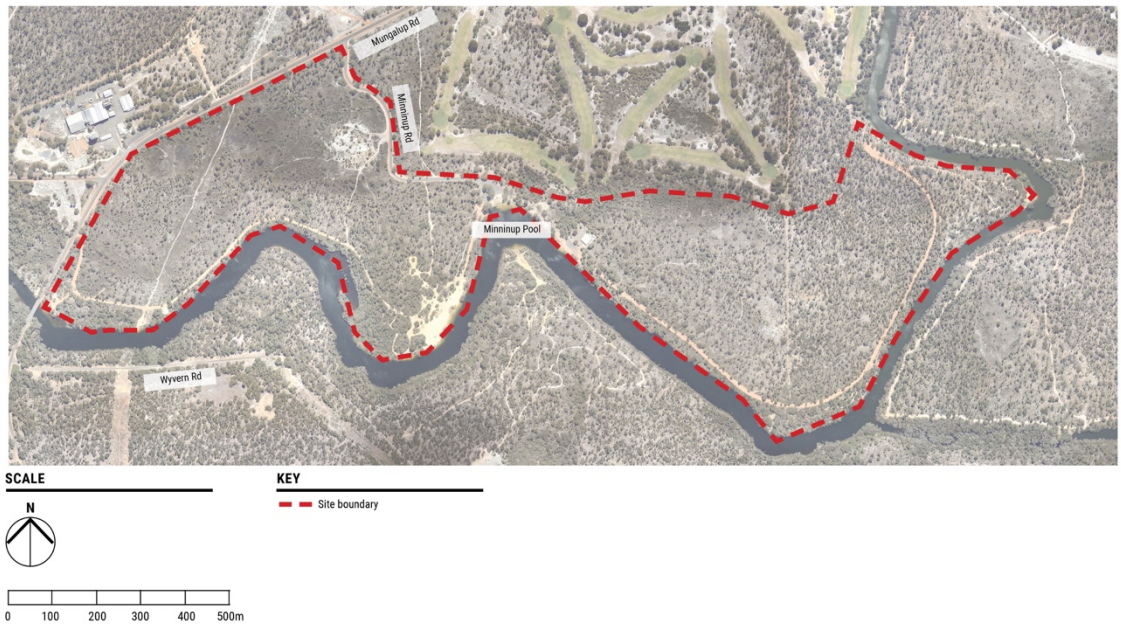

Figure 3. Map showing Reserve 34343 (the project area). *Reference: To & Fro Studio*

2. BACKGROUND

2.1. Project Background

The following information was provided by the Shire of Collie in the Request for Tender document and provides a useful background for this project.

The Shire of Collie is undertaking planning, including feasibility and environmental assessments, for a nature-based tourism facility, including short stay accommodation and day use facilities at Minninup Pool, Reserve 34343, Collie. Minninup Pool is a registered Aboriginal heritage site (ID 15330) as is the Collie River (ID 16713).

There are two major components to this project. The first is an engagement and vision process to establish the local Aboriginal community's long-term vision for the site (see separate report). The second is the desktop and on ground heritage assessment and associated development of documents necessary for any statutory heritage approvals (this report).

Aboriginal community engagement is vital to ensure the vision and involvement of Aboriginal stakeholders is integral to the assessment and decision making for this site.

Therefore, a comprehensive Aboriginal engagement process is required which includes:

- The preparation and implementation of an Engagement Strategy
- Discussions and visioning workshops.
- The identification of opportunities for Aboriginal involvement and interpretation including potential management, employment, activities and tours.
- A final report outlining the outcomes of the engagement process including recommendations for site development

The outcomes of this part of the project will be used to inform the prefeasibility and concept plan that is Stage 2 of the larger overall Minninup Pool Precinct Project.

2.2. Definitions of Aboriginal Heritage Places

The legal definition of an Aboriginal heritage place in Western Australia is covered in Section 5 of the *Aboriginal Heritage Act* (1972, as amended). Aboriginal Heritage Places are defined as:

(a) any place of importance and significance where persons 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 the Aboriginal people, past or present;

(b) any sacred, ritual or ceremonial site, which is of importance and special significance to persons of Aboriginal descent;

(c) any place which, in the opinion of the Committee, is or was associated with the 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;

(d) any place where objects to which this Act applies are traditionally stored, or to which, under the provisions of this Act, such objects have been taken or removed.

Under Section 6, the act also applies to Aboriginal Objects, defined as:

(1) Subject to subsection (2a), this Act applies to all objects, whether natural or artificial and irrespective of where found or situated in the State, which are or have been of sacred, ritual or ceremonial significance to persons of Aboriginal descent, or which are or were used for, or made or adapted for use for, any purpose connected with the traditional cultural life of the Aboriginal people past or present.

(2) Subject to subsection (2a), this Act applies to objects so nearly resembling an object of sacred significance to persons of Aboriginal descent as to be likely to deceive or be capable of being mistaken for such an object.

(2a) This Act does not apply to a collection, held by the Museum under section 9 of the *Museum Act 1969*, which is under the management and control of the Trustees under that Act.

(3) The provisions of Part VI do not apply to an object made for the purpose of sale and which —

(a) is not an object that is or has been of sacred significance to persons of Aboriginal descent, or an object so nearly resembling such an object as to be likely to deceive or be capable of being mistaken for the same; or

(b) is an object of the kind referred to in paragraph (a) that is disposed of or dealt with by or with the consent of the Minister.

2.3. Regional Archaeological Context

People have occupied the South West for tens of thousands of years, evident at a number of stratified archaeological sites such as Upper Swan near Perth (Pearce 1981) and Devil's Lair near Margaret River (Dortch 1974; 1976). Excavations at the limestone cave, Devil's Lair, remains one of the longest sequences of human occupation at a single locality in Australia, with a rich archaeological assemblage that includes flaked stone artefacts, bone (animal and human) and ornaments (bone pendants, beads) (Dortch 1974; 1976). There is evidence that the site was occupied as early as 50,000 years before present (Turney et al 2001), with occupation horizons dating to 12,000 years ago, when the cave entrance was blocked by natural processes.

In South Western Australia, regional archaeological models infer late Holocene settlement-subsistence patterns based on broad environmental zones, that compares and contrasts the associated archaeological signatures (e.g. Anderson 1984). Anderson (1984) compared and contrasted the available archaeological site data for three environmental zones – the Swan Coastal Plain, the Darling Range and Darling Plateau. The results indicate that site density of the Swan Coastal Plain was three to six times as great as that estimated for the Darling Ranges and Plateau, particularly in those areas of the Swan Coastal Plain containing alluvial deposits (Anderson 1984:34). Anderson (1984) found that larger sites and site clusters located in the Swan Coastal Plain tend to be situated on elevated dunes and/or sandy ridges while those from the Darling Range and inland plateau are commonly situated on low-lying and gently sloping ground.

On the basis of the available archaeological and ethno-historical data, Anderson (1984) proposed a landuse model for past Aboriginal groups centred on the Swan Coastal Plain and adjacent Darling Plateau. During summer and autumn, it is suggested that groups gathered in large numbers on the coastal plain, centred on specific water-based core territories, such as estuaries, rivers, lakes and swamps. The large and numerous archaeological sites on the coastal plain appear to represent regular re-visits to such areas. During winter and early spring, coastally-based Aboriginal groups dispersed and ranged more widely (presumably to relieve pressure on the now less abundant water-based resources), moving into the jarrah forests of the Darling Ranges (Anderson 1984; Hallam 1975). Compared to the coastal plain region (particularly during the summer months) the Darling Ranges contain less abundant and less predictable food resources; this is seen to be reflected in the generally small size of sites in the forest zone.

However, researchers have documented a number of large sites from the Darling Scarp and Darling Plateau suggesting relatively intensive use of the jarrah forests on the inland southwest than that described by Anderson (Pearce 1981). These sites are often located near resource-rich micro-environments such as swamps and rivers. For example, the site of Walyunga (situated within Walyunga National Park adjacent to the Swan River valley in the Darling Scarp) is a large open site (approximately 170-m by 140-m) containing a dense scatter of artefacts on the surface of a deflated sand dune. Excavations conducted by Pearce (1978) revealed occupation at the site beginning around 8000 years B.P. and occupied repeatedly up until the ethnographic present. Pearce's (1978) excavations and surface survey at Walyunga documented the stone tool technology consisting of backed blades, adzes, scrapers, bipolar flakes and grindstones made from a wide range of raw materials. The site's central location within close proximity to different ecological zones and the wide array of abundant local resources account for the site's relatively long history of occupation. In the jarrah forest of the Darling Plateau, three sites have provided chronological sequences – Collie (~5,800 BP), Boddington (~3230 BP) and North Dandalup (~2280 BP), indicating at least a mid-Holocene occupation of this upland environment (Pearce 1981).

Pearce (1981) conducted an archaeological assessment of some 280 square kilometres of the Darling Plateau, encompassing a transport corridor between Boddington and Collie. A total of 264 archaeological sites/features were located, characterized largely by stone artefact scatters of quartz, with over 90% of the finds comprised of small scatters (less than 50 artefacts). Pearce (1981) noted that the largest sites were located on silty, sandy or gravel soils near creeks and swamps, with the majority of the smaller sites located on lateritic or sandy slopes within the gently-sloping valleys. As a result of his extensive surveys in the area, Pearce (1984) concluded that this type of environmental configuration did not sustain intensive use/occupation, and was more likely to represent an area comprised of small groups engaged in logistical forays or specialized tasks.

An archaeological survey of the Harvey Dam area near Collie (Veth et al 1983) noted broadly similar structure and patterning of site distributions as Pearce, in that larger, more structured sites were generally found near swampy or well-drained areas, atop relatively-flat ground close to waterways, and/or the lower slopes of valleys. This study also noted two important points that are relevant to this project. The first is that several archaeological sites were found in sub-surface context exposed by road cuttings, culverts, or uprooted trees (Veth et al 1983). The second is that over two-thirds of the 53 locations identified with artefactual material were in contexts of adequate ground surface visibility associated with disturbances (tracks, roads) or exposed "patches" of lateritic soils. A regional survey conducted by Anderson (1984) of the Darling Plateau and Range (centred on the Canning Dam area) also demonstrated the importance of factoring in survey bias (visibility) in any assessment of forested environments, whereby all of the sites located were observed in road cuts and other disturbed areas (recently logged areas).

Mattner and Harris (2004) reviewed previous archaeological investigations of the Darling Plateau and examined the distribution of known sites (183) across specific landform units. The results indicate some apparent structure in archaeological site location with a focus on small valleys and slopes (44%), rocky ground with granite outcrops (19%), undulating upland and plateau (18%), seasonal creeks and swamps (14%) and lateritic hills and ridges (3%). The other landform units included in this assessment - major valleys and alluvial flats, granite

hills and/or outcrops, and rock ground with other (non-granite) outcrops - did not contain any archaeological sites from this particular sample.

Mattner and Harris' (2004) synthesis of previous studies relevant to the Darling Plateau included a number of predictive statements that provide some basis for conceptualizing and interpreting this assessment.

Table 1. Archaeological site types and predictive locations of the Darling Plateau and Range, south west Australia (Mattner and Harris 2004:50-51 - text cited directly).

Feature	Prediction
Major artefact scatters (1000 pieces+)	Will occur within a radius of about 500 m, but not closer that 100m of reliable and long-lasting water sources, such as soaks, springs, swamps, and deep river pools. Major artefact scatters will be situated on open and flat or slightly sloping ground in clearings. They are more likely in areas with broad valleys and major creeks or rivers, and where granite bedrock is exposed in large domes or hills.
Medium-sized artefact scatters (100s of pieces)	Will not be numerous but may occur at a variety of locations, especially near seasonal water sources such as creeks, swamps, soaks, and possibly near granite outcrops where these contain gnamma holes or soaks. They will occur close to water sources, probably within 200m.
Small artefact scatters	Will be numerous and principally occur close to watercourses, often within 20m of the drainage channel, and close to granite outcrops. But such sites will also occur in a wide variety of locations, provided the land is reasonably level.
Artefact clusters	Consisting of a few artefacts and possibly representing butchery sites, can be expected in valleys or on the crests of ridges. They will occur on a wide range of landforms and will not be tied to water sources.
Quarries	For stone to manufacture flaked stone tools will be uncommon. They will be found at outcrops of fine grained silicified dolerite, but most dolerite outcrops will not contain quarries. Quarries will also occur where quarry veins and seams are exposed in granite domes or outcrop, but most granite exposures will not host quartz outcrops and will not be potential quarry sites.
Stone arrangements	May be expected on a small number of the granite domes, particularly in locations near ephemeral water sources that are remote from major campsites.
Lizard traps	Can be expected on some granite domes, especially those where water was available nearby, either from gnamma holes or depressions in the rock or from seasonal creeks.
Engraving sites	Will be rare. If any undiscovered examples exist, they will be located with large boulders that provide surfaces to engrave.
Painting sites	Will be rare. They are only likely to exist in protected overhands or rock shelters.
Scarred or marked trees	Will be uncommon. They are more likely to occur in woodland than forest, and likely to be marri trees rather than jarrah or wandoo trees. For this reason, such sites are more likely to exist in clearings than in broad valleys.
Other	Other sites reported for the region, such as ochre quarries and grinding grooves are rare.
Burial sites	Are known to exist in the region. These appear to be historic and possibly the graves have markers. There are unlikely to be nay undiscovered graves but if any exist, they probably will be reasonably close to historic settlements, such as farms or timber camps.

More fine-grained survey and analysis is required before definite statements can be made regarding the nature of past occupation and use across the Region. It should also be noted that extensive use of fire as a food acquisition strategy, for environmental management, and also to facilitate movement through the landscape (Hallam 1975; J.Dortch 2000; Hassell and Dodson 2003) undoubtedly created a mosaic of micro-environments within any one environmental or landform unit that are not so clearly defined today.

In sum, archaeological models suggest that the area encompassing the project area was part of a seasonal settlement-subsistence pattern focused on winter occupation, and with an overall (perceived) scarcity of food resources, lack of surface water (at least seasonally), and limited ethno-historical accounts of past human use (c.f. Hallam 1975; Anderson 1984), it has been characterized as a marginal area of occupation. For this project area, the regional models suggest that this type of upland, open woodland environment to be characterized by an extensive archaeological signature comprised of small, un-structured artefact assemblages dominated by amorphous quartz artefacts. However, these environments are characterized by low ground surface visibility and have not been studied to any great extent. Regional models are very general and ignore much of the variation in landform systems, past methods of resource utilization (such as fire) that involved environmental management/manipulation, and also social processes of movement, trade and ceremony. Therefore, any predictive statement or survey result should factor in these processes.

2.4. Regional Ethnographic Context

The Traditional Owners in Collie today identify as Wiilman people and are part of the Gnaala Karla Booja (GKB) Native Title group, which is a sub-set of the broader South West Native Title Settlement. The GKB area incorporates three of the original Noongar sub-groups; the Pinjarup, Wiilman and Kaniyang. Wiilman territory is extensive, as described here;

> *"At Wagin and Narrogin; on Collie, Hotham, and Williams rivers west to Collie; Wuraming north to Gnowing, Dattening, and Pingelly; east to Wickham, Dudinin, and Lake Grace; south to Nyabing (Nanpup), Katanning, Woodanilling, and Duranilling. Southern and western boundaries correspond with the change with the change in place name terminations from [-ing] to [-up]." (Tindale 1974:260)*

Collie Traditional Owners also identify as Noongar, sharing cultural ties and language traditions with the Noongar people that live throughout the south-west corner of the Australian continent. Wiilman is a sub-group of Noongar culture. Noongar people form a distinct cultural bloc now and into the distant past, based on shared linguistic and cultural traditions, a cohesive social structure and kinship network, shared regional identity, and a common geographical connection to the lands and waters that make up the southwest corner of the Australian continent. There are a range of social structures which further delineate Noongar people and connect them to particular parts of the Southwest region. This is articulated succinctly in the Noongar evidence provided to the Federal Court hearings (Federal Court of Australia 2006:38), during which the claimants noted that the southwest region:

> *... was occupied and used by Aboriginal people who spoke dialects of a common language and who acknowledged and observed a common body of laws and customs. Those Aboriginal people recognized local and regional names within the broader society but shared a commonality of belief, language, custom and material culture, which distinguished them from neighbouring Aboriginal groups and societies. Responsibility for and control, particular areas of land and waters, were exercised by sub-groups or families, but the laws and customs under which the sub-groups possessed those rights and interests were the laws and customs of the broader society*

The term 'Noongar', also sometimes spelled Nyungar, Nyoongar or other variations, is a common term used almost ubiquitously around the region for local Aboriginal people. However, its use as a term of identity is thought to be a linguistic adaptation that originated during the post-European contact period. It originally meant man in the languages of the Southwest (Bates and White 1985:47) and Aboriginal people used to identify as 'Bibbulmun' rather than 'Nyungar' (Bates and White 1985:46). While some Southwest people still identify with this term, Nyungar is now more widely accepted and Bibbulmun is more commonly used as the identifier of people with customary rights and responsibilities to particular areas of the Southern forests from the Denmark area in the east to the Nannup area in the north-west.

The Noongar cultural bloc, also referred to as the "South-West" cultural bloc by Berndt (1980: 84), incorporates the south-west corner of the Australian continent following a line from around Jurien Bay in the north, to Esperance in the south east, and encompassing all the area between there and the coastline. The boundary between the Noongars and their desert and semi-desert dwelling neighbours actually follows the botanical boundary between the South West Botanical Province and the arid inland provinces.

> The change from the dense forests of the south west to the low bush of the desert is a gradual one, but botanists use a line that follows the extent of the 175-millimeter winter (May to October) rainfall as a boundary dividing what they call 'the southwest botanical province' from the arid regions to the east and north. Significantly the major cultural boundary that marks the extent of the Noongar religious and ritual practices follows this winter rainfall boundary for over 1200 kilometres (Ferguson in Mulvaney and White, 1987).

The Noongar cultural bloc also coincides in location with the South-West Coast Drainage basin (Ferguson 1985: Peterson 1976; Smith 1993: 86). The kaip 'water' and bilya 'rivers' of the South-West Coast drainage basin are fundamental to the economic, social and spiritual lives of Noongar people (note; kaip and bilya may differ slightly between dialect groups, but essentially these are the Noongar words for water and river). The rivers formed movement corridors and resource rich landscape features integral to Noongar economy. Noongar culture also attaches powerful spiritual associations to the rivers through creation and dreaming stories, in particular dreaming stories associated with the 'Waugal', a spiritual snake who is responsible for carving out and creating many of the landscape features we see today, particularly the rivers. Rainfall levels which define the Southwest Botanical Province, and the catchment systems that comprise the South-West Drainage Basin, form a distinctive geographic and environmental zone, they also define Noongar country. As defining features

of Noongar country, the rivers, lakes, creeks, and all of their tributaries are fundamental to Noongar culture, and thus maintain a special significance. The Collie River is one such waterway and today the river and its tributaries are a registered mythological site (Site ID 16713), on the basis of its association with the Ngarngungudditj Walgu Dreaming (Goode and Harris 2009).

Traditional Noongar society is divided into thirteen sub-groups, linked by language and cultural tradition that included practicing initiation rituals of upper body cicatrisation and piercing of the nasal septum, which follows what Berndt describes as the "Old Australian Tradition" (1979a and 1979b). These initiation rituals are not commonly practiced in the modern era. The thirteen sub-groups broadly adhere to the Noongar linguistic and cultural traditions, but distinguish among themselves on the basis of subtle cultural and linguistic distinctions, which relate to territorial and social organisation. Berndt (1980: 82) described the sub-groups as 'dialectal units' of the broader Noongar linguistic group but also identified detailed distinctions among the thirteen affiliated groups on the basis of social organisation. He divides the sub-groups into four distinct categories. The first incorporates seven of the thirteen sub-groups encompassing the northern and western majority of Nyungar country and is based on social organisation which adheres to a matrilineal decent system and paternal ritual affiliation (Berndt 1980: 82). The second is comprised of two sub-groups Bibbulmun and Mineng, and is based on similar organisation to the first, but uses a patrilineal decent system. The third comprises the Ballardong and Nyaginyagi, and utilizes two alternating descent systems between different generations, but is focussed on patrilineal local decent groups, which Berndt suggests is similar to the social organisation of Western Desert people (Berndt 1980: 83-4). The fourth category refers to that of the Wudjari and the Goreng, which Berndt describes as similar to the third category, being based on patrilineal descent. However, he distinguished between the third and fourth categories on the basis that Wudjari and Goreng maintained named totemic groups which he suggests are probably 'patrilocal descent units' (Berndt 1980: 84).

Noongar society has its roots deeply etched in the traditional social structures of the pre-contact period and like all societies continues to evolve and change as a result of both internal and external influences. European invasion and subsequent settlement of the region is a major external influence and the impacts on Noongar society have been severe and far-reaching. None the less, Noongar culture and society has evolved, adapted and survived. Among all of the layers of connection and identity that comprise the fabric of Noongar society, perhaps the most fundamental is that of family and kinship. Noongar people identify most fervently with their extended family and they will very often define their primary identity on the basis of family.

Fundamental to Noongar identity and culture is connection to country. This concept articulates a series of rights and responsibilities that every Noongar person maintains to certain places, landscapes and regions. Perhaps the two most important aspects of connection to country are 1) the responsibility to care for country and 2) the right to speak for country. The responsibility to care for country is something that Noongar people inherit from their ancestors and bequeath to their children. Upholding these responsibilities are fundamental to Noongar culture and identity, and at some level to people's reason for being. On this basis, being able to uphold these responsibilities is pivotal to Noongar people's sense of purpose and self-worth and therefore, well-being. Intertwined with the responsibilities that people maintain to country are rights to make collective decisions affecting country.

The combination of these rights and responsibilities are the basis for contemporary Noongar custodianship. What this means in a practical sense, is that Noongar people expect to have a 'seat at the table' in decisions that affect their lands and waters. Put another way, Noongar people have a customary set of rights and responsibilities that require them to have real power in all decisions affecting their country. As all Noongar people are now living within the modern economy of Australia, their time and input has costs associated with it. While the Aboriginal Heritage Act (1972) stipulates the need to consult with Aboriginal people about a narrowly defined set of places and materials, Noongar people have a custodial interest and responsibility over a much broader set of places and values than those defined by the act.

3. ARCHIVAL RESEARCH

3.1. Minninup Pool

Minninup Pool has been extensively documented over the past two decades as a significant place for Aboriginal people with sacred, spiritual and social values. The place was first registered with the Department of Aboriginal Affairs in 1997 by anthropologist Bob Chown and Noongar men Joe Northover and Norm Hayward (Chown 1997). The ethnographic recording was undertaken as part of an Aboriginal heritage site avoidance survey for the then Waters and Rivers Commission who were planning to undertake water bore drilling within the Collie Basin Water table. The site file states "'Gnarngum Gudditch Walgu' Hairy Faced Snake is here". This is in reference to the much-documented 'ngitting yarn' (dreaming story) of Ngarngungudditj Walgu, a hairy faced serpent who is considered responsible for the creation of the Collie River, Brunswick River, Preston River and the Leschenault Inlet (Beckwith 2007, 2009; CALM 2005; Goode and Harris 2009; SWALSC 2008). The associations between Minninup Pool and the mythical serpent are documented back as far as the early 20th century (Williams 1979:122).

Ritual and social activities that continue to be carried out at Minninup by Noongar people have been documented previously. This excerpt quotes Joe Northover from 2008.

> So whenever we come back now – my cousin died the other day so we come back here, bring his spirit home because this is where he belong here. They will bury him with his mother and you sing out to him. *Ngany moort koorliny. Ngany waanginy, dadjinin waanginy kaartdijin djurip.* And we come and look there and talk to you old fellow. Your people have come back. *Ngany waangkaniny.* I talk now. *Balap kaartdijin.* Listen, listen. *Palanni waangkaniny. Ngany moort koorliny noonook. Ngany moort wanjanin.* Your people come to rest with you now. Listen old fellow, listen for 'em, bring them home. *Karla koorliny.* Bring them home and then you sing to them. (Singing in language) And then chuck sand to land in the water so he can smell you. That's our rules. *Beeliargu moort.* That's the river people. That's why this place important. (SWALSC 2008)

In 2014, the Department of Aboriginal Affairs unilaterally decided to remove the Collie River – which had been registered as a sacred place since 1999 – from the WA Aboriginal heritage register. This action was challenged in 2015 by Joe Northover (ABC 2015).

Joe Northover was instrumental in getting the Collie River back on the DAA heritage register in 2015 after it had been de-registered by the Department of Aboriginal Affairs (ABC 2015). Joe has previously articulated the spiritual, cultural and emotional significance that he and other Noongar people associate with the Collie River and it has been widely documented, including audio recordings and transcripts of Joe's words (SWALSC 2008).

Noongar values associated with the Collie River have been extensively documented elsewhere in a 2009 report by Beckwith Environmental Consulting (Beckwith 2009). The report is very detailed and provides strong evidence of deep and ongoing connections.

> Waterways in the South West, including the Collie River, continue to play an important role in the lives of Nyungar people. Their connection to the Collie River is reflected in their mythological and spiritual beliefs and its role as a source of food and water, as well as recreation. (Beckwith 2009: i)

In summary, Minninup Pool is a high profile heritage place that has been extensively documented as a place of high spiritual and social significance for Noongar people past and present.

3.2. Registered Heritage Places

Minninup Pool is a registered Aboriginal heritage site (ID 15330) as is the Collie River (ID 16713) on which the pool is situated (see figure 2). As such the place is covered by two registered sites. Both sites are registered on the basis of their association with the Ngarngungudditj Walgu dreaming.

4. METHODOLOGY

4.1. Ethnographic Assessment Methodology

The aims of the ethnographic assessment were:

1. Ensure the Traditional Owners had all the information they required to make an informed set of decisions and recommendations about the proposed works under the principle of *free prior* and *informed* consent as defined in the United Nations Declaration on the Rights of Indigenous People – Article 32
2. Identify cultural values within the area of potential effect (APE) as part of a site identification survey model
3. Undertake a cultural significance assessment as defined by the Burra Charter 2013 (Australia ICOMOS 2013)
4. Assess whether Sections 5 or 6 of the *Aboriginal Heritage Act* applies to any places within the APE

5. Identify potential impacts to cultural values
6. Identify solutions to mitigate potential impacts

A site identification survey model was selected for this project because major ground disturbing works may be undertaken and the Shire of Collie intend to seek Section 18 Approval to undertake such works. Here is a description of a site identification survey methodology:

> During Site Identification Surveys, the recording of Aboriginal sites is undertaken to a sufficient level of detail to allow a Statement of Significance to be provided for each Aboriginal site. The Statement of significance must meet DAA's requirements for section 18 purposes. The purpose of a Site Identification Survey is to provide the proponent with sufficient information on the nature, extent and significance of any identified Aboriginal site to satisfy the requirements of the ACMC when considering an application under section 18 of the AHA. Similar to Site Avoidance Surveys, the on-the ground methodology for anthropological Site Identification Surveys varies very little compared with other types of surveys, other than a need to inform the Aboriginal Consultants of the purpose of the survey. For archaeological Site Identification Surveys, the on-ground methodology must be rigorous enough to ensure that all possible values are recorded, as well as enough information to determine the importance and significance of any sites (YMAC 2015:29).

The Burra Charter outlines a process for managing places of cultural significance (Australia ICOMOS 2013):

> 6.1 The cultural significance of a place and other issues affecting its future are best understood by a sequence of collecting and analysing information before making decisions. Understanding cultural significance comes first, then development of policy and finally management of the place in accordance with the policy. This is the Burra Charter Process.
>
> 6.2 Policy for managing a place must be based on an understanding of its cultural significance.
>
> 6.3 Policy development should also include consideration of other factors affecting the future of a place such as the owner's needs, resources, external constraints and its physical condition.
>
> 6.4 In developing an effective policy, different ways to retain cultural significance and address other factors may need to be explored.
>
> 6.5 Changes in circumstances, or new information or perspectives, may require reiteration of part or all of the Burra Charter Process.

This survey assessed the cultural significance of the place through one-on-one and group discussions and an on-ground assessment with a representative group of Traditional Owners. This information is combined with the results of an archaeological assessment and

background research, to produce a cultural significance statement for the place(s) in accordance with Section 6.1 of the Burra Charter (Australia ICOMOS 2013). The report provides direct quotes from informants wherever possible as a primary data source.

The assessment considers the proponents 'needs' (Section 6.3) expressed in the form of the proposed scope of works, which represents a potential 'change in circumstances' for the place (section 6.5). It also considers the physical condition of the place and other external constraints (Section 6.3) as appropriate before developing management recommendations to form the basis of a 'policy for managing the place' (section 6.2).

As is best-practice and a preferred methodology of the Traditional Owners, the overlap between archaeological and ethnographic assessments provides the advantage of allowing detailed discussion about the archaeological results and how best to manage those cultural materials, in tandem with assessing ethnographic values. This helps to solidify the recommendations and discuss management of archaeological features and cultural values.

The final recommendations were all agreed upon by the entire group and all participants were satisfied that they had been provided with the necessary information and had the opportunity to freely contribute their opinions on the final recommendations.

4.2. Archaeological Assessment Methodology

The aims of the archaeological assessment were:

1. Perform the archaeological studies sufficient to assess previously recorded sites and identify any new sites that may be located within the proposed area of potential affect.

2. Determine physical extent, context (cultural and geographic), and condition of the cultural resources.

3. Integrate the archaeological assessment results with ethnographic assessment to inform a discussion of management recommendations with the Traditional Owners.

The archaeological assessment identified and assessed sites under a Site ID survey methodology as defined by the AHA and outlined above. The archaeological assessment focused on identification of material cultural remains that may be isolated finds (a single artefact), a feature (gnamma hole or lizard trap), or a site (artefact scatter).

4.3. Cultural Significance Assessment

This cultural significance assessment is based on the principles and criteria set out in the *Australia ICOMOS* Burra Charter 2013 (Australia ICOMOS 2013) and the Western Australian *Aboriginal Heritage Act* 1972.

The International Council on Monuments and Sites (Australia ICOMOS) defines cultural significance in the following way:

> *The concept of cultural significance is used in Australian heritage practice and legislation to encompass all the cultural values and meanings that might be recognised in a place. Cultural significance is the sum of the qualities or values that a place has, including the five values— aesthetic, historic, scientific, social and spiritual—that are listed in Article 1.2 of the Burra Charter.*
>
> *Through the processes of investigating the place and assessing each of these values, we can clearly describe why a place is important. This is the first step towards ensuring that our decisions and actions do not diminish its significance. (Australia ICOMOS 2013:)*

Assessing the cultural significance of a place means defining the reasons why a place is culturally important (Office of Environment and Heritage NSW 2011:7). This is done by assessing the place based on criteria.

This assessment uses two sets of criteria. The place must meet at least one of the four definitions of an Aboriginal heritage place to warrant protection under the *Aboriginal Heritage Act*. The five values outlined in the Burra Charter are used to form a more robust assessment that meets national and international standards (Appendix A – Significance Criteria). The criteria are:

1) The five values outlined in the Burra Charter (see Appendix B):

    a. Social
    b. Spiritual
    c. Historic
    d. Aesthetic
    e. Scientific

2) The four definitions of an Aboriginal heritage place in Section 5 of the *Aboriginal Heritage Act:*

    a. Place with Aboriginal objects.
    b. Sacred, Ritual or ceremonial place.
    c. Place of importance to the Aboriginal Heritage of the State.
    d. Traditional or designated storage places for Aboriginal objects.

5. FINDINGS

5.1. Archaeological Places in the Survey Area

The archaeological survey did not identify any places of archaeological significance in Reserve 34343, which would be considered a site under Section 5a of the Aboriginal Heritage Act.

A single quartz backed blade was found within the survey area at location 420367mE 6306359mN (Zone 50). The artefact is a small complete flake (L=18mm W=7mm Th=4mm) with evidence of retouch along both lateral margins. The artefact was found in an area of vegetation disturbance caused by a well-used mountain bike track which provided a narrow (< 2m wide) window of ground surface visibility in an area of sandy sediment with laterite pebbles. No other artefacts could be identified in the vicinity, but it should be noted that visibility was obscured either side of the narrow bike trail making it difficult to rule out the possibility of other artefacts under the vegetation.

Figure 4. Quartz backed blade.

Figure 5. Location in which artefact was identified, showing narrow window of visibility.

There are a number of potential reasons why more archaeological features were not identified in the survey area.

1. Ground visibility across reserve 34343 is very limited due to the presence of native vegetation which makes identification of stone artefact scatters difficult. There may be stone artefacts currently obscured by vegetation and leaf litter.
2. The entire corridor is heavily disturbed. The vegetation has been logged in the past so no old growth exists on the reserve, which means any scarred trees from the pre-European period (a common cultural feature in the region) would have been removed. Extensive ground disturbance for underground pipes, vehicle tracks, an old hockey ground and speedway etc. may also have obscured, damaged or removed artefacts or cultural features.
3. The entire reserve is within a flood zone and thus is subject to flooding events which can dislodge sediment, moving it downstream, and redeposit new alluvial sediments washed down from further upstream. This means cultural materials and artefacts may have been redeposited or covered over by alluvial deposits during past flooding events. For example, in 1963-64 a major flood event occurred and an 8km stretch of the Collie River, including the project area, was dredged, deepened, widened and fringing vegetation removed (GFG Consulting 2018). These events would have had major impacts on archaeological materials in the survey area.
4. It is also entirely possible that there is not much, or any more archaeological materials present in the study area. Some ethnographic literature relating to the region indicates

that places associated with the Waugle, such as Minninup Pool, were traditionally treated as avoidance places by Noongar people (McDonald, Hales and Associates). Thus it may be that people did not undertake secular activities (such as toolmaking, camping, hunting) at Minninup Pool and thus did not leave a strong archaeological trace.

Figure 6. Example of vegetation within Reserve 34343 obscuring ground surface visibility.

5.2. Ethnographic Places, Values and Threats

The ethnographic survey resulted in the identification of a range of spiritual, social, ecological and cultural values associated with the place, primarily focussed around the Collie River (see significance statement). This previously registered place warrants continued protection under Section 5 (b) of the *Aboriginal Heritage Act*, based on its association with the Ngarngungudditj Walgu Nyitting Yarn (dreaming story) and a range of other heritage values. The results of the ethnographic survey are consistent with those of previous heritage surveys.

The Elders emphasised the primacy of the river in the lives on Noongar people now and into the distant past. For example Joe Northover recalled how all the different family groups used to camp at different locations, always in close proximity to the river. He emphasised that they all chose their camping locations so that they could utilize the river and its resources.

> *By remembering the places and people, it keeps them alive. When you forget them they are dead. – Joe Northover*

James Khan emphasised the importance of the bushland as well as the river.

All that bushland is important to us because our apical ancestors used to travel that way. – James Khan

Many of the Elders placed a strong emphasis on the health of the flora, fauna and the water quality in maintaining protection of the place.

There used to be plenty of frogs and mussels in there. We need the frogs and mussels to come back. -Phyllis Ugle

A detailed significance statement is provided below, outlining the ethnographic values which make this a significant cultural place which warrants protection under Section 5b of the Aboriginal Heritage Act.

Figure 7. Conducting on ground assessments throughout Reserve 34343

Figure 8. On site discussions with the project team

5.3. Minninup Pool Significance Statement

Minninup Pool is a place of deep spiritual and social significance for Noongar people past and present.

Sacred/Spiritual Significance

The spiritual significance of Minninup Pool is based on the *ngitting yarn* (dreaming story) of the *Ngarngungudditj Walgu*, a hairy faced rainbow serpent who is responsible for the creation of the Collie River in Wiilman Noongar belief systems. According to these beliefs, the *Ngarngungudditj Walgu* came to rest its head at Minninup Pool after creating the Collie River, Brunswick River, Preston River and the Leschenault Inlet (Beckwith 2007, 2009; CALM 2005; Goode and Harris 2009; SWALSC 2008) and still rests beneath the water at the Minninup to this day. The associations between Minninup Pool and the mythical serpent are documented back as far as the early 20th century (Williams 1979:122). The place was first registered with the Department of Aboriginal Affairs in 1997 by anthropologist Bob Chown and Noongar men Joe Northover and Norm Hayward (Chown 1997).

Ritual activities that adhere to this spiritual belief system continue to be carried out at Minninup by Noongar people today and have been documented previously. The below excerpt of Joe Northover speaking about it in 2008 provides a good description of the link between the spiritual beliefs and the ritual act of throwing sand into the water while talking to *Ngarngungudditj Walgu*.

> So whenever we come back now – my cousin died the other day so we come back here, bring his spirit home because this is where he belong here. They will bury him with his mother and you sing out to him. *Ngany moort koorliny. Ngany waanginy, dadjinin waanginy kaartdijin djurip.* And we come and look there and talk to you old fellow. Your people have come back. *Ngany waangkaniny.* I talk now. *Balap kaartdijin.* Listen, listen. *Palanni waangkaniny. Ngany moort koorliny noonook. Ngany moort wanjanin.* Your people come to rest with you now. Listen old fellow, listen for 'em, bring them home. *Karla koorliny.* Bring them home and then you sing to them. (Singing in language) And then chuck sand to land in the water so he can smell you. That's our rules. *Beeliargu moort.* That's the river people. That's why this place important. (SWALSC 2008)

This quote also draws a link between the spiritual associations of the place and the tradition of coming to Minninup Pool when a death in the family is experienced. Members of the Noongar community visit Minninup Pool after the death of a loved one to ask the serpent being to accept the spirit of the deceased person and allow them to rest at this place in the afterlife. The continuation of these ritual traditions adds a layer of contemporary significance to the place as Noongar people continue to practice culture at Minninup Pool and teach those traditions to younger generations.

Social Significance

Minninup Pool and surrounds are a place of important social significance for Noongar people who visit the place regularly to take part in sacred and secular activities. It is a place for recreation, swimming, hunting, gathering, talking, storytelling, teaching and learning. Most

notably it is a place that brings people together, a meeting place. The social significance of Minninup Pool is intergenerational, as this quote explains.

> *Stories have been passed on from generation to generation. If we as one can nurture, look after, share Minninup as it has been for many many years, our next generation will share stories and history of this significant place* (Elaine Chitty: handwritten personal statement about Minninup Pool, December 2018).

Through this process of intergenerational storytelling and knowledge sharing, Minninup Pool contributes to a collective sense of memory and identity. It is thus an important part of the social fabric of the local Noongar community.

Minninup Pool and the Collie River are integral to local Noongar identity. As Joe Northover explains local people refer to themselves as *Beeliargu moort* – river people (SWALSC 2008). In this way they take their identity, their sense of who they are as individuals and as a community, directly from their ongoing association with the river. These associations are on the one hand spiritual and social and on the other hand deeply practical, as the river continues to be a resource rich feature in the landscape. *Beeliargu moort* have been using the resources of the river for many generations and continue to do so. The connection between the river and identity is an important one because it links to the wellbeing of individuals and of the broader Noongar community. As people actively use and care for the river in ways that are consistent with their cultural teachings, they are asserting their identity and solidifying their understanding of who they are and how they connect to the world around them. The implications of this process of identity-making for people's wellbeing cannot be understated. Put simply, if people do not have a strong sense of identity, their mental and physical well-being suffers. For this reason, places like Minninup Pool which plays an important role in individual and community identity-making, are vital for the wellbeing of local Noongar people.

Noongar values associated with the Collie River have been extensively documented elsewhere in a 2009 report by Beckwith Environmental Consulting (Beckwith 2009). The report is very detailed and provides strong evidence of deep and ongoing connections.

> Waterways in the South West, including the Collie River, continue to play an important role in the lives of Noongar people. Their connection to the Collie River is reflected in their mythological and spiritual beliefs and its role as a source of food and water, as well as recreation. (Beckwith 2009: i)

In 2014, the Department of Aboriginal Affairs unilaterally decided to remove the Collie River – which had been registered as a sacred place since 1999 – from the WA Aboriginal heritage register. This action was challenged in 2015 by Joe Northover (ABC 2015).
Joe Northover was instrumental in getting the Collie River back on the DAA heritage register in 2015 after it had been de-registered by the Department of Aboriginal Affairs (ABC 2015). This action adds to the social significance of the river as a site of activism, a place considered worth fighting for now and into the future.

In summary, Minninup Pool is a high-profile heritage place that has been extensively documented as a place of high spiritual and social significance for Noongar people past and

present. The continuation of ritual and social activities at Minninup demonstrates the ongoing relevance of the place for Noongar culture, spirituality, identity and wellbeing.

6. CONCLUSIONS

In summary, Minninup Pool is a high-profile heritage place that has been extensively documented as a place of high spiritual and social significance for Noongar people past and present. The results of this Aboriginal Heritage Assessment and community visioning process support and build-upon the existing literature and documentation about the place. Based on the community visioning process and the ethnographic survey, there is a clear consensus among the Traditional Owners and the Collie Noongar community that they support a project to upgrade the day-use facilities and to consider eco-camping options within the prescribed area, outlined through the visioning process. The community visioning report provides details about what on-ground actions are supported by the community. Ongoing involvement of the Noongar community in the project is integral to its success.

7. RECOMMENDATIONS

It is recommended that the Shire of Collie and their partners, including the Collie Noongar community, proceed with the planning and installation of day-use and eco-camping facilities within Reserve 34343 at Minninup Pool, subject to the following recommendations.

9. **It is recommended** that any on-ground works at Minninup are consistent with the Noongar vision for the place, as documented in the accompanying report.
10. **It is recommended** that the Shire of Collie seek Section 18 approval to undertake the works from the Department of Planning Lands and Heritage, before any on ground actions are taken. This document and the accompanying Visioning Report can be used as the basis for a Section 18 application.
11. **It is recommended** that the Shire of Collie undertakes consultation with the Noongar Elders about the final plans, before proceeding with the on-ground works. This is due to the fact that the current plans are only conceptual in nature and do not provide specific details. Another formal Aboriginal heritage assessment is not required. The results of the consultation about the final plans can be added as an addendum to this report.
12. **It is recommended** that the felled tree on the riverbank is not removed, due to its cultural significance.
13. **It is recommended** that Noongar monitors are to be engaged for any ground disturbing works taking place in or around the river.
14. **It is recommended** that the Shire of Collie work toward stopping illegal camping in and around the precinct.
15. **It is recommended** that female and male toilets with disabled access be installed on site.
16. **It is recommended** that every effort is made to protect the flora within construction activities, and that boardwalks be considered as an option for protecting flora from increased visitor numbers.

REFERENCES

Australian Broadcasting Corporation (ABC)
2015. Online resource http://www.abc.net.au/news/2015-06-06/collie-river-custodian-fights-to-reinstate-protected-site/6526566 accessed 23 January 2019

Anderson, J.
1984 *Between Plateau and Plain: Flexible Responses to Varied Environments in Southwestern Australia.* Occasional Papers in Prehistory No.4. Department of Prehistory, Australian National University: Canberra.

Australia ICOMOS
2013 *Charter for Places of Cultural Significance, The Burra Charter*.

Australia ICOMOS
2013 *Understanding and Assessing Cultural Significance.* Online resource; accessed 19 April 2018. http://australia.icomos.org/wp-content/uploads/Practice-Note_Understanding-and-assessing-cultural-significance.pdf

Bates, D.M. and I. White
1985 *The Native Tribes of Western Australia.* Canberra: National Library of Australia.

Beard, J.S.
1980. *Plant life of Western Australia.* Kenthurst: Kangaroo Press.

Beckwith, Jo Ann.
2007. Upper Collie Water Management Plan Issue Scoping Report. Unpublished report prepared for Department of Water.
https://www.water.wa.gov.au/__data/assets/pdf_file/0016/5443/91172.pdf accessed 23 January 2019

2009. Nyungar Values of the Collie River. Unpublished report prepared for Department of Water. https://www.water.wa.gov.au/__data/assets/pdf_file/0016/5443/91172.pdf accessed 23 January 2019

Berndt, R.M.
1980 Aborigines of the South-west. In R.M. & C.H.Berndt (eds) *Aborigines of the West, Their Past and Present*, pp.81-89. University of Western Australia Press, Nedlands.

Chown, Bob
1997 Report of an Aboriginal Heritage Site Avoidance Survey for Collie Basin Water Table Monitoring Bores Drilling Project. Unpublished report for Waters and Rivers Commission.

Dortch, C.E.
1974. A twelve thousand year old occupation floor at Devil ' S Lair. *Mankind* 9: 195-205.

1976. Two engraved stone plaques of Late Pleistocene age from Devil's Lair, Western Australia. *Archaeology and Physical Anthropology in Oceania* 3:32-44

2002. Modelling Past Aboriginal Hunter Gatherer Socio-Economic and Territorial Organisation in Western Australia's Lower South West. Archaeology in Oceania Vol 37. 1-21.

Dortch, J.
2000. Paleo-environmental change and the persistence of human occupation in southwestern in southwestern Australian forests. Unpublished PhD, Department of Anthropology, UWA, Perth.

Federal Court of Australia.
2006. *Bennell v State of Western Australia*. FCA 1243.

Ferguson, W.C.
1985. *A mid Holocene depopulation of the Australian southwest*. Unpublished PhD thesis, Department of Prehistory and Anthropology, School of General Studies, Australian National University, Canberra.

GFC Consulting.
2018. Collie River Revitalisation Strategy. Unpublished report prepared for the Shire of Collie.

Goode, B. and J. Harris.
2009. An Aboriginal Heritage Survey of the Proposed Shotts Industrial Estate, Collie, Western Australia. Unpublished Report to South West Aboriginal Land and Sea Council, on behalf of Landcorp.

Guilfoyle, David
2006 *Aboriginal Cultural Heritage Regional Studies: An Illustrative Approach*. NSW Department of Environment and Conservation.

Hasell C. and Dodson, J.
2003. The fire history of south-west Western Australia prior to European settlement in 1826-1829. In I. Abbott and N. Burrows (eds) *Fire in ecosystems of south-west Western Australia: impacts and management*.
Department of Conservation and Land Management. Leiden: Backhuys Publishing, pp.71-85.

Horton, D.
1996. *Aboriginal Australia Map*. Aboriginal Studies Press AIATSIS

Office of Environment and Heritage (NSW)
2011 Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW

Matter C.J. and Harris, J.
2004. *Archaeological Assessment of Proposed Expansion Areas for Boddington Bauxite Mine*. Prepared for Worsley Alumina Pty Ltd. on behalf of Artefaxion Pty Ltd.

McDonald, Hales and Associates. 2001. *Report of the Aboriginal Heritage Survey of the Proposed Mineral Sands Mining of the Gwindinup Projects, Western Australia.* Unpublished report.

Pearce, R.H.
1978. Changes in artefact assemblages during the last 8000 years at Walyunga, Western Australia. *Journal of the Royal Society of Western Australia*, 61: 1-10.

1981. *Worsley Alumina Project Survey for Aboriginal Sites*. Prepared for Worsley Alumina Pty. Ltd.

1984. *Worsley Alumina Joint Ventures Bauxite Gold Operations, Survey for Aboriginal Sites*. Prepared for Reynolds Australia Mines Pty. Ltd.

Peterson, N.
1976. The natural and cultural areas of Aboriginal Australia: a preliminary analysis of population groupings with adaptive significance. In N. Peterson (ed) *Tribes and Boundaries in Australia*. Australian Institute of Aboriginal Studies, Canberra.

Smith, M.
1993. Recherche A L'Esperance: A Prehistory of the Esperance Region of South-Western Australia. PHD Thesis, University of Western Australia: Nedlands

South West Aboriginal Land and Sea Council (SWALSC)
2008. Online resource https://www.noongarculture.org.au/joe-northover-minningup-pool/ accessed 23 January 2019

Tindale, N.B.
1974 Aboriginal Tribes of Australia, Australian National University Press, Canberra.

Turney, C.S.M., Bird, M.I., Fifield, L.K., Roberts, R.G., Smith, M., Dortch, C.E., Grun, R., Lawson, E., Ayliffe, L.K., Miller, G.H., Dortch, J. & Cresswell, R.G.
2001. Early human occupation at Devil's Lair, southwestern Australia 50,000 years ago. *Quaternary Research* 55: 3-13.

Veth, P., Ward, K. and Zlatnik M. 1983. Report on the preliminary survey for Aboriginal sites at the Harris Dam Project area, Collie, including regional ethno historical data. Prepared for Dames and Moore on behalf of the Public Works Department.

YMAC (Yamatji Marlpa Aboriginal Corporation)
2015 *Aboriginal Cultural Heritage Management Guidelines.* Online resource http://ymac.org.au/wp-content/uploads/2013/07/YMAC-Heritage-Guidelines-Apr-15-2.pdf Accessed 23 January 2019

APPENDIX A – SIGNIFICANCE CRITERIA

Table 2. Definition of criteria used in cultural significance assessment

Criterium	Definition
Social	Social value refers to the associations that a place has for a community or cultural group and the social or cultural meanings that it holds for them.
Spiritual	Spiritual value refers to the intangible values and meanings embodied in or evoked by a place which give it importance in the spiritual identity, or the traditional knowledge, art and practices of a cultural group. Spiritual value may also be reflected in the intensity of aesthetic and emotional responses or community associations and be expressed through cultural practices and related places. The qualities of the place may inspire a strong and/or spontaneous emotional or metaphysical response in people, expanding their understanding of their place, purpose and obligations in the world, particularly in relation to the spiritual realm.
Historic	Historic value is intended to encompass all aspects of history—for example, the history of aesthetics, art and architecture, science, spirituality and society. It therefore often underlies other values. A place may have historic value because it has influenced, or has been influenced by, an historic event, phase, movement or activity, person or group of people. It may be the site of an important event. For any place the significance will be greater where the evidence of the association or event survives at the place, or where the setting is substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of such change or absence of evidence.
Scientific	Scientific value refers to the information content of a place and its ability to reveal more about an aspect of the past through examination or investigation of the place, including the use of archaeological techniques. The relative scientific value of a place is likely to depend on the importance of the information or data involved, on its rarity, quality or representativeness, and its potential to contribute further important information about the place itself or a type or class of place or to address important research questions. To establish potential, it may be necessary to carry out Australia ICOMOS Incorporated Page 4 Practice Note Version 1: November 2013 some form of testing or sampling. For example, in the case of an archaeological site, this could be established by a test excavation.
Aesthetic	Aesthetic value refers to the sensory and perceptual experience of a place—that is, how we respond to visual and non-visual aspects such as sounds, smells and other factors having a strong impact on human thoughts, feelings and attitudes. Aesthetic qualities may include the concept of beauty and formal aesthetic ideals. Expressions of aesthetics are culturally influenced.
Place with Aboriginal Objects	Any place of importance and significance where persons 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 the Aboriginal people, past or present.
Sacred Ritual or Ceremonial Place	any sacred, ritual or ceremonial site, which is of importance and special significance to persons of Aboriginal descent;
Significance to the State	Any place which, in the opinion of the Committee, is or was associated with the 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;
Storage Place	Any place where objects to which this Act applies are traditionally stored, or to which, under the provisions of this Act, such objects have been taken or removed.