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The White-bellied sea-eagle in the Jervis Bay region: an exploration of the cultural, ecological and conservation significance

Amanda Baldwin

University of Wollongong

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The White-bellied Sea-Eagle in the Jervis Bay region:
An Exploration of the Cultural, Ecological and Conservation Significance

St. George's Head Lookout, Bherwerre Peninsula, Jervis Bay

By Amanda Baldwin

A thesis submitted in part fulfilment of the requirements of the research degree of Master of Science in the School of Earth and Environmental Sciences, University of Wollongong, 2010
The information in this thesis is entirely the result of investigations conducted by the author, unless otherwise acknowledged, and has not been submitted in part, or otherwise, for any other degree or qualification.

Amanda Baldwin, May 27th, 2010
ACKNOWLEDGEMENTS

This project would not have been possible without the help of so many extraordinary people. I would like to first of all acknowledge all of the people who participated in this project, for taking the time out to give this project life. I would like to thank those members of the Jerrinja Aboriginal Community who participated in this project. You welcomed me into your home, on your own time, brought me out and introduced me to your Country. I would also like to thank the participant from Wreck Bay who also kindly shared with me your stories and your Country. I am forever grateful for these experiences! I would like to make a special thanks to Sue Feary and everyone at the Nowra Area Office, who tolerated me going through the library for two weeks. Your advice for this project is very much appreciated! A special thanks to Fran Clements and Nathan Knott from the Marine Park Office who also helped with the initial stages of this project. Your guidance was most helpful!

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ABSTRACT

This research project seeks to challenge the historical and contemporary exclusion of Aboriginal people by negotiating more effective and collaborative relationships between settler and Aboriginal Australians. This is achieved through a cross-cultural and collaborative design which employs two primary theories within environmental management and conservation topics; ‘nature is contested’ and ‘nature is more than human’. The thesis explores the questions of how Aboriginal and settler knowledge systems, conceptualisations of space and cultural values are represented and how, in comparison, they form commonalities and differences. In acknowledgement of Australia’s diverse ecological systems and the heterogeneity of the people who constitute a part of those systems, the thesis questions are most appropriately applied to a small scale geographic location within a focused field. Subsequently, the thesis questions are examined through the fields of human geography and environmental management, and are specifically applied to a well recognised species in the study area; the White-bellied Sea-Eagle. The geographic location for the research is the Jervis Bay region on the south coast of NSW.

The research provides insight into both Aboriginal and non-Indigenous experiences pertaining to conservation in the Jervis Bay region, with considerable overlap between the two study-groups, each informing the other. The research findings from both participant groups highlight a continued contestation of Aboriginal knowledge and management practices, due to privileged methods of measurement and comparison to ‘traditional’ Aboriginal contexts which rely upon continuity and very little change. Results also indicated conflict between cross-cultural conceptualisations of space, promoting disparity between the two Aboriginal Communities in the study area as well as highlighting existing gaps in the acknowledgement and understanding of Aboriginal and ecological conceptualisations. Finally, the research indicates some commonality between the two groups regarding the cultural significance of the White-bellied Sea-Eagle as well as challenging the science based human-nature dichotomy. The embodied and affective dimensions of human-nonhuman encounters, demonstrates that the Settler science model thus reveals the falsity of its own binary logic. These research findings assist in negotiating cross-cultural differences, encourage further understanding, and empower both Aboriginal and non-Indigenous knowledge systems, conceptualisations of space, and cultural values for the overall interest of improved environmental conservation and management.
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<td>ATSIC</td>
<td>Aboriginal and Torres Strait Islander Commission</td>
</tr>
<tr>
<td>ANPWS</td>
<td>Australian National Parks and Wildlife Service</td>
</tr>
<tr>
<td>BNP</td>
<td>Booderee National Park</td>
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<tr>
<td>CAMBA</td>
<td>China-Australia Migratory Bird Agreement</td>
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<tr>
<td>CITES</td>
<td>Convention on International Trade of Endangered Species of Wild Flora and Fauna</td>
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<td>DECCW</td>
<td>Department of Environment, Climate Change and Water (NSW)</td>
</tr>
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<td>DDET</td>
<td>Department of Defence Environment Team (Beecroft Peninsula, Jervis Bay, NSW)</td>
</tr>
<tr>
<td>DEWHA</td>
<td>Australian Government, Department of Environment, Water, Heritage and the Arts</td>
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<tr>
<td>DIPNR</td>
<td>Department of Infrastructure, Planning and Natural Resources (NSW), now divided into two separate departments, The Department of Planning and The Department of Natural Resources</td>
</tr>
<tr>
<td>DPIPWE</td>
<td>Department of Primary Industry, Parks, Water and Environment (TAS)</td>
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<tr>
<td>IUCN</td>
<td>The World Conservation Union (formerly the International Union for the Conservation of Nature)</td>
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<td>JBNP</td>
<td>Jervis Bay National Park (NSW)</td>
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<tr>
<td>LALC</td>
<td>Local Aboriginal Land Council</td>
</tr>
<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>MPA</td>
<td>NSW Marine Parks Authority</td>
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Terminology:

‘Country’- The term ‘Country’ has a different meaning in Aboriginal English than its standard Western English definition. While the definition in Aboriginal English is rather complex and ambiguous, a basic understanding is that ‘Country’ is an ‘ecological web’, a ‘nourishing terrain…a place that gives and receives life’ (Rose, 2002: 18, 14). ‘Country’ is used in Aboriginal English as both a proper and common noun; as if one is speaking to a person (Rose, 2002). Deborah Rose illuminates:

…they speak to country, sing to country, visit country, worry about country, grive for country and long for country. People say that country knows, hears, smells, takes notice, takes care, is sorry or happy. Country is a living entity with a yesterday, today and tomorrow, with consciousness, action, and a will toward life. Because of its richness in meaning, country is home and peace; nourishment for body, mind and spirit; and heart’s ease (Rose, 2002:14).

Delia Lowe, from Jerrinja Aboriginal Community explains ‘It [Country] is related to all places. It’s like a web, which branches out where all things are related, from hunting to ceremony to religion. For a long time, thousands of years, our people have lived on this land. Our very existence is our relationship to this land, and if we cannot have that something will die within us’ (Lowe, 1988). The use of the term ‘Country’ in this thesis, works to embody the richness of its meaning for Aboriginal people generally, and particularly for the Aboriginal people who belong to the Country I visited for this research project.

‘Totemism’ and ‘Dreaming’- ‘Totemism’ is a term used originally to define the beliefs and cultural practices of one Native North American tribe situated north of Lake Huron, the Ojibwa (Rose et al., 2003). Despite the unique origins of the terms ‘totem’ and ‘totemism’, an early generation of academics adopted these terms to define and group together ‘the phenomenon’ of various Indigenous cosmologies (‘cosmologies’ meaning- ‘a people’s basic assumptions about what kind of world they live in, what forces control it, and what the place of humans is’), creating what was commonly considered a universal term (Rose et al., 2003: 3). Many scholars have since critiqued the Ojibwa term’s usage to define the multitude of various Indigenous cosmologies, and the acceptance and appropriateness of this term also varies among Aboriginal Australians (Rose et al., 2003). As ‘some Aboriginal people in NSW use the term and seem to regard it as an important part of their culture (Nayutah & Finlay 1988), while others find it unfamiliar, and some find it offensive’ (Rose et al., 2003: 2). The term ‘totem’, in Australia, is interchangeable with the term, ‘Dreaming’, which is
characteristically Aboriginal Australian (Rose et al., 2003). Rose et al. (2003) best explains the complexities of the terms ‘totem’ and ‘totemism’ in this excerpt:

The terms ‘totem’ and ‘totemism convey three main meanings in NSW:

1. The first is an identity meaning- the ‘totem’ is a non-human species or phenomenon that stands for, or represents, the group.
2. The second is a relationship meaning- the ‘totem’ and the person or group share their physical substance, and share a kin relatedness.
3. The third is a worldview meaning- the relationships are embedded in a view of the world in which connectivity is the foundation of all life.

Several main points can be made concerning contemporary totemism in NSW:

- Totemism articulates a system of kinship with the natural world.
- Totemism is expressive of a worldview in which kinship is a major basis for all life, in which the natural world and humans are participants in life processes. Relationships are based on the kin-concepts of enduring solidarity, responsibility and care.
- In some areas totems represent individuals and groups in broader social contexts. Group representation is often achieved emblematically- the image of the totem represents the person or group to others.
- One major issue arising from the case studies is ecological connectivity. A totemic species is not treated as if it were isolated from its environment. To the contrary, the duty of care that inheres in bonds of mutual life-giving includes human care of the whole environment which enables the totemic species to thrive.
- A second major issue arising from the case studies is respect. Respect is founded in law and works across human and ‘natural’ systems. Respect for knowledge and autonomy is linked with respect for living things and their habitats.

(Rose et al., 2003: 3)

The terms ‘Dreaming’, ‘totem’ and ‘totemism’ are used throughout the thesis, with particular considerations for the various complexities in the terms meanings.

‘Indigenous’- The term ‘Indigenous’ is a universal term used to describe the original inhabitants of particular territories (Kottak, 2007). The United Nations have played a significant role in establishing international best practice regarding the acknowledgement of Indigenous peoples’ rights and interests. The United Nations, with significant input from the Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, Jose R. Martinez Cobo, provided a working definition for the term ‘Indigenous peoples’ which states:
Indigenous Communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system. This historical continuity may consist of the continuation, for an extended period reaching into the present of one or more of the following factors:

a) Occupation of ancestral lands, or at least of part of them;
b) Common ancestry with the original occupants of these lands;
c) Culture in general, or in specific manifestations (such as religion, living under a tribal system, membership of an indigenous community, dress, means of livelihood, lifestyle, etc.);
d) Language (whether used as the only language, as mother-tongue, as the habitual means of communication at home or in the family, or as the main, preferred, habitual, general or normal language);
e) Residence on certain parts of the country, or in certain regions of the world;
f) Other relevant factors.

On an individual basis, an indigenous person is one who belongs to these indigenous populations through self-identification as indigenous (group consciousness) and is recognized and accepted by these populations as one of its members (acceptance by the group). This preserves for these communities the sovereign right and power to decide who belongs to them, without external interference (United Nations, 2004: 4).

These definitions explain the key commonality between the multitude of diverse and unique Indigenous cultures throughout the world. However, many Indigenous cultures also share similar characteristics with cultural aspects such as, knowledge, resource use, etc. which will be explored in the thesis (Eriksen & Adams, 2010). In an international context this term can incorporate all Indigenous peoples such as, Native Americans, Maori, Saami, San, First nation peoples, native people, etc. In an Australian context, this term is used to describe both Aboriginal and Torres Strait Islander people (Gregory et. al, 2009). While this thesis does recognise more specific terminology could be used to differentiate between cultures, these terms are not within the scope of the thesis. As a result, the thesis refers to the universal term ‘Indigenous’, with the exception of the term used to define Indigenous people originating from Australia.

‘Aboriginal’- the term ‘Aboriginal’ is used in this thesis to specifically describe the Indigenous people originally from Australia. This term is not inclusive of Torres Strait
Islander people and other Indigenous peoples. Although not used in this thesis, more locally or regionally appropriate classifications used by Australian Indigenous peoples, such as ‘Goori’, ‘Koori’, ‘Murri’, ‘Noongar’, etc., are acknowledged (Head, 2000a; Head, 2000b; Cavanagh, 2007; Gregory et al., 2009).

‘Non-Indigenous’ and ‘Settler’ – the terms used throughout the thesis to describe people who are of Western or Colonial lineage. Non-Indigenous and Settler Australians have either ancestors who settled in Australia in the last 300 years or have recently settled in Australia themselves. Settler Australians are not of ‘Indigenous’ or ‘Aboriginal’ background.

‘Indigenous Knowledge’ and ‘Indigenous Environmental Knowledge’- Several terminologies have been created and applied to describe ‘the environmental knowledge and cultural resource practices of Indigenous peoples’ (Eriksen & Adams, 2010). These terms include ‘Indigenous Knowledge’, ‘Indigenous Environmental Knowledge’, ‘Traditional Ecological Knowledge’ (and its acronym ‘TEK’), ‘Indigenous Technical Knowledge’ and ‘Ethno-ecology’ (Berkes, 2008; Menzies, 2006; Menzies & Butler, 2006; Eriksen & Adams, in press). While recognizing all of these terms, this thesis employs what I believe to be the most appropriate and universal term, ‘Indigenous Environmental Knowledge’. This term does not emphasize a static knowledge as does the term ‘traditional’; it does not accentuate a mechanical knowledge process as does the term ‘technical’; and it does not seemingly restrict the definition to an ecologically based knowledge, as does the terms ‘Ethno-ecology’ and ‘Traditional Ecological Knowledge’. ‘Indigenous knowledge’ incorporates all ways of knowing for Indigenous people, and ‘Indigenous Environmental Knowledge’ slightly narrows ‘Indigenous Knowledge’ to focus on both traditional and contemporary environmental themes.

‘Local Knowledge’ and ‘Local Environmental Knowledge’- A term used to define a broader dimension of knowing which is at times considered more inclusive than ‘Indigenous Environmental Knowledge’. ‘Local Knowledge’ is typically excluded from the Western paradigm of ‘formal’ education and knowledge though it is not specifically identified with Indigenous or Aboriginal ways of knowing (Griffith, 2006; McGoodwin, 2006).

‘Traditional Owner’- ‘Traditional Owner’ is defined as a person who, ‘through membership of a descent group or clan, has responsibility for caring for particular country... [who is] authorised to speak for country and its heritage’ (Australian Heritage Commission, 2002).
INITIATING COLLABORATIVE AND CROSS-CULTURAL RESEARCH IN THE JERVIS BAY REGION

1.1. Introduction

This thesis is a cross-cultural study examining knowledge systems, conceptualizations of space and cultural values within the study area: the Jervis Bay region. This investigation is twofold: it identifies constructions and representations of knowledge, space and cultural values within protected area management as a whole, and then specifically examines these constructions and representations in relation to one particular species, the White-bellied Sea-Eagle. This introductory chapter summarises the research topic, aims and significance. Section 1.2. provides insight into the initial stages of the research project, specifically regarding why the research was conducted in Jervis Bay and the issues which preceded the research project. Section 1.2.1. geographically locates the study area of Jervis Bay, providing some background information for the study area as well as locating the major stakeholders in this study. Section 1.3. provides the conceptual framework of the thesis. Sections 1.4. and 1.5. then state the thesis aims and significance. Section 1.6. provides a statement regarding cross-cultural research which explains the organization and presentation of the results. Finally, Section 1.7 provides a thesis structure outline and Section 1.8 explains the thesis design and flow.
1.2. Identifying the Study Area and Initiating Research

This research for this project was conducted in the Jervis Bay region. Previous work conducted with the Wreck Bay Aboriginal Community in Jervis Bay by the project’s co-supervisor, Dr. Michael Adams, raised an issue in need of further exploration. The White-bellied Sea-Eagle is the emblem of Booderee National Park (BNP), a Wreck Bay Aboriginal Community owned and Commonwealth co-managed park. The Wreck Bay Aboriginal Community openly acknowledges the species as their ‘guardian animal’ (Farrier & Adams, in press). However, the adoption of the species as BNP’s emblem and the significance of the species to the park generally and the Wreck Bay Aboriginal Community specifically is not well documented. Non-Indigenous awareness of this cultural connection between the species and the Wreck Bay Aboriginal Community was instigated when a proposal was made by independent scientists to conduct scientific research on BNP’s resident healthy population of White-bellied Sea-Eagles.

The proposed research sought to capture and tag Sea-Eagle nestlings (bringing in raptor expert Dr. Victor Hurley) to determine the number of the species returning to the area after fledging. The proposed research served as a continuation of a previous ecological mapping study (conducted from 2001-2003) of the White-bellied Sea-Eagles in Jervis Bay, which was conducted by the same scientists to determine the spatial patterns and abundance of the species in the area by method of observation only. Due to BNP’s co-management arrangement between the Wreck Bay Aboriginal Community and Parks Australia (Commonwealth Government), the research proposal was required by law to seek approval of the BNP Board, which has a majority representation of Wreck Bay Aboriginal Community members, as well as the application being forwarded to the Wreck Bay Aboriginal Community Council for approval on applications that are of interest to and can potentially impact the Community.

The Wreck Bay Aboriginal Community members met the research proposal with disapproval for a number of reasons. The proposed research was invasive to a species already highly sensitive around its nesting sites. The research was not viewed by the Aboriginal Community to be necessary, given the healthy population at Jervis Bay and as a result seemingly risked doing more harm than good. Most importantly, the Aboriginal Community was not consulted at any stage prior to or during the development stages of the proposal. As a result, the proposal denied the Wreck Bay Aboriginal Community any input or involvement with the
research. This lack of consultation, while probably unintentional, disregarded any potential cultural conflicts with the research. Had the scientists consulted with the Aboriginal Community prior to the proposal, they could have been made aware of any potential cultural conflicts with the research. In this case, given the significance of the species to the Wreck Bay Aboriginal Community, any potential harm to the species was considered unacceptable and the application was eventually denied. While in the end, the co-management arrangement of the park worked in favour of the Wreck Bay Aboriginal Community, allowing input and ultimately the right to refuse the application, the ease of the refusal process remains controversial. Some non-Indigenous BNP Board members remember disapproving of the research proposal from the start. Some Wreck Bay Aboriginal Community members remember non-Indigenous BNP Board members to be in support of the research initially and attempts being made to persuade Aboriginal Community members to move in favour of the research despite any cultural conflicts.

This incident is clearly remembered by many of the people involved, and highlights some of the dilemmas facing conservation science in areas with at least some level of Aboriginal control. The research I commenced sought to uncover some of the complexities behind these processes, using the significance of the White-bellied Sea-Eagle as the focus.

1.2.1. The Jervis Bay Study Area

Conservation management is a complex and controversial issue in Jervis Bay. Within the relatively small geographic area on the coast approximately 200 km south of Sydney (See Map 1.1 below), the land tenure is varied (Cho, 1995). The study area falls within both NSW State lands and the Commonwealth Jervis Bay Territory. There are six major bureaucratic stakeholders which form a matrix of land and sea tenure: Jervis Bay National Park (NSW), Jervis Bay Marine Park, Booderee National Park (Commonwealth), Department of Defence & HMAS Naval College (Commonwealth owned and operated), Wreck Bay Aboriginal Community Council and Shoalhaven City Council. Some of these land holdings, such as Defence and Booderee National Park, are contiguous, while others, such as the NSW Jervis Bay National Park and more recently the Jerrinja Aboriginal Community land grants, are sporadic and broken up throughout the area. Surrounding these large protected area tenures and Commonwealth lands, there are two urban centres, Huskisson and Vincentia, and smaller villages such as Culburra Beach, Currarong, Callala Bay, Callala Beach, Hyams Beach,
Erowal Bay, Wrights Beach, Sussex Inlet, St. Georges Basin, Sanctuary Point, Woollamia, and Tomerong (DECCW, 2007; MapData Sciences, 2010). Land uses for these surrounding areas consist of ‘rural residential, forestry, grazing and small areas of other agricultural enterprises’ (Spencer & Lynch, 2005; DECCW, 2007). The Australian Bureau of Statistics for the 2006 Census estimates a total population of 88,405 people for the Shoalhaven Local Government Area (LGA) with a total of 3,311 identified Aboriginal persons (ABS, 2007a). Excluding the Nowra Urban Centre as well as the Jervis Bay Territory which was not a part of the census, the rural Shoalhaven Statistical Local Area (SLA) had a reported total of 1,519 identified Aboriginal persons out of a total population of 57,451 people (ABS, 2007b). In 2005, the area attracted a total of 6,808,200 tourists which benefited more than 800 businesses in the area (Shoalhaven City Council, 2007). Protected areas in the region have won tourist awards nationally and locally, such as Booderee National Park’s 2009 Best Indigenous Tourism in Australia award (Australian Government, 2010; Farrier & Adams, in press).

In the case of Jervis Bay protected areas, both the NSW State Government and the Commonwealth Government are stakeholders in the region. Jervis Bay National Park (JBNP) is potentially becoming a co-managed park with Jerrinja Aboriginal Community, and Booderee National Park (BNP) is currently operating as an Aboriginal owned and co-managed park with the Wreck Bay Aboriginal Community. However, as different levels of government are subject to different legislation and resource distribution, the proposal the NSW State government is prepared and able to offer the Jerrinja Aboriginal community varies considerably from the arrangement between the Wreck Bay Aboriginal Community and the Australian Commonwealth Government. While the Wreck Bay Aboriginal Community still faces challenges with the co-management agreement already in place between the Wreck Bay Aboriginal Community Council and the Federal Government, Jerrinja Aboriginal Community has yet to negotiate the transfer of ownership and co-management agreement with the NSW NPWS for JBNP (Feary, 2001; Lowe & Davies, 2001; Lowe, pers. comm., 2010).

In addition to the land within JBNP boundaries, land on Beecroft Peninsula is openly acknowledged as having Aboriginal traditional ownership with the Jerrinja Aboriginal Community defined as the custodians of that land (Lowe & Davies, 2001; Lowe, pers.comm., 2010). However, the land is divided up into three segments: a small northern section being owned and managed by the NSW State government ‘for recreation and preservation of
Aboriginal cultural features’ (Lowe & Davies, 2001: 257), a middle section forming a majority of the peninsula consisting of NSW freehold land which is currently owned by the Commonwealth Government and used by the Department of Defence as a weapons range, and a small southern coastal strip which is Commonwealth territory and is also used by the Department of Defence (Lowe & Davies, 2001; Godden Mackay Logan, 2009).
Map 1.1 Jervis Bay Study Area

Map of Jervis Bay Study Area adapted from Lowe & Davies (2001). Key indicates various stakeholders by pattern. More detailed maps will be provided in Chapters 4 and 5. The highlighted red area in the inset map in the left hand corner indicates the location of the study in Australia.
1.3. Conceptual Framework

The research in the Jervis Bay study area, identified three main components which shaped participants’ viewpoints with regards to environmental management and the White-bellied Sea-Eagle, and which provide a conceptual framework from which the thesis is structured: knowledge, space, and cultural significance. These components, when examined cross-culturally, maintain two primary theories within environmental management and conservation topics: nature is contested (Cronon, 1995; Langton, 1998; Colchester, 2003; Adams & English, 2005; Cant et. al, 2005; Castree, 2005; Cavanagh, 2007; Johnson & Murton, 2007) and nature is more than human (Plumwood, 2001, 2006, 2008, 2009; Instone, 2004; Lorimer, 2007; Rose & van Dooren, 2009).

1.3.1. Knowledge, Space & Cultural Significance

Internationally, there exist several knowledge systems which work to structure and inform different environmental management systems. Castree (2005: 18) argues, ‘Knowledges of nature are multiple in their origins, their meanings, their referents and their audiences.’ However, European history has given evidence to the production of hegemonic discourses of Western knowledge systems, which have since been embodied in policies and institutions, and have privileged Western nature-knowledges (Castree, 2005). Smith (2000:211) argues Western science is constructed to promote ‘the reification of Western thought’ through its positivist framing of the world and its embedded technological rationality. Western nature-knowledge thrives on positivist Western natural science disciplines; such as biology, ecology, geology, and for the purposes of this study, ornithology.

Dominant discourses of Western knowledge have formed hierarchical dualisms which inevitably place ‘other’ knowledge systems into inferior and (in the case of most Indigenous people) unheard positions, though they are certainly not unvoiced (Rose, 2004). Furthermore, Western knowledges as privileged seek to validate, to define the authenticity of those ‘other’ knowledge productions (Kurtzer, 2003). Langton (1998:9) argues, ‘Aboriginal people and their land management traditions have been rendered invisible in Australian landscapes, not only by legal but also by ‘science fictions’ that arise from the assumption of superiority of Western knowledge over Indigenous knowledge systems’. Consequently,
Indigenous people around the world often have a general distrust for Western systems which work to maintain privileged colonial frameworks and hierarchical structures. This distrust is not unwarranted and is substantiated further by the modern Western desire to possess all knowledge for private and public exploitation (Nakata, 2004a; Dodson, 1996a). This is not welcomed by most Indigenous people, who have demonstrated the importance of ‘cultural and spiritual sensitivity and integrity’ (Dodson, 1996a:31).

While Indigenous environmental knowledge is ‘based on extensive empirical observation’, it is essential to recognise the differences in the construal of those observations between Indigenous knowledge systems and Western scientific paradigms (Eriksen & Adams, 2010). Berkes (1999) emphasises Indigenous environmental knowledge is based on relationships linking all living beings: plants, animals, humans, Country. Unlike Indigenous environmental knowledge systems, Eriksen & Adams (2010:2) argue, ‘heritage paradigms, amongst other common influential conventional scientific theories of value, have a focus on objects, entities and places whilst the all-but-invisible background of relationships, behaviours, non-human entities and kinship structures that arguably shape people-environment relations are ignored.’ This thesis examines cross-cultural differences of nature knowledge construction. This thesis also recognises the history of contestation of Indigenous knowledges and the continuing privileged Western knowledge constructions in environmental management systems in Australia. Consequently, this research seeks to identify and negotiate cross-cultural constructions: ‘ways of knowing’, ‘what counts as knowledge’ and specifically how these apply to the White-bellied Sea-Eagle.

In addition to knowledge systems, spatial conceptualizations are also significant to this project. Spatial conceptualizations are almost entirely shaped by historical and cultural processes. Birch (2003) argues that as much as other physical means of imperial domination (e.g. guns, warships, etc.) served as weapons by settler Australians, maps have been just as significant and extensive. Settler surveyors such as Major Thomas Mitchell, who was stationed in Western Victoria in 1836, acted as authorities on behalf of the British Crown in their search for exploitable land (Birch, 2003). In so doing, the land and its features were charted, ordered and labeled on a map, classified as terra nullius (a houseless and thus uninhabited or ‘socially empty space’ despite encounters with local Aboriginal people), and claimed as a colonial possession (Birch, 2003). Through cartography, land which was occupied by Aboriginal people for thousands of years was taken for possession by Britain (Birch 2003). Hartley (1988), Ferrier (1990) and Birch (2003) argue maps shape the way in
which the landscape is conceived. Furthermore, Birch (2003: 155) in particular argues maps give a particular history: in this case it was a British history which resultanty concealed ‘the presence and histories of the Indigenous people’. Maps created and land claimed in the settler era continue to shape the way in which people, and particularly non-Indigenous people, perceive and possess the landscape in the post-colonial era. Young (1999) argues one must, when analysing landscape construction, realise not only the influence of covert cultural processes, but also realise that social groups do not interpret or experience environments in the same way. In recognition of these differences, as well as the one-sided construction of maps, landscapes and land use laws during the settler era and the permeation of these constructions within national parks and protected areas in Australia, this project endeavors to identify cross-cultural conceptualisations of space within the study area.

In addition to knowledge and space, this thesis seeks to provide a cross-cultural understanding of the social and cultural significance of the White-bellied Sea-Eagle species. Due to the raptors’ non-endangered listing in both Commonwealth and NSW threatened species legislation, the species is not a management priority for any of the protected area management bodies in the study area; however, the White-bellied Sea-Eagle is of great significance to the Aboriginal people within and surrounding the protected areas in the study area, as well as to non-Indigenous people who have formed particular connections with the species.

1.3.2. Protected Areas

Protected areas as they exist today were constructed and based entirely upon Western and settler constructions of ‘nature’ and ‘nature conservation’ (Stevens, 1997; Adams, 2003; Adams, 2005). However, constructions of ‘nature’ are contested. Western conceptualizations of ‘nature’ as a pristine, untouched, and unlived landscape contrast considerably from Indigenous perceptions of landscape as a cultural resource, which has been a major source of conflict between protected area managers and Indigenous people. In his collaborative work with the Saami Indigenous people of Northern Europe and Aboriginal Australians, Adams (2003: 4) argued, ‘The Western concept of national parks, which usually defines people as visitors who ‘take only photographs and leave only footprints’, does not sit comfortably with Indigenous peoples’ understandings and use of their homelands, where the marks of their use
and habitation are something to be treasured and celebrated.’ Recognising the contestation of nature is significant due to the privileged and dominant Western model of environmental management.

Several Indigenous and non-Indigenous academics have written formal critiques on contemporary Indigenous involvement in conservation management and have overwhelmingly concluded an improvement on current environmental management frameworks is necessary (Dodson, 1996b; Stevens, 1997; Langton, 1998; Berkes, 2008; Head, 2000a; Head, 2000b; Baker et al., 2001a; Lowe & Davies, 2001; Feary, 2001; Adams, 2003; Adams & Mulligan, 2003; Birch, 2003; English & Baker, 2003; Adams, 2004; Adams, 2005; Adams & English, 2005; Feary, 2008). From these works, along with an ever growing push from Aboriginal Communities all over Australia, and particularly from the personal communications I have shared with participants for this study, it is evident there exists a need for a higher level of understanding and incorporation of Aboriginal Australians into a presently Western dominated conservation management approach.

1.4. Thesis Aims

The overall aim of this research project is to undertake a cross-cultural comparison of Indigenous and non-Indigenous perspectives on the White-bellied Sea-Eagle in the Jervis Bay region. While neither participant group is homogeneous, a broad brush comparison is relevant due to the one-sided history of conservation management in Australia.

For each of these two groups my specific aims are to explore:

1. ways of ‘knowing’ the White-bellied Sea-Eagle and determine what ‘counts’ as knowledge

2. the conceptualisations of space within which conservation interests generally, and the White-bellied Sea-Eagle specifically, are managed and expressed in law

3. personal connections and cultural significance

Thus, I will identify commonalities and conflicts in the management of the White-bellied Sea-Eagle, suggest practical implications for the study area, and provide a solid foundation
from which further study could be conducted on these issues, particularly for a project with longer duration.

1.5. Significance and Originality

Over the past six years, fellow students have embarked on cross-cultural research journeys with various projects (Kilham, 2004; Cavanagh, 2007; Edmunds, 2008). In so doing, each of these students have contributed a further step towards negotiating the gap of understanding between Aboriginal and non-Indigenous groups and the embedded social and political natures of these negotiations, particularly pertaining to conservation issues in Australia.

This research project also acts as a further step towards negotiating these differences. Given the project’s short duration, this thesis serves as the foundation for further study either applied to the Jervis Bay study area specifically, or more generally for similar negotiations taking place throughout Australia and abroad. Overall, the project outcomes are significant as they contribute to the identification of areas of common ground between the Aboriginal Communities and Settler Scientists, which are significant in negotiating the differences world views, and breaking down false perceptions of the Western science binary logic, to achieve similar and desired physical outcomes generally, and pertaining to the White-bellied Sea-Eagle specifically.

However, the most significant component of this research project is the practical and real outcomes that will benefit, though not immediately, the Aboriginal and non-Indigenous people who currently maintain divergent interests within the study area.

1.6. A Cross-Cultural Study

Given the one-sided construction of ‘nature’ in the colonial era, its historical processes which resulted in marginalisation and loss of control of resources for Aboriginal people in Australia (Gregory et al., 2009), a cross-cultural comparison is relevant. However, the presentation of cross-cultural studies can be difficult as it explores how two social groups are represented and conceptualized by both internal and external sources. There are several limitations to combining cross-cultural participant groups due to vast cultural differences. This is particularly so with Indigenous and settler constructs, where settler ideologies are largely dominant and privileged. For protected area management, cross-cultural studies work to challenge dominant settler views by presenting a view point with a different set of values and
interests, as well as a different approach to environmental management. For example, Western dominated environmental management approaches work by often separating conservation of biodiversity and ecology from culture and heritage. However, Sutherland & Muir (2001:25), in their experience with Aboriginal people in the Northern Goldfields region of WA, argue ‘The relationship between physical and cultural management is blurred, with the two methods constantly informing each other.’

Another significant consideration to make is the diversity within each participant group, which presents a huge amount of issues and dilemmas within their own contexts. What Anderson (1996:155) describes modern Aboriginal social organization as the ‘Aboriginal Community infrastructure’. However, in research, the concept of ‘community’ can present a number of dilemmas, particularly when it is viewed as a single social entity uniting on all issues due to individuals sharing a common culture (Peters-Little, 2000). In both the Jerrinja Aboriginal Community and the Wreck Bay Aboriginal Community, only some members actually live in the communities due to a number of reasons (e.g. not enough space in the community, the need to live in close proximity to work or school, etc.), which means access to Country is varied. In addition to geographical differences, other circumstances of historical, political, social, and spiritual nature affect the individualistic nature of Aboriginal people’s opinions and lifestyles (Peters-Little, 2000). While it is important to consult Community representatives during the initial stages of the research to determine potential harm and/or benefits, when individuals are spoken to it is important to recognise the diversity of the community and the potential for contested opinions between individuals. Peters-Little (2000: 5) argues, ‘My most personal commitment is to interview people as individuals with individual voices and not as community representatives: Aboriginal people are individuals and need to be respected as such and not pressured into thinking that they are speaking on behalf of a race, community, organisation or doctrine.’ Western nature constructs and the Western model of environmental management come across several dilemmas in dealing with even Western human presence. For example, the Western concept of nature as pristine and preserved and the environmental managers who serve to protect that ideology conflict considerable with Western human actions of littering, 4-wheel driving, and illegal fishing/hunting. Neither social group is homogenous in their beliefs and opinions. Furthermore, just as individuals are diverse within their own social group, so too, are their perceptions of and experiences with other social groups.
Due to the differences between Aboriginal and settler ‘ways’, as well as the immense diversity within each group, it is most beneficial to introduce these perspectives separately. While thesis is structured to present separately Aboriginal and settler aspects of representation pertaining to the White-bellied Sea-Eagle, I am aware that that is in effect a simplification, and that there are overlaps and wide penetrations between them. So, while Chapters 3 and 4 present two perspectives, they are each not strictly informed by one party.
### 1.7. Thesis Outline

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Description of Argument</th>
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<tbody>
<tr>
<td><strong>One</strong></td>
<td>An introduction to the major themes of the thesis including: a brief background, a description of the study area and its selection process, the project aims, the significance of the project, and a model of the thesis design.</td>
</tr>
<tr>
<td><strong>Two</strong></td>
<td>A comprehensive literature review is provided in this chapter to provide a conceptual framework for which to understand the key research questions. The chapter explores: contemporary issues in conservation and park management, focusing particularly on cross-cultural issues in Australia; issues in both State and Commonwealth park management, particularly as it applies to the study area; the significance of Raptor species to Indigenous peoples internationally.</td>
</tr>
<tr>
<td><strong>Three</strong></td>
<td>A description of the ethical theories, debates, and processes for this project, and dilemmas encountered. An overview of research methodology, theory and a rationale for methods chosen to collect, analyze, and report data as well as an acknowledgement of thesis scope and limitations.</td>
</tr>
<tr>
<td><strong>Four</strong></td>
<td>An exploration of non-Indigenous peoples’: ways of knowing; conceptualizations of space within which conservation interests generally (and the White-bellied Sea-Eagle specifically) are managed, and expressed in law/lore; personal connections and cultural significance of the White-bellied Sea-Eagle.</td>
</tr>
<tr>
<td><strong>Five</strong></td>
<td>An exploration of Aboriginal peoples’: ways of knowing; conceptualizations of space within which conservation interests generally (and the White-bellied Sea-Eagle specifically) are managed, and expressed in law/lore; personal connections and cultural significance of the White-bellied Sea-Eagle.</td>
</tr>
<tr>
<td><strong>Six</strong></td>
<td>A cross-cultural comparison between the participants groups and a discussion of the emerging themes. Considerations for the ‘road ahead’ and issues for ‘managing’ a mobile organism.</td>
</tr>
<tr>
<td><strong>Seven</strong></td>
<td>A brief summary conclusion of findings, and suggestions for a way forward.</td>
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1.8. Thesis Design
LITERATURE REVIEW

2.1. Introduction
This chapter provides a literature review on the historical and contemporary issues arising in conservation management and its recent involvement of Indigenous people. The relatively recent involvement of Indigenous people in protected areas has brought about an entire new set of issues and dilemmas which have been raised by both Indigenous and non-Indigenous people, particularly with species management and ‘cultural ecology’ (Lewis, 1992). A background of these issues is relevant to provide the project with a conceptual framework from which to develop and understand the key research questions. Section 2.2. reviews the establishment of national parks on an international scale and how these influenced the development of national parks in Australia. Next, Section 2.3. outlines the processes which initiated the involvement of Indigenous people in conservation issues and environmental management, particularly the involvement of Aboriginal people in protected areas in Australia. Next, Section 2.4. examines Commonwealth and State managed protected areas to identify commonalities and disparities. Following, Section 2.5. introduces the theoretical frameworks for the research project. Finally, Section 2.6. briefly explores the cultural significance of raptor species to Indigenous people internationally to understand the nature of these various relationships and to address cross-cultural issues in conserving these different species.
2.2. Establishment of National Parks: A ‘One-Sided’ History

Indigenous involvement in Western natural resource management is a relatively recent development in post-colonial countries. Previously, the establishment and management of protected areas were entirely represented by Western paradigms. The first official national park was established in 1864 with Yosemite National Park in the United States. Yosemite, and then Yellowstone National Park (1872), set a precedent for the conservation movement which resulted in international Western establishments of protected areas and national parks (Stevens, 1997; Colchester, 2003; Adams, 2005). The creation of Yosemite and Yellowstone National Parks was significant in two ways: it epitomised protected areas as a preservation of the natural landscape, partly for its distinctive view and partly as a representation of national identity (Adams, 2001), and it created a distinct separation between the natural environment and the cultural landscapes in Western perceptions of ‘nature’. Australia formed the second National Park in 1879, which was developed simultaneously with Yellowstone, with the establishment of the Royal National Park in NSW (Grove, 1995; Adams 2005). Royal National Park, unlike Yellowstone, was based on the large ‘commons’ parks of urban Britain, though the motivations for establishment of the Royal National Park were dissimilarly based on natural resource management and game reserves (Adams, 2001). A major characteristic of nineteenth century colonialism was the dispossession or displacement of Indigenous people, which was highly integrated into the early stages of the global conservation movement. Soon after establishment, Yellowstone National Park displaced the inhabitant Native Americans through the reservation settlement system (Stevens, 1997). While Royal National Park did not displace Aboriginal people, preceding processes of colonial development had already begun removing Aboriginal people off traditional country of value for establishment of non-Indigenous private and commercial ownership. Young *et al* (1991:13) state, ‘Through the seizure and alienation of their land for agricultural, pastoral and settlement purposes many Aborigines were forced to resettle, either within the growing towns or in groups under mission or government control on small resourceless areas of land reserved for their accommodation.’ The concepts of both Yellowstone and Royal National Park incorporated and generated ‘the stereotyping of Indigenous peoples as ‘noble savages’ into the newly discovered (and imaginary) Edens’ (Adams, 2001: 170).
Aplin (1998) argues the technological advancements and the foundational positivist science of Western society has worked to increasingly alienate Western people from the environment and alternatively has worked to encourage sizing up the monetary value of the environment and natural resources. Similar to the relocation of Aboriginal people onto resourceless land areas, research now indicates the primary land held for national parks or protected areas were residual (Adams, 2003; Davies et al., 1999). Adams (2003: 9) argues:

Conservation lands are not primarily representative of biodiversity distribution or rare species habitats, they are representative of areas that are not required for other purposes...which often overlaps and conflicts with another residual landuse, the remaining lands owned or accessed by Indigenous peoples. ...While...there is also a historic trend to conserving areas of high scenic value, which often correspond to ruggedness or low potential for other land uses, it is the prioritisation of other land uses which has been the primary determining factor.

Common views of dominant non-Indigenous constructions of the unused and ‘natural’ environment tend to be seen as either preservationist or instrumentalist: seeking strictly non-consumptive ways to enjoy wilderness or seeking protection of resources for future use (Aplin, 1998; Davies et al., 1999).

Despite the Western establishment of national parks in the late seventeenth century, Stevens (1997: 9) argues:

Indigenous peoples created the world’s first protected areas centuries ago. Their sacred places...were regions removed from every-day access and resource use...with which people communed but did not interfere. On a larger scale, entire Indigenous homelands could be considered to be the equivalent of what we now call national parks and protected areas, territories whose forests grasslands, and other habitats, and the wildlife within them have been used, managed, and conserved in accordance with cultural knowledge and values, customary systems of tenure, and local resource management institutions.

Archaeological evidence now suggests Aboriginal people have existed for about 50,000 years prior to colonisation (Head, 2000b; Adams & Mulligan, 2003). Assumingly, traditional Aboriginal management of and life with Country has been long standing. Dispossession policy, which directly influenced the non-Indigenous conservation policy in Australia, removed Aboriginal people from Country and from the newly claimed colonial social landscapes. As a result, Aboriginal peoples’ multi-dimensional constructions of country, which consist of ‘people, animals, plants, Dreamings, underground, earth, soils, minerals and waters, surface water, and air’ (Rose, 1996), also became marginalised by settler...
constructions of space in the form of tenure division. Naturally, the developing Western tradition of national parks and protected areas within the colonial establishment had and continue to have severe ‘implications for Indigenous peoples as well as for the preservation of wildness, biodiversity, valued cultural landscapes, spectacular scenery, and places of physical and spiritual renewal’ (Stevens, 1997:15).

2.3. Indigenous Involvement in Conservation Management

Trends in international policy over the last few decades indicate the establishment of international norms regarding the environmental conservation as well as the treatment and inclusion of Indigenous people (DeLacy and Lawson, 1997; Stevens, 1997; Sutherland & Muir, 2001; IUCN, 2003; Erikson & Adams, 2010). Of these norms, ‘non-discrimination on the basis of race’ has the most apparent groundwork for the international recognition of Indigenous peoples’ rights (Sutherland & Muir, 2001). Most governments consider this norm to be binding, setting a standard obligation for all countries and creating international pressure for corrective action if any country is found to be in breach (Sutherland & Muir, 2001).

From dispossession to assimilation to tolerance, Australia as a nation has seen a considerable shift towards involving Aboriginal Australians in conservation management in the last four decades. This recent shift towards involving Aboriginal people in Australian conservation management reflects a broader shift in relations between settler Australia and Aboriginal people in the last four decades: a shift from assimilation policy towards welfare policy (Anderson, 1996; Baker et al., 2001b). The major characteristics of the assimilation period consisted of state managed Aboriginal affairs, exclusion of Aboriginal people from civil rights, and an overall indoctrination of Aboriginal people into non-Indigenous constructs such as centralised settlement, Western education, work, adoption of non-Indigenous technologies, and renouncement of Aboriginal knowledge systems, languages and traditional resource management practices (Anderson, 1996; Baker et al. 2001b). In the shift towards a welfare policy, Anderson (1996:155) identifies three key social processes: ‘the removal of constitutional barriers to Aboriginal citizenship following the 1967 referendum; the development of a national Aboriginal political movement focused on self-determination; and the development of a federal bureaucratic apparatus which administers Aboriginal programs
and facilitates Aboriginal self-management.’ These changes to settler Australia’s approach with Aboriginal people resulted in the construction of an ‘Aboriginal Community infrastructure’ (Anderson, 1996: 155). While these recent shifts in both domestic and international law and policy have brought some positive change for Indigenous people, processes are still significantly constructed within a legal framework and are based on the assumed superiority of Western knowledge systems, both of which continue to obstruct and contest Aboriginal self-determination and empowerment (Langton, 1998; Sutherland & Muir, 2001).

Overall, conservation organisations did not take Aboriginal involvement in conservation management into consideration until Aboriginal Communities were able to recover significant portions of land through title under land rights legislation (Sutherland & Muir, 2001; Adams & Mulligan, 2003). Presently, there are still few acts in Australia which recognise the right ‘for traditional owners to be directly and independently involved’ in their own heritage management and policy trends since the 1970s indicate land rights legislation has been more effective than heritage legislation in providing the protection and support of various Aboriginal cultures (Sutherland & Muir, 2001: 27).

The development of legislation which promotes Aboriginal land management and Aboriginal involvement in conservation management in Australia includes acts such as the acknowledgement of native title through the Native Title Act 1993, the Aboriginal Land Rights Act 1983 (NSW), the Aboriginal Land Rights Act Amendment 1996 (NSW) and the National Parks and Wildlife Act 1974 (NSW). These acts provide for Aboriginal ownership and co-management of land at both the State and Commonwealth level: co-management with the National Parks and Wildlife Service (NPWS) of State run national parks, co-management with the Australian National Parks and Wildlife Service of Commonwealth run national parks, Indigenous-led co-management arrangements supported by relevant government agencies, and independently owned and managed Aboriginal land (Feary, 2001; Sutherland & Muir, 2001; Adams & Mulligan, 2003).

Co-management arrangements in national parks are established through the statutory acknowledgement of Aboriginal people’s rights and interests in national parks through land granted by the government to Aboriginal people, generally as a result of successful claims under land rights legislation (Bauman & Smyth, 2007). Bauman & Smyth (2007: 6) explain co-management agreements establish ‘a legal partnership and management structure which
reflects the rights, interests and obligations of the Aboriginal owners of the park, as well as those of the government conservation agency, acting on behalf of the wider community.’ In most cases (not all), co-management involves the transferring of ownership of the park over to Aboriginal Community stakeholders in exchange for an agreement consisting of two key elements: a lease back of the land for continued use as a national park and a shared responsibility between all stakeholders (Indigenous and non-Indigenous) for the care and management of the park (Bauman & Smyth, 2007).

Native title legislation on the other hand recognises traditional and continuing ownership of Country by Indigenous people under their own traditional law systems (Bauman & Smyth, 2007). Unfortunately, native title further supports what Adams (2003) and Davies et al (1999) argue in an International context: most Indigenous lands are residual. Establishing native title in a land claims case requires proof of traditional and continued Aboriginal ownership (in an Indigenous law context) of the land. In most cases, native title continues to exist in areas of Crown land which have not yet been allocated or used for other purposes (Bauman & Smyth, 2007). Regardless, successful native title claims provide another means for Aboriginal Communities to negotiate co-management or other participatory arrangements in the management of conservation areas (Bauman & Smyth, 2007).

Successful native title claims most often result in an Indigenous Land Use Agreement (ILUA), which offers additional to opportunities to negotiate land management (e.g. Aboriginal rights to use traditional resources within the protected area) (Bauman & Smyth, 2007). Another Indigenous-led approach in land and conservation management made possible by native title, which has become increasingly popular over the past decade, is Indigenous Protected Areas (IPA’s) (Bauman & Smyth, 2007). According to Bauman & Smyth (2007: 13), Australian government commitments in the early 1990s ‘to establish a system of protected areas which is comprehensive, adequate and representative of the full range of ecosystems’ combined with the ‘increasing interest of Aboriginal people to gain assistance and support in the management of their land’, particularly in the northern and central regions of Australia where large areas have been returned to Aboriginal people through the land claim process’, led to a combined interest towards the establishment of IPA’s. IPA’s offer a higher degree of flexibility for both Aboriginal and conservation interests, with only the formation of a plan of management by the Aboriginal owners ‘to make a commitment’ to manage the land in the interest of conserving biodiversity values (Bauman & Smyth, 2007: 14). They can be established through formal conservation
agreements under state or territory legislation, or they can be established and managed under Indigenous law. With Aboriginal people voluntarily choosing protected area status over the land they own, they can also choose the level of external/government involvement, the level of tourism access, the extent of development, and how they are able to utilise the land (Bauman & Smyth, 2007).

Overall, the legal process is long for Aboriginal Communities pursuing land claims and due to the high level of difficulty, only a portion of land claims filed by or on behalf of the Aboriginal Communities are actually granted (Feary, 2001; Lowe & Davies, 2001; Lowe, pers. comm., 2010). Regardless, as more land claims (both on park lands and off) are made, all people (both Indigenous and non-Indigenous) speculate how the land will be managed.

2.4. Commonwealth vs. State Managed Protected Areas

Within the study area of Jervis Bay, there exist both Commonwealth and State managed protected areas. Commonwealth lands in the Jervis Bay region include the Jervis Bay Territory on Bherwerre Peninsula, which is administered by the Wreck Bay Aboriginal Community and the Australian National Parks and Wildlife Service (ANPWS), and Beecroft Peninsula to the north which is currently administered by the Department of Defence Environment Team (DDET) (previously environmental management on Beecroft Peninsula was also managed by the ANPWS). These lands are subject to a number of unique laws and regulations which remain separate and absolute to State controlled lands which are subject to NSW state legislation. Subsequently, it is relevant to investigate the commonalities and differences between the two management authorities to understand their potential impacts within the study area.

The Commonwealth government passed the National Parks and Wildlife Conservation Act 1975, which establishes the ANPWS as the agency responsible for the care, control and management of Commonwealth National Parks as well as providing the Director of National Parks and Wildlife the power to perform any functions in cooperation with an agency of a State government. The NSW government passed the National Parks and Wildlife Act 1974, which establishes the National Parks and Wildlife Service (NPWS) of NSW as the agency responsible for the ‘care of fauna, for the protection of native plants and for the protection of relics and Aboriginal places in NSW. The act provides for the establishment of NSW State
national parks or reserves. Additionally, the act establishes the Director of the NSW NPWS and the NSW NPWS agency as responsible for the care, control and management of any national park or reserve established under the act. An amendment to the act in 1998 provided for Aboriginal ownership of certain national parks in NSW (Feary, 2008).

In cases where Aboriginal ownership and lease-back arrangements are made between Aboriginal Communities and State or Commonwealth managed national parks, these tenures are jointly managed by both the Aboriginal Community and the relevant State or Commonwealth Departments. The NSW legislation for Aboriginal ownership of parks and co-management was developed and based almost entirely off of the Uluru and Kakadu joint-management models, however, the circumstances are extremely divergent (Feary, 2001; Smyth, 2001). For instance, Uluru-Kata Tjuta National Park, Kakadu National Park, Keeling National Park, Christmas Island National Park, Norfolk Island National Park, along with Booderee National Park which is featured in this study, are the only Commonwealth administered national parks in Australia (Commonwealth of Australia, 1991; Baker, 2010, pers. comm). As a result, these parks were afforded a rather direct approach with establishment and are subject to Commonwealth legislation (Smyth, 2001). In contrast, NSW legislation places several restrictions on Aboriginal owners, including any rent monies paid to the community are to be spent on park management, Aboriginal owners are not permitted to live on the National Park, and establishing or validating who the traditional owners are is very restrictive (Feary, 2001; Bauman & Smyth, 2007). Feary (2001: 279) argues:

While the philosophy and intent of joint management are fully embraced by NPWS, it is the very pragmatic issues such as access and harvesting of plants and animals that test the commitment and understanding of staff involved in the process, particularly if they are ardent conservationists.

It is evident that there is a great deal of contestation to do with Aboriginal ways of doing things: owning the land, accessing and utilizing resources, and even managing the land. Their involvement raises a number of varying issues, all highlighting the conflicts between nature-knowledges and nature-constructions. To address these conflicts in the cross-cultural research, a theoretical framework is provided.
2.5. Theoretical Frameworks

To produce a cross-cultural exploration of knowledge systems, conceptualisations of space and cultural attachments to a nonhuman agent, a theoretical framework which equally embodies the perspectives and experiences of both participant groups is necessary. The theoretical frameworks, which guide this investigation, draw from the supposition that nature is contested. Furthermore, to understand an overlapping component of the thesis, the nonhuman (White-bellied Sea-Eagle) and its role as agent rather than object, this investigation also draws from the assumption that nature is more than human.

Several nature philosophies in human geography build upon postcolonial theories such as those of Edward Said and Michel Foucault, which work to highlight the power of knowledges and the circulation of hierarchical binaries (Foucault, 1970; Said, 1978; Childs & Williams, 1997). Postcolonial geographies have challenged geographers to consider the social and historical implications of nature constructions, particularly the impacts of the colonial legacy, highlighting the voices of those who are ‘silenced’ by it (some of which is explained in Section 2.2 with the establishment of national parks) (Blunt & McEwan, 2002). This thesis recognises the origins of postcolonial theory as the basis of several nature geographical enquiries, and admittedly threads the theory in bits throughout, drawing on the challenges it presents Western knowledge-nature constructions. However, the focus of the research is not to highlight the already well documented oppression of Indigenous knowledge-nature constructions as a result of embedded hierarchical Western epistemologies. Young (1999:319) argues, ‘It is not only recognition of the influence of hidden cultural processes on landscape construction, however, which is important. It is also the realization that social groups do not necessarily observe and interpret environments in the same way.’ Subsequently, the theoretical framework for this thesis assumes postcolonial theory is established and builds upon the postcolonial assumptions to focus on equally presenting both Indigenous and non-Indigenous knowledge-nature constructions, recognising particularly the differences as well as the less commonly discussed similarities. Thus Section 2.5.1. presents ‘nature as contested’ to highlight both the Indigenous and non-indigenous constructions of knowledge-nature and its relationship to the White-bellied Sea-Eagle. Section 2.5.2. then highlights an overlapping spatiality onto the Indigenous and non-Indigenous by drawing on the nonhuman (the White-bellied Sea-Eagle) as an agent, which may in fact demonstrate commonalities between the two participant groups.
2.5.1. Nature as Contested

Nature is contested: within Western nature-knowledge constructions (Castree, 2005), between Indigenous nature-knowledge constructions (Battiste, 2000b; Peters-Little, 2000), as well as within the dualism many academics acknowledge the two nature-knowledge constructions form (Young, 1999; Rose, 2004). An example of divergent Western scientific nature-knowledge constructions is within the very field of geography: the sub-disciplines of human and cultural geography on one side of the deliberation, and physical and environmental geography on the other (Castree, 2005). Physical and environmental geographers, according to Castree (2005: 178-179), embody both ontological and epistemological realism: ontological realism in the belief that ‘the non-human world exists independently of our representations of and actions upon it’, and epistemological realism in theory that ‘in both principle and practice, it [nature] can be understood in more or less accurate ways.’ These geographies are based on the theory that science as knowledge was something which was free from both bias and prejudice, for which its counterparts, the sub-disciplines of social and human geography, argue to be a falsity (Castree, 2005). Human geographer, Forsyth, sought to reveal the realities of ‘nature being concealed with false representation’ (Castree, 2005: 130). Other human and cultural geographers, such as Peter Jackson (1989) and James Duncan (1999) have expressed concern with the embedded cultural assumptions of knowledge-nature construction, which very much affect how nature is cared for and how these ‘concepts of nature further interests of the ruling elites, which are perpetuated through hegemony’ (Castree, 2005: 130).

Nature-knowledge constructions are also contested within and between Indigenous societies. Henderson (2000:254) argues the eurocentrism of Western though often depicted Aboriginal people ‘as members of a harmonious, internally homogeneous, unchanging culture’. Langton (1998:49) argues a central theory ‘within sociological traditions [is] the individual…assumed to be the basic unit of a society. A major sociological concern becomes a struggle over the extent to which individual consciousness and reality shapes, or is shaped by, social structure.’ Peters-Little (2000) also recognizes the great deal of diversity within Aboriginal Communities. He argues the Aboriginal people of his Country ‘are the most fiercely independent, resilient and individualistic in their opinions and lifestyles, and are as boldly explicit in their manner of self-expression as any Aboriginal community I have worked in’ (Peters-Little, 2000: 1). Even in the Western definition of Aboriginal nature-knowledge
constructs there is divergence. Head (2000a) notes an added complexity: the ways in which Indigenous nature-knowledge constructions have been perceived. Another dualisms is created with one perception being the romanticized view of Indigenous societies as ‘the original conservationists’ and the other perception being the ‘demonized’ view of Indigenous societies ‘as the hunters of endangered species’ (Head, 2000a:120).

The relatively recent yet well documented concept of ‘nature as contested’, is formed as a result of the divergent interests between Western and Indigenous nature-knowledge constructions. Many well known geographers have demonstrated this conflict (Colchester, 2003; Dodson, 1996a and b; Stevens, 1997; Langton, 1998; Duncan, 1999; Young, 1999; Head, 2000a and b; Baker et. al, 2001; Rose; 2004; Adams, 2005; Adams & English, 2005; Cant et. al, 2005; Adams et. al, 2007; Johnson & Murton, 2007). Young (2000) broadly explains conflicting concepts of nature between Indigenous and Western societies’, with the former stressing spiritual and emotive characteristics, and the latter stressing economic and exploitative characteristics. Langton (1998: 25-27) highlights the notion of ‘wilderness’ for non-Indigenous people is that of an untamed and unmanaged land; however, for Aboriginal people ‘wilderness’ is neither pristine nor untamed: rather it represents a denial of Aboriginal imprint on Country and in effect is a Country without ‘its songs and ceremonies.’ Adams (2003) argues Western focus at both the national and international level are on the development of national parks, lands which happen to be remaining and are often traditionally owned and or accessed by Indigenous people. Pertaining to biodiversity conservation, Adams et.al (2007) argue Aboriginal peoples’ modern approach to looking after Country incorporates recognition of a changing environment, accepting some introduced species (e.g. bush lemons and honey bees) and recovering from the loss of some ‘native’ species, which are either extremely low in numbers or are all together extinct. This contrasts from many area managers perspectives, who now work to restore and preserve their conceptualisation of the ‘natural’ environment (Adams et. al, 2007). Robinson et. al (2004) further reveal the challenges of divergent biodiversity conservation interests in the Aboriginal owned and co-managed Kakadu National Park, with the Aboriginal people adapting to introduced species such as the water buffalo and horses; however, viewing pigs as a threat to Country. In contrast, the Kakadu National Park Board’s interests fall in meeting ‘international and national obligations to protect the park against feral animal damage’ (Robinson et. al, 2004: 1386). In response to these conflicts, many geographers work to negotiate the gaps and differences between Aboriginal and Western knowledge-nature
Central to these negotiations, Adams (2004:8) argues:

Reciprocal partnerships between conservation interests and Aboriginal communities could help respond to the challenges of a rapidly changing landscape...The attraction is in the idea (with some evidence) that the different worldviews may, in fact, significantly overlap in on-ground management outcomes: different values and intents can result in similar physical scenarios. A physical result that derives directly from spiritual beliefs, for example, need not be quantitatively or qualitatively worse than (or even different to) one deriving from scientific beliefs.

A focus on this ‘physical result’ may help to break down embedded Indigenous-non-Indigenous dualisms in nature theory to identify commonalities and negotiate real outcomes. This leads to our second and final theoretical component, which works to look beyond human differences and examine the nonhuman agents in a ‘more than human’ nature context.

### 2.5.2. Nature beyond Human

The human-nature question has circulated Western thought for some time now. Aristotle argued ‘man was an animal with the capacity for politics’, which embedded a ‘division within man between animality and humanity’ (Braun, 1999: 21). Rose (2004) argues critical reflection over previous decades has portrayed Western thought and action to encompass hierarchical dualisms, particularly the culture/nature dualism, with culture being not only separate but dominant over nature. This dualism has reinforced the principle of Western science as consisting of entirely rational and objective thought processes, which rely upon a clear division between subject and object (Instone, 2004). Instone (2004: 131) argues, ‘Negotiating the ‘gap’ between what is in our heads and what is ‘out there’ requires strategies which refuse dualistic discourses and confound the distinctions between culture and nature.’ In so doing, other gaps may be negotiated. In the Indigenous context, Henderson (2000:256) argues:

Ecological forces have always been the source of the most important lessons of Aboriginal thought and life. Aboriginal worldviews, languages, knowledge, order, and solidarity are derived from ecological sensibilities, so an understanding of these forces is essential to an understanding of Aboriginal contexts and thought.
Instone (2004:132) argues ‘Non-representational theorists’ such as Bruno Latour (1993), bring considerable insight into the questions of realism and social constructions of nature, rejecting ‘both the idea of a nature ‘out there’ and the view that nature is a wholly social construction.’ Central to the ‘nature beyond human’ theory is the decentralisation of human agency, the ‘nonhuman charisma’ in biodiversity conservation, and the nonhuman creative force in human-nonhuman encounters (Instone, 2004; Lorimer, 2007). This challenges the assumed characteristic of objective epistemology in Western Science (Lorimer, 2007).

Lorimer’s (2007) work has made a significant contribution to ‘more than human’ theoretical debates in geography, and draws significantly from Bruno Latour’s (1993) book, *We have never been modern.* Latour argues that maintaining obedience to the ‘nature-society dualism’ restricts one’s thoughts to ‘an impoverished analytical repertoire that purifies the vast ‘middle kingdom’ of hybrid nonhuman entities, both organic and inorganic’ which progressively propagates our ‘modern’ world (Lorimer, 2007:913). Lorimer’s work, *Nonhuman Charisma*, outlines the specific characteristics and parameters of nonhuman charisma, a topic which has been discussed superficially in conservation geography literatures (Lorimer, 2007). Lorimer frames nonhuman charisma in its ontological, epistemological and ethical assumptions (Lorimer, 2007). Lorimer (2007: 927) argues, ‘Ontologically, nonhuman charisma blurs the modern subject-object dualism to provide a new approach to understanding nonhuman agency.’ In his discussion of conservation scientists, Lorimer (2007:911) explains their passions for both their work and their species of study, noting while this passion is both complex and relational, it ‘clearly overflows the confines of a scientific epistemology configured around a modern subject-object dualism…these organisms clearly have both agency and ethical status in these practical interactions.’ In his quest, along with other geographers, to forge a ‘more-than-human’ comprehension of agency and creating opportunity to understand nonhuman agency as an emanating ‘relational property’, Lorimer (2007:913-915) first defines what he terms ‘nonhuman charisma’. Nonhuman charisma, Lorimer (2007: 915) explains, is best described as the differentiation between a nonhuman unit or series of actions that ‘determine its perception by humans and its subsequent evaluation’.

Lorimer (2007) then identifies three key characteristics of nonhuman charisma, which he coins ‘ecological charisma’, ‘aesthetic charisma’, and ‘corporeal charisma’. A species or nonhuman ecological charisma incorporates firstly a species’ unique attributes which allow it to be recognised and distinguished from other species, and secondly consists of the
concurrency of the its (nonhuman) patterns and frequencies with that of a human’s, ‘relates to the intersections between the space-time rhythms of the two organisms’ (Lorimer, 2007: 917). Lorimer (2007) argues this enables an understanding the application of ‘learning to be affected’ by the nonhuman organism of interest, or, even more interestingly, ‘becoming-animal’. The second and third characteristics of nonhuman charisma, aesthetic charisma and corporeal charisma, build upon the concept of ‘human-nonhuman encounters as acts of becoming-animal’ (Lorimer, 2007:918). Aesthetic charisma draws from a nonhuman’s aesthetic characteristics such as behavior and physical form, which prompt powerful emotional responses in humans: depending on the species characteristics these can be either ‘awe-some’ or ‘awe-full’ or both (Lorimer, 2007). For example, the anthropomorphic cuddly charisma, as argued by Emmanuel Levina, associates a nonhuman ‘face’ with a human face which generally produces concern for the species, particularly if it is a species of reciprocity (Lorimer, 2007). Contrastingly, a nonhuman object which displays patterns of autonomy to humans (e.g. insects) or is the product of a negative manifestation (e.g. snakes, spiders) often triggers fear, disgust, and hatred in humans. The last characteristic of nonhuman charisma, corporeal charisma, has two manifestations of ‘becoming-animal’. The first, Lorimer (2007:921) argues is epiphanies which often stem from human childhood encounters with a particular nonhuman organism, or group of organisms, which in turn affect or reterritorialise the career path of future human scientist as well as the nonhuman focus of their later research. The second manifestation of corporeal charisma, jouissance, ‘relates to the emotions and becomings experienced by the self-described scientists in their everyday practices and interactions with their target organisms’ (Lorimer, 2007:922). For example, jouissance can manifest itself in human surveyors who obtain satisfaction in creating and managing lists of species or in naturalists who obtains a sense of pride from identifying species in the field: both are satisfactory as the components of the world fit into categories for which the particular human is familiar. A final point Lorimer (2007) makes, explains nonhuman charisma ‘in action’ through a flagship species. These species are understood as being well-known, charismatic and thus well-liked, with no necessity for playing a vital role in their ecosystem; however, they are able to generate emotive responses such as sympathy and awareness (Lorimer, 2007). These flagship species ‘perform charisma’ in their role as independent actants which limit ‘their possible encounters with humans and the attachments that might emerge from them’ (Lorimer, 2007:927). Lorimer (2007) found in his study that overall Western scientists, despite demonstrating emotive responses to nonhumans, were wary and even feared admitting such an attachment. He argued, ‘Many felt threatened by the
ascendancy of the ‘reductionist’ approach of molecular biology within their discipline and were wary of accusations of sentimentality or even of suffering from a ‘cuddly-species syndrome’.

All three characteristics of nonhuman charisma overlap, intersect and interact with one another, and are put into action through flagship species. The key point Lorimer is making is that nonhumans are not objects but rather agents which powerfully effect human behaviors and emotions; humans are not just Western scientific observers and we, as humans, have never really been modern (Latour, 1993; Lorimer, 2007). Through this realisation, Lorimer (2007:925) suggests nonhuman charisma allows ‘different groups to collaborate, despite their political and epistemological differences’.

2.6. Cultural Significance of Raptors Internationally

Social connections to raptor species are not unique to Australia or the study area, and as such a brief literature review concerning the cultural significance of raptors is necessary to understand the significance of other raptor species to other Indigenous peoples throughout the world. Though the literature available for this topic is limited, this section draws together some of the available literature to identify commonalities and differences amongst other areas around the world. This provided a foundation from which to initiate the research project in the Jervis Bay Aboriginal Communities.

A raptor is a bird of prey which includes species such as Eagles, Hawks, Falcons and Owls (Newton et al. 1990). It is commonly known that many large raptor species play a significant role internationally in both Indigenous and non-Indigenous cultures, though it is not well documented. It is clear humans are awe-struck by their magnificence: revering, protecting, and even fearing them as a top predator. The various relationships humans form with these birds of prey are symbolically represented around the world in many different ways from appearing on state emblems to portrayals in art forms. The Bald Eagle is the national symbol of the United States of America, appearing on several national seals and coins. The White-bellied Sea-Eagle, , is represented on the state emblem of Selangor (Malaysia), the previous Australian Defence Department (Beecroft Peninsula) logo, is currently represented on the Booderee National Park logo, and is even the emblem of the Manly Rugby League Club in Sydney (Pwee, 2002; Forbes, 2010, pers. comm; Baker, 2010, pers. comm).
It is important to note that in most Western academic contexts it is recommended to acknowledge the scientific classification of a species when it is introduced in text. While this thesis recognizes the Western scientific method of classification and identification, the decolonising nature of this thesis challenges those academic professionals to consider the different ways in which people identify a particular species beyond the ‘scientific’ perspective, the various names people have chosen to identify particular species, and the significance of understanding and accepting these various non-Western ways of knowing. While this thesis focuses on various cross-cultural perspectives of the White-bellied Sea-Eagle, this chapter explores, through a literary review, the less commonly known significance of various raptor species around the world to Indigenous peoples.

2.6.1. Native Americans: The Bald Eagle and Golden Eagle

The Bald Eagle (scientific classification *Haliaeetus leucocephalus* (Birdlife International, 2009b)) and Golden Eagle, raptor species found in North America, are sacred species to several Native American groups. These Eagles are found on Native American totem poles: carvings which commemorate and tell ‘visual stories about ancestors, animals and spirits’ (Kottak 2007). Native Americans are referred to by anthropologists as practitioners of animism and/or totemism. These raptors have symbolized spiritual beings for Native Americans for many centuries and were thought to have ‘dominion over the cosmos’ (Collier, 2003). They were believed to be ‘spiritual messengers’ who connected the people to the Gods and who acted out the Gods’ wishes. As spirit messengers, the Eagles ‘would appear in dreams and visions to help people move correctly along their life path’ (Collier, 2003). Raptor images, feathers, and Eagle parts are kept and/or displayed to link Native Americans with spirit powers (Collier, 2003; Lawrence, n.d.). With the decline of the Bald Eagle population in North America over the last century, some Native Americans have felt a significant need to help manage and protect this species as it is an inherent part of their culture. The decline of the species is due to human impact from development such as destruction of habitat, and accidental deaths from sources, such as electrocution from power lines, primary and secondary poisoning occurring from toxic pollution in rivers, mercury deposits in fish, and pesticides on plants, which affect both mortality and reproduction (egg shell thinning) (DeMeo, 1995). The Bald Eagle is protected by the U.S. *Endangered Species Act 1973* on the Threatened species list (DeMeo, 1995). Several Native American councils
have also developed and declared statements of protection for the species, such as the National Congress of American Indians (NCAI, 2007). However, it is a romantic notion that most Native Americans support the degree of federal protection and see it as a way of preserving the future for Native Americans and their cultural ties to the species. There have been numerous cases where threatened species legislation has arguably impinged upon Native American cultural rights. Most recently, a Native American was tried and convicted for killing a Bald Eagle for ceremonial purposes (Berry, 2008). These protective regulations do limit modern possession of Eagle Feathers and Parts by Native Americans (DeMeo, 1995; U.S. Fish and Wildlife Service, 2009).

2.6.2. North and South American Indian tribes: The California Condor, Andean Condor, and Harpy Eagle

The California Condor (Gymnogyps californianus) is found in parts of Western California and Western Mexico, is of great symbolic importance and is considered a source of great ‘supernatural powers’ (Newton et. al, 1990; Birdlife International, 2010a). The Andean Condor (Vultur gryphus), being the largest flying bird in the world, is revered within its geographic distribution, which includes all parts of the South American Andes: Venezuela, Colombia, Ecuador, Peru, Bolivia, Paraguay, Argentina and Chile (Newton et. al, 1990; Birdlife International, 2010b). The Harpy Eagle (Harpia harpyja) is significant to the nomadic Waorani Indigenous people of Ecuador, who keep them to guard their communities (Newton et. al, 1990). The species is considered rare throughout all parts of its geographic distribution, which extends through southern Mexico, Guatemala, Belize (recently confirmed), Honduras, Nicaragua, Costa Rica, Panama (including four birds introduced in 1998), Colombia, Venezuela, Guyana, Suriname, French Guiana, Ecuador, Peru, Bolivia, Brazil, Paraguay and north-east Argentina (Birdlife International, 2010b). As the Harpy Eagle is revered for both its ‘strength and beauty’, its feathers are displayed in both head and arm bands to exercise its power (Newton et. al, 1990: 174). Feet and other body parts of raptors are often hung in vehicles ‘to ward off oncoming vehicles and danger’ (Newton et. al, 1990: 174).
2.7. Conclusion

This chapter has discussed the evolution of modern environmental management; the shift in International and Australian policy to encourage Indigenous involvement in environmental management, and emerging issues introduced by Aboriginal involvement in environmental management. This chapter then provided a theoretical framework for the research, focusing on post-colonial, Indigenous, and eco-humanitarian concepts which guide the analysis of this thesis. A brief international background was then provided pertaining to the cultural significance of raptor species to various Indigenous Communities. With the one-sided Western constructions of environmental management presented in this chapter in mind, a broad-brush cross-cultural comparison of the research participant groups is relevant. Chapter 3 will discuss how this cross-cultural research project was designed and conducted, and how the ethical dilemmas encountered were negotiated.
3

ETHICS AND METHODOLOGY

3.1. Introduction

Due to the divergent nature of various social groups, many human geographers adopt the ontological position in which the world does not appear empirically the same to all participants, and these various perspectives assemble competing social constructions, representations and performances (Smith, D.M., 1999). This chapter addresses these empirical differences between various participants to improve geographical inquiry and to understand the complexities within cross-cultural research. To accomplish this, the thesis employs qualitative research methods which attempt to challenge the objective approaches to research in human geography. This impels an approach which highlights the values of both the researcher and the participants as well as demanding an enquiry into the ‘psychological, emotional and existential attachments that individuals’ maintain ‘towards particular spaces, places and landscapes’ (Limb & Dwyer, 2001: 3), and in this case a specific species. As such, this thesis incorporates several qualitative research methods, all of which are fundamental to the understanding of the complex issues surrounding the research topic.

Bradshaw and Stratford (2005) argue the dependability of any qualitative research project depends upon careful design and rigour, to produce a research project which results in adequate results and establishes trustworthiness. This chapter provides a comprehensive explanation of the ethics and methodology used to ensure rigour and careful design for the
research project. The first step to achieving rigour in qualitative cross-cultural research is to address the ethical concerns and requirements in a Western academic context (i.e. Ethics Committee Applications) and in an Aboriginal Community context (i.e. cultural protocols in the Wreck Bay and Jerrinj Aboriginal Communities) (See Section 3.3.1 and 3.8 respectively). A significant component of this chapter is the application of critical reflexivity to address ethical concerns and to critically examine the researcher’s positionality (See Section 3.5). Section 3.6 then addresses the various politics and positionalities of the participants to better understand the complexities of their position within the study groups and study area. Finally, Sections 3.7 and 3.8 provide a specific description of the research design, methods employed and research scope.

3.2. Rigour and Qualitative Research

Bradshaw and Stratford (2005) define rigour in qualitative research as establishing trustworthiness: for ourselves as researchers, for the work we produce, and most importantly, for the responsibilities we have towards participants. Rigour is something which must be considered throughout the entire research process, a process which as Bradshaw and Stratford (2005: 74) define as a ‘hermeneutic circle’ which begins with an interpretive community (literature relevant to topic and Academic community), moves to the participant community and the researcher (during the field work and analysis), and then returns back to the interpretive community (for peer review and assessment). To achieve rigour throughout the research process, Baxter and Eyles (1997) identify Lincoln and Guba’s (1985) criteria for establishing rigour in qualitative research. These serve as a tool to link the criteria to theoretical concerns regarding epistemology, ontology, methodology and the overall research process (Baxter and Eyles 1997). These criteria are outlined as credibility, transferability, dependability, and confirmability (Lincoln and Guba, 1985; Baxter and Eyles, 1997; Graneheim and Lundman, 2004). Lincoln and Guba (1985) along with several other researchers (Baxter and Eyles, 1997; AIATSIS, 2000; Hay, 2000; Valentine, 2001; Bradshaw and Stratford, 2005; Winchester, 2005; University of Wollongong, 2008), argue the use of these criteria to incorporate multiple methods throughout the research process, as well as the recognition of the methods, strengths and weaknesses, to help ensure rigour in qualitative research. Valentine (2001) warns the use of multiple methods to ensure rigour creates apparent contradictory findings; however, these findings are not problematic ‘but rather show how successful you have been at capturing the complexities, contradictions, ambiguities and
messiness of human behaviour and everyday life.’ To draw on the benefits of establishing rigour in qualitative research, this thesis employs Lincoln and Guba’s (1985) criteria, along with other adaptations towards the research process (See Table 3.1. below).
### Table 3.1. Methods to Achieve Rigour in Research Design

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
<th>Methods employed to ensure rigour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility</td>
<td>Production of authentic representation of experiences</td>
<td>• Purposeful sampling employed to identify and interview participants who match selected target groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Triangulation employed for cross-check through multiple methods (observation, interviewing, member-checking, peer-review, direct quotations), sources, investigators and theories</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Interpretive community employed through literature review to set background context (as well as Peer-review)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Peer-review utilized through involvement of supervisors and topic experts in research and proofreading</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Member checking was adopted by continued consultation with participants to confirm accuracy in representation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Disciplined subjectivity employed through critical reflexivity, and positionality and politics of the researcher and participants</td>
</tr>
<tr>
<td>Transferability</td>
<td>Applicability of methods and results to contexts beyond the study area</td>
<td>• Purposeful sampling employed to identify and interview participants who match selected target groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Interpretive community employed through appealing to an existing body of literature to set background context</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Provided a clear description and rationale of</td>
</tr>
</tbody>
</table>
methods and analysis employed in research

- Provided an acknowledgement of the limits to transferability due to the particularities of the research topics in the local study area

<table>
<thead>
<tr>
<th>Dependability</th>
<th>Minimisation of researcher idiosyncrasies in interpretation; tracking variability (degree to which data change over time and alterations made in the researcher’s decisions during analysis) to identifiable sources.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interviews recorded through audio recording and note taking which allowed for in-depth analysis</td>
</tr>
<tr>
<td></td>
<td>Peer-review utilized through involvement of supervisors and topic experts in research and proofreading</td>
</tr>
<tr>
<td></td>
<td>Member checking was adopted by continued consultation with participants to confirm accuracy in representation</td>
</tr>
<tr>
<td></td>
<td>Referred back to methodologies prior to analysis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confirmability</th>
<th>Identification of the biases, motivations, interests and perspectives of the researcher; the extent to which these influence interpretation and analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disciplined subjectivity employed through critical reflexivity, description of positionality and politics of the researcher, and an autobiography statement</td>
</tr>
<tr>
<td></td>
<td>Critical reflexivity applied towards field notes taken during field observations</td>
</tr>
<tr>
<td></td>
<td>Peer-review utilized through involvement of supervisors and topic experts in research and proofreading</td>
</tr>
</tbody>
</table>

Adapted from Lincoln and Guba (1985); Baxter and Eyles (1997); Graneheim and Lundman (2004); Bradshaw and Stratford (2005); Cavanagh (2007); Edmunds (2008)
3.3. Negotiating Ethics

3.3.1. Western Scholarship and Application Processes

Smith, L.T. (1999: 42) critiques research as a Western theory of knowledge embedded in ‘empiricism and the scientific paradigm of positivism’: ‘a position that applies views about how the natural world can be examined and understood to the social world of human beings and human societies’. Harrison & Livingstone (1980) note the positivist heritage of geography and argue that despite the apparent theoretical shift towards questioning science as being wholly rational, neutral and objective, intellectuals continue to emulate methods within the natural sciences. While traditionally linked in Western scholarship, with the empirical study of place and humans in place, contemporary geographers recognize they must possess a ‘multiplicity of conceptual approaches and methods of enquiry’ with the study of humans, bodies, discourses, silenced voices, histories and fragmented landscapes associated with place (Winchester, 2005). The ever growing inquiry within the discipline has produced much contemporary debate amongst researchers on the issues of moral geography and ethics (Hay, 1998; Proctor, 1998; Smith, D., 1999; Kobayashi, 2001; Valentine, 2003; Dowling, 2005; Hodge & Lester, 2005; Howitt & Stevens, 2005; Valentine, 2005) as well as the installation of human research ethics committees to approve and oversee human research in an effort to safeguard against harm to people involved in the research process (sponsors, the general public, and the participants) (Dowling, 2005). Ethics committees are primarily focused on researcher’s responsibilities to the participants through the formulation of guidelines and rules to instruct the researcher on what should and should not be done, and to enforce this through an application process at start of a research project (Dowling, 2005). For this research project, two application processes were required: the first application being through the University of Wollongong’s Human Research Ethics Committee and the second application, which considered both the ethics and research interests of the area, through Booderee National Park.

3.3.1.1. The University of Wollongong, Human Research Ethics Committee

Prior to conducting research on behalf of the University of Wollongong, it is a requirement of the researcher to submit a formal application to the University of Wollongong’s Human Research Ethics Committee for approval in accordance with the NHMRC National Statement on Ethical Conduct in Human Research (see Appendix B and C). This application process
asked the researcher to provide statements (with regards to the safety of the participants on both an individual and collective level) on ethical considerations, risks and benefits, types and age of participants, how participants would be recruited, the consent process, and confidentiality and privacy. Given this was a cross-cultural research project, the ethical considerations statement was sculpted to reflect issues of conducting research with Aboriginal Communities. This suggested a plan for ethical conduct in Aboriginal research which outlined any information collected from Aboriginal participants would be taken back to the participant for approval prior to its inclusion in the final report. Other ethical considerations involved both Aboriginal and non-Indigenous participants. Privacy and confidentiality were addressed to ensure private details about individuals were not released into the public domain as well as ensuring a participants anonymity for the research if they wish to remain unidentified in the final report. Informed consent was addressed in the application with attached information sheet, which was provided to the participants prior to their consent, outlining the aims, purpose and focus of the research project and the Academic organisation promoting the research. Free and knowing consent was addressed with the requirement of all participants to sign the consent form prior to participating in the research, though the application also noted verbal consent would be accepted in cases where Aboriginal participants preferred this method. Considerations of harm were made during the application process with none having been found. Initial conversations between my supervisor and the potential participants at the time found they all supported the project and saw little to no controversy in the research topic.

Following the initial application, a response was required: to clarify how photographs may be used in the report, to indicate use only after explicit agreement by the Communities and individuals, and to clarify that ‘appropriate’ community members from the Aboriginal Communities had been consulted in negotiating the project details and consented/approved in the form of a signed agreement or letter (to be provided). While the application process had improved upon some previous assumptions brought to light in Cavanagh (2007), the university application process still operated under several assumptions when this application was lodged. The most notable discovered were the following assumptions: researchers could predict all ethical issues at the onset of a research project, researchers played no role in the research process other than as the objective facilitator, and what the Committee deems to be the ‘appropriate’ individual and process of seeking approval in Aboriginal Communities is the same for all Aboriginal Communities.
3.3.1.2. Booderee National Park Permit Application

In addition to the University of Wollongong’s Human Research Ethics Committee application, I was required to submit a formal permit application to the Booderee National Park (BNP) Board (See Appendix D). Permit approval is required to conduct research activities in a Commonwealth reserve in accordance with the *Environment Protection & Biodiversity Conservation Act 1999 and Regulations 2000*. This process can take considerable amounts of time and is subject to approval by BNP’s Joint Management Board. This application process involved submission of the application made to the University of Wollongong’s Human Research Ethics Committee to BNP’s Joint Management Board. Due to the co-management arrangements in BNP, the Wreck Bay Aboriginal Community has a majority representation on the Board of Management (Booderee National Park Board of Management, 2002). This was beneficial for ensuring the local Aboriginal community had input from the onset of the application process, as a result the Board members were able to identify the project as being of particular interest to the Wreck Bay Aboriginal Community as they share a close affinity to the White-bellied Sea-Eagle. The Board of Management proceeded by sending the application to the Wreck Bay Aboriginal Community Council (WBACC) to determine whether the application would be approved and to identify conditions to be placed on the permit. The WBACC approved the application and placed the following conditions (See Appendix D, Special Conditions) in addition to Park Board Permit Conditions:

1.) The permittee must not trap, harm, touch, or tag any White-Brested Sea Eagles (*Haliaeetus leucogaster*).

2.) The permittee must not touch or collect any eggs of White-Brested Sea Eagles (*Haliaeetus leucogaster*).

The WBACC also requested if the project were to provide employment opportunities over the course of the research, that considerations were made to employ Indigenous people as well as the final report being jointly owned by the researcher and the Wreck Bay Community. While this process ensured Wreck Bay Aboriginal Community involvement directly with all stages of the application process, it failed to go beyond the application process. The process did not establish a liaison between the researcher and any individuals from Wreck Bay Aboriginal Community (e.g. the Wreck Bay Aboriginal Community liaison officer) in order to negotiate specific details of the research project, as well as to employees within BNP who were
potential participants. The letter and permit did not identify who the WBACC CEO was or how the CEO could be contacted. Additionally, the process of tabling to the Board of Management took a long period of time which placed time constraints on the researcher’s ability to build trustworthiness among participants and the Wreck Bay Aboriginal Community (this is discussed further in Section 3.10).

### 3.3.2. Critiques

While there is clearly a need for rules and processes in making ethical considerations in human research, there have been several critiques concerning the development of strict administrative regulations and processes to address ethical concerns in research (Winchester, 1996; Hay, 1998; Kearns et al., 1998; Shea, 2000; National Health and Medical Research Council, 2007; Valentine, 2005; Institute of Australian Geographers, 2006). Kearns et al. (1998) argue the teaching of such strict ethical guidelines can be problematic in two ways: it can create in the researcher a dependence on regulatory frameworks and it can instil in the researcher an exogenous attitude towards participants. A dependence on ethics application guidelines is detrimental to research. These guidelines fail to consider the varied nature of geographical research (Hay, 1998): the unique research encounters for a variety of issues and topics raised during research. This creates difficulties for researchers in their attempts to mould the research and participants into a predetermined structure to meet ethics committee guidelines and gain approval. As this approach also generally fails to encourage interaction and consultation with the participants, it then denies participants the chance to negotiate for themselves whether the research is in their best interest and what ethical behaviours are appropriate (Kearns, 1998; Shea, 2000; Valentine, 2005). The National Health and Medical Research Council (2007: 4) argue, ‘Trustworthiness of both research and researchers is a product of engagement between people’. Failure to do this is particularly detrimental in cross-cultural research, when it is necessary for the researcher to consult with the specific community to determine cultural protocols and to discuss how the research project could benefit the community.

Another major critique of the ethics committee process is its failure to instil a long-term ethical plan in the researcher. The Institute of Australian Geographers (2006) argue University Human Research Ethics Committees are often too concerned with regulating their own ethical decrees than providing researchers with a broad and long-term understanding of ethical issues. As a result the ethics approval process is often viewed by the researcher as a
Chapter 3: Ethics and Methodology

3.4. Critical Reflexivity, Positionality, and Politics in Research

‘Research is personal’ (Cavanagh, 2007: 60). Not only does the researcher delve into the lives of their participants and draw conclusions from their perspectives and knowledge, these conclusions are also based upon the researcher’s own life experiences. As a result, the personal is also political (Valentine, 2003). Several human geographers have noted approaches which critique the empirical and recognise the role of the researcher as also being embedded in the social nature of the discipline (Kobayashi, 2001; Skelton, 2001; Smith, 2001; Gold, 2002; Valentine, 2003; Dowling, 2005; Wright et. al, 2007). Skelton (2001:89) argues:

> We are not neutral, scientific observers, untouched by the emotional and political contexts of places where we do our research. We are amalgams of our experiences and these will play different roles at different times...part of our honesty and integrity as researchers must be based upon considerations about ourselves, our positionalities and our identities and what role they might play in our research.

These approaches in geography expand upon the debates which emerged in feminist research regarding critical reflexivity (Gregory et. al, 2009). Critical reflexivity is defined as the ‘process of constant, self-conscious, scrutiny of the self as researcher and of the research process’ (Dowling, 2005: 22). It entails deliberation on a number of factors including: personal biography, social situation, political values, situation within the academic labour structure, personal relationship to research respondents, relations of authority within the
research process and so on’ (Gregory *et. al*, 2009). As a result, a degree of reflection is necessary to determine the conditions through which data was analysed and the final report produced (Gregory *et. al*, 2009); examining the impact of the researcher on the research. Dowling (2005) notes this process is not easy, as researchers are often not in the habit of examining their own engagement in research with the same level of intensity they give towards examining their research participants, let alone conducting this reflexivity habitually.

To aid in overcoming these difficulties, a field journal was kept during the field research. However, to expand upon this attempted consciousness further, I have also included a brief Researcher Autobiography: how I came to be in Australia, what motivated me to do a cross-cultural research project, and what considerations I have made about myself and my positionality throughout my experience as a researcher. Following the autobiographical statement, this section also addresses positionality and politics in the research.

**Box 3.1. Researcher ‘Autobiography’**

I come from a small and rather isolated town called, ‘Knox’, located within the ‘agricultural belt’ of the United States, in the northwest corner of Indiana (a State in the US). I spent eighteen years of my life in this town, almost completely unexposed to the huge world beyond it. I can confidently say that I possess very little knowledge about the native plant species in my region, but I am well aware of the species of plants that are human modified to satisfy the region’s economic demands with the agricultural industry and aesthetic appeal of the tourist industry. Being almost completely land locked, the components of the land are a major focus. Growing up, ideas of ‘nature’ were culturally embedded. I interacted with ‘nature’ when I occasionally chose to visit ‘natural landscapes’. These ‘natural landscapes’ existed in total isolation from the places I lived, such as, my landscaped yard, my house and my town. ‘Nature’, to me was most easily defined and represented in small State parks and reserves. I had of course heard of National Parks (in the US, all ‘National’ parks labelled as such, are run by the Federal Government though they are acknowledged to be within the given state boundaries rather than existing as a separate ‘capital territory’ area). Some states, such as Indiana, do not even have ‘National Parks’.

Additionally, my exposure to Indigenous communities and people were completely non-existent, though I ironically enough, lived in a state whose very name (Indiana) was named after a previously slang term, ‘Indian’ (a term which is considered inappropriate by some contemporary Native Americans). Prior to colonisation, three Native American tribes, the
Miami, Illini and Shawnee, lived in what is now Indiana. Today, there are no federally recognized Native American tribes based in Indiana (Redish & Lewis, 2009; U.S. Department of the Interior, 2010a; U.S. Department of the Interior, 2010b). All Native Americans tribes were forced to leave Indiana during the Indian removals of the 1800s and moved to reservations in Kansas and Oklahoma. Only the Eastern Miami tribe was able to resist displacement after resistance and treaty negotiations; however, their rights as Native Americans were terminated by the Federal Government and have yet to be reinstated (Redish & Lewis, 2009). Four unrecognized Native American tribes of Miami and Shawnee decent remain operational in Indiana. The nearest federally recognized Native American tribe is the Pakogan Band of Potowatomi Indians in the bordering state of Michigan, which maintains tribal service to some of its members residing in Indiana (Redish & Lewis, 2009). The Native American tribes formally recognized today are considerably less in the Eastern half of the United States, with only 62 federally recognized tribes out of the total 564 recognized tribes (U.S. Department of the Interior, 2009; U.S. Department of the Interior, 2010a; U.S. Department of the Interior, 2010b). Issues and debates regarding North American Indigenous people today are more numerous and prevalent in the Western half of USA due to their prevalence.

Generally speaking, my own personal exposure to any cross-cultural analysis or critique growing up was severely limited. For years, the Knox Indiana school corporation’s pedagogics have reinforced ethnocentrism and jingoism in their students at their most basic levels, from a lack of Indigenous or multi-cultural incorporation into learning programs to the blatant disregard for Native American human rights with our school mascot, the ‘Redskins’ (a derogatory term used to describe Native American skin colour) with non-Indigenous students parading around at half-time sporting events dressed as Native Americans ‘re-enacting ceremonial rituals’. In retrospect to the theories and cross-cultural perspectives that have challenged my ways of thinking for the past 5 years, I can say rather confidently that Indiana has lost a significant culture, an important lens through which to view the land, and various pre-colonial frameworks from which to challenge the unopposed, modern day, bureaucratic, Western, colonial framework.

My exposure to cross-cultural perspectives did not really begin until my second year at University. I enrolled straight out of Secondary school at a small private school, called Hanover College, located in the southeast corner of Indiana. At Hanover, I studied History...
and Anthropology, both of which exposed me, in some degree, to human geography with a focus on hermeneutic methodology\(^1\) in cross-cultural research. In my fourth and final year at Hanover, I came to Wollongong, Australia, as a study abroad student at the University of Wollongong. I would say this was my first on-the-ground exposure to Indigenous issues, and particularly some of the issues Aboriginal Australians face. In my Aboriginal Studies and Australian History classes, I had the privilege of interacting, debating, working and becoming friends with fellow students and professors of both Indigenous and non-Indigenous backgrounds. In particular classes I took, students were able to get out into the field and speak with members of the Aboriginal Communities, to hear their stories and perspectives. What was meant to be a six month study abroad experience, turned into a one year study abroad experience, and I selected an Australian history topic for my required Independent Study (IS) project with Hanover College. My IS topic titled, *Dawn and New Dawn or Dawn of the Dead?: A Rediscovery of Australian History*, focused on the effects of pastoral expansion and Government legislation in New South Wales and Queensland on Aboriginal Women and Children, between 1820-1967. Though this was a huge topic for what was a relatively small research project, I found throughout my historical analysis that ‘Oral History’ was not (at least in the academic community) considered a reputable historical source until very recently. After sifting through a majority of my primary sources, I realised this sort of historical analysis only tells one side of the ‘story’, the colonial version and any story that is one-sided is far from reality. Since this discovery, I have been exploring theoretical applications of ‘Decolonisation’ and cross-cultural analysis.

### 3.5 My Positionality

Positionality is the effect a researcher’s social, cultural, subject positions, and other psychological processes have on: the questions they ask, how they frame them, and the theories that they are drawn to (Gregory *et. al*, 2009). Positionalities embody particular subjectivities, which Ivanitz (1999) argues are at the heart of cross-cultural research. In this section, my own positionalities will be addressed to examine the various subjectivities that I embody in my roles as a non-Indigenous, non-native, and post-graduate researcher. These

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\(^1\) ‘The reading of texts and literature to explore peoples associations with and understanding of place’ (Limb & Dwyer, 2001). See Chapter 4 for more information on this qualitative research method.
subjectivities will be identified, examined, and critiqued by how they may influence my own personal analysis and how they may influence the reactions of my participants and/or potential participants. This will culturally locate myself, as the researcher, within the research project. Furthermore, this section will discuss the different participant groups and the various power relationships and complexities surrounding participants in this research project. Once an awareness of the various human complexities in this research project is established, these issues will be addressed in research design.

3.5.1. Ethical Dilemmas as a non-Indigenous and non-native Australian researcher undertaking cross-cultural research

An advantage to being a non-Indigenous and non-resident Australian conducting cross-cultural research in Australia is that I have not grown up with the learnt and inherent cultural assumptions and generalisations made towards both Indigenous and non-Indigenous Australians. The experiences individuals undergo, particularly a lifetime of experiences that shape Australian culture, have power and influence over the way people think, most of which individuals are not cognisant of despite decent attempts of self awareness. While I am not exempt from my own past experiences that continue to shape who I am today, my experiences do not include a lifetime enmeshed within Australian culture (Indigenous or non-Indigenous). This allows for a different and perhaps more open-minded approach towards the cross-cultural thesis topic, though it most certainly does not come without its disadvantages.

I can only assume that to a small degree some individuals from both participant groups did not feel comfortable speaking with me about particular issues or participating in the project due to my positionality as either a non-Indigenous researcher or a non-native Australian researcher (or both) (Smith, L.T., 1999; Dowling, 2005). Dowling (2005) notes that the researcher’s ability to interpret certain situations with participants depends upon the researcher’s characteristics as either an ‘insider’ (a researcher who is similar to their informants) or an ‘outsider’ (a researcher who differs from their informants). As a non-Indigenous and non-native Australian, I could potentially be classified as the ‘outsider’ in both participant groups, which could impact my analysis of participant information as well as how I am viewed by participant groups.
As a researcher being classified as the ‘outsider’, there is also a potential risk in identifying my participants from both participant groups as the ‘Other’. Smith, L.T. (1999: 39) argues ‘Research has not been neutral in its objectification of the Other’. Consciousness of this reiterated the importance of rigour and constant self reflexivity throughout the entire research process. Furthermore, I was potentially viewed by both participant groups as the ‘outsider’, someone who perhaps knows very little of Australian issues and debates. This potentially affected whether participants agreed to participate and how consented participants responded to the research. Again, consciousness as well as triangulation assisted in overcoming these dilemmas in the stages of participant recruitment and the analysis of participant information.

The ‘insider’ vs. ‘outsider’ dichotomy is not a common feature in Western society when the ‘outsider’ is coming from within the ‘Western’ realm. Usually the ‘Western’ vs. ‘Other’ dichotomy is constructed in cases where the ‘outsider’ is also coming from an ethnic background which is constructed as ‘non-Western’ or ‘Other’ (Said, 1978). However, this classification of the non-Indigenous and non-native Australian researcher as the ‘Other’ still seemingly occurred in my research, regardless of the fact that I had more similarities with non-Indigenous participants. Perhaps some of the people I approached found it ironic that coming from a Western background I was attempting to challenge my own ‘Western’ and ‘Colonial’ frameworks. Regardless of the various reasons participants may have had, I did nevertheless face some degree of reluctance when approaching some potential participants from either participant group.

3.5.2. Positionality as a Post-graduate Student and Researcher

Due to my Western upbringing, Western knowledge has permeated my way of thinking: about animals, about ‘nature’, about people. As this research topic is cross-cultural it is imperative to reflect upon my positionality not only as a non-Indigenous and non-Australian person, but also as a student brought up within Western knowledge frameworks to a post-graduate qualification level. While some courses have encouraged a reflection upon Western knowledge frameworks and a realisation of Indigenous cultural values and knowledge systems, these were still conducted and based within a Western Academic system and as a result could not fully realise other worldviews. My positionality as a post-graduate student within a Western framework creates subjectivity towards these Westernised worldviews in my research analysis, which is a positionality I have attempted to be critically aware of throughout the course of this project. My positionality as a student within Western
frameworks thus enabled me to have less difficulty in relating to non-Indigenous participants, and a greater level of difficulty in relating to Aboriginal participants. This also affected the ways I was perceived by my participant groups. Non-Indigenous participant groups who were employees of various agencies in the study area were also brought up valuing only Western academic frameworks and a majority of these participants had also completed post-graduate qualifications. In my positionality as a post-graduate student, I was viewed as an ‘insider’ to non-Indigenous participants. However, to the Aboriginal participant group who valued Aboriginal worldviews and knowledge systems, I was again viewed as an ‘outsider’ from a ‘positional superiority of Western Knowledge’ (Smith, L.T., 1999: 59). Aboriginal academics have noted an annoyance with non-Indigenous productions of work which attempts to understand and portray Aboriginal cultural values and knowledge systems. Huggins (2003: 61) states, ‘Precisely what irks me...is its proposition that Aboriginality can be understood by all non-Aboriginals. Aboriginality is not like that...it reeks of whitewashing in the ultimate sense.’

A product of my positionality as a post-graduate student, my subjectivity as a researcher was even more complex. As a researcher, I must work within a Western Academic context. This places pressures and conflicts on the research such as deadlines, application processes, the need to produce knowledge, and to produce it according to predetermined standards. My subjectivity as a researcher attempting to meet institutional standards and determine project results had the potential to affect my ability to fully relate to all participants on an individual basis. While I attempted to take in the entirety of peoples’ experiences, I was also, in my role as the researcher, seeking particular information. However, my awareness of this from the onset of the research project enabled me to prepare for interactions with participants and attempt to engage in what Wright et. al (2007: 150) calls an ‘interwoven learning exchange’, which ‘centres on relationships of mutual learning and recognises the subjectivities of all participants as multiple and fluid’.

3.5.3. Addressing Risks

The various roles and positionalities I encompass have associated risks with the research conducted. This section specifically identifies known risks and how they were addressed in the research. There is a serious danger of generalisation by myself as the researcher due to
the cultural gaps between my status as a non-Indigenous and non-native Australian researcher and my Aboriginal and non-Indigenous Australian participants (Anderson, 1996; Skelton, 2001). Due to my lack of inherent Australian cultural knowledges, it is evident that my understanding of both Aboriginal and non-Indigenous participant groups will only be somewhere amid a scale of partial to full, though my understanding is particularly partial with Aboriginal participants due to my Western background. Acknowledgement of this disadvantage allowed for a degree of political and social consciousness during the production of this thesis. I rigorously considered how I was writing, who I was writing about, and what I was representing, while being vigilant about stereotypes, generalisations, and assumptions during the analysis (Skelton, 2001). To prevent oversight, methods such as triangulation, peer review, and continued consultation with the participants were extremely advantageous to help overcome this.

Another danger particularly associated with cross-cultural research is the risk of exploitation of Aboriginal Communities by the researcher (Indigenous or non-Indigenous). The differentiation of power between the researcher and the researched arguably facilitates the potential to exploit the Aboriginal community participants, with the researcher being in the position to scrutinise, observe, interrogate, and draw conclusions, ‘appropriating their experience to create symbolic capital’ (Anderson, 1996:156). While it is not my intent as a researcher to exploit the Aboriginal participants of this research, it is an inherent characteristic and potential reality of my positionality and the resulting social relationships with my participants. The nature of the research topic involves sensitive issues such as providing Indigenous environmental knowledge and culturally significant information. The benefit for the Aboriginal Communities as a result of providing this information is not clear and exploitative procedures are potentially embedded in the request for this information. Anderson (1996:157) identified, ‘The tension of reconciling the differences over what constitutes good science and what the community to be studied believes is acceptable is inherent in all research projects which deal with human populations. In an effort to prevent exploitation and identify precisely how the Aboriginal Communities could benefit, I adapted recommendations from Anderson (1996) and the National Health and Medical Research Council (NHMRC) (2007) (See Table 3.2.) for my approach towards the Wreck Bay and Jerrinja Aboriginal Communities.
Table 3.2. Aboriginal Community benefit and research utility: Guidelines for protecting Aboriginal Communities from Exploitation by Researchers

<table>
<thead>
<tr>
<th>Recommendations from Anderson (1996)</th>
<th>Guidelines modified for the Jervis Bay region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan research based on how it will benefit the Aboriginal Community</td>
<td>The idea for the research project was identified through a previously attempted study in the region which failed to consult with the Aboriginal Communities and was based primarily on Western Scientific notions of tagging/touching the White-bellied Sea-Eagle. It is also widely understood that the species is significant to the Wreck Bay Aboriginal Community. This project highlighted the gap in understanding between Western and Indigenous ways of understanding, knowing and caring for the species. Lessening this gap will help both the researcher/park staff and the Aboriginal Community in negotiating positive outcomes and as a result will also be beneficial for the White-bellied Sea-Eagle and other species who may be implicated in future research/conservation matters.</td>
</tr>
<tr>
<td>Ensure maximum community benefit through quality researcher-participant relationships</td>
<td>While participant numbers from both Aboriginal Communities was low due to time constraints (see section 3.10), this was employed through continued consultation, ensuring I was accessible and easily reached by the participants, and the member checking of data with participants.</td>
</tr>
<tr>
<td>Engage research problems within community processes</td>
<td>This was employed by understanding and recognising the Aboriginal Communities’ cultural protocols and negotiating with</td>
</tr>
</tbody>
</table>
Aboriginal participants throughout the course of the research process.

<table>
<thead>
<tr>
<th>Help to develop community members’ skills as they assist with research</th>
<th>While this short-lived research project could not fund employment of Aboriginal Community members for participatory mapping of the spatial elements of the research project, this was employed through a two-way learning process. The information shared with me by Aboriginal Community members, was and will continue to be reciprocated through the findings of the research project, the resulting knowledge and the potential long term benefits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognise the potential damage of particular research strategies</td>
<td>This was overcome through recognising Aboriginal Communities’ cultural protocols to ensure community approval, negotiating with the Aboriginal participants throughout the research process, member checking data provided, and retaining the anonymity of Aboriginal park employees.</td>
</tr>
</tbody>
</table>

Guidelines adapted from Anderson (1996).

As discussed further in 3.10, while there was significant interest from many people in Aboriginal Communities in the subject of the research, the combination of University timeframes and appropriate respect for protocol severely restricted my ability to engage with Aboriginal participants. By the end of the research period, I had clearly established sufficient credibility for community members to be keen to speak with me, but I was no longer in a position to continue with field engagements. The final thesis will however provide an appropriate addition to the very limited literature in this area, both specifically to do with the White-bellied Sea Eagle, and also with Indigenous and non-Indigenous relationships in species management.
3.6. Positionality, Power and Politics: Participants

Just as it is important for researchers to conduct a thorough self-assessment to determine their own positionality and subjectivities, it is also ethically responsible to locate the participants and their politics within the research and to examine the researcher-participant power relationships formed throughout the research process. Dowling (2005) identifies three types of power relationships between the researcher and participants: reciprocal, asymmetrical and potentially exploitative. Reciprocal relationships are formed when both the researcher and the participants share similar social positions and have comparably equal costs and benefits from participating in the project (Dowling, 2005). Asymmetrical relationships are formed when participants are in positions of influence from the researcher (Dowling, 2005). Potentially exploitative relationships are formed when the researcher is situated in a position of higher power than the participants (Dowling, 2005). These power relationships will be examined within participant groups.

3.6.1. Non-Indigenous participants

Non-Indigenous participants in the research consisted of current and previous employees from the JBNP, JBMP, BNP, DDET as well as experts in the field. Most potential participants within this study group were successfully recruited and highly receptive. However, it is essential to note that all participants in this group maintained the positionality of a paid employee who participated and collaborated in such research projects as a part of their job. Furthermore, most of the participants could also relate to my positionality as a researcher and post-graduate student, as they had previously been in a similar position when obtaining their own qualifications. Power relationships between the researcher and the participants in this group were both asymmetrical and reciprocal. Relationships were asymmetrical due to the researcher’s ability to collect, interpret and use data the participants gave. Relationships were reciprocal due to the similar social positions between the researcher and participants as well as shared benefits from the projects outcomes as a result of either conducting or participating in the project.
3.6.2. Indigenous participants

An important difference in the positionality and politics of the non-Indigenous participants and the Indigenous participants in the project is their employment. These participants are not paid employees who can incorporate their participation in a research project as a part of their job, like so many of the non-Indigenous land managers involved in the project. Indigenous participants, in their attempt to keep traditional values and practices alive, participate despite the limitation of time as they maintain employment elsewhere and maintain personal aspects of their lives. Jack, a non-Indigenous participant who had some experience in working with Aboriginal people on a scientific basis stated:

Their [Aboriginal Community] organisation is absolutely bombarded with what they often see as ‘Whities’ trying to drag them in and get them involved in a multitude of things for which that just don’t have enough time let alone perhaps inclination...these people have their own commitments, their own life, their family, their jobs and so on, and then to have this sort of imposed upon them isn’t always necessarily what suits them.

Jack, non-Indigenous conservation biologist

The power relationships between myself as the researcher and the Aboriginal participants is also highly significant to note. As Skelton (2001) notes, prior to participants consenting, the researcher is disempowered, providing potential participants with the power to either consent to provide information to the researcher or refuse to participate. However, once a participant has agreed to participate and has provided information to the researcher, the position of the researcher is then shifted into a position of power in comparison to the participants. This is defined by Dowling (2005) as an ‘asymmetrical relationship’ in which the participants are in a position of influence by the researcher.
3.6.3. Indigenous park staff participants: conflicting roles and responsibilities

The most conflicting roles observed during the field research, were the conflicting roles of Aboriginal Protected Area staff members. As a staff member within a bureaucratic protected area system, it is a significant part of an employee’s role to work as openly as possible with external researchers and employer’s projects, reports and publications. However, Indigenous staff must also abide by their Aboriginal community cultural protocols, particularly with regards to the knowledge and information they disclose to Indigenous staff from different Aboriginal Communities, non-Indigenous staff and the public. Cultural protocols protect all aspects of Aboriginal culture and particularly those which Western society would otherwise attempt to exploit for Western frameworks or merely out of curiosity, such as Indigenous environmental knowledge and certain cultural practices. These aspects of Aboriginal culture are afforded high levels of respect for the traditional owners of that knowledge (Cavanagh, 2007). The very nature of bureaucratic and Western knowledge structures functions on the open distribution of knowledge and information, which can at times be particularly conflicting with the nature of Indigenous environmental knowledge and heritage. With a steadily increasing number of NSW and Commonwealth Aboriginal identified positions within protected area agencies, and limited changes to the structure of the agency itself to incorporate Indigenous cultural practices, these conflicting roles are becoming progressively more conflicting. Greg, an Aboriginal participant from Wreck Bay Aboriginal community and an employee at BNP explained to me when discussing what he could ‘tell me’:

As an Aboriginal park manager, I’ve got two laws to follow. I’ve got to follow the Commonwealth Law or Park Law for my bosses. I have more laws to follow than other park staff... I’ve got to follow my Aboriginal Community Law too. We respect the elders and I’ve got to talk to them about what I’m allowed to talk about.

Greg, Aboriginal BNP employee
As I discovered when identifying Indigenous participants, the respect for Aboriginal Law and community elders is inherent throughout the region. The cultural protocols were evident to me throughout the process though non-Indigenous co-workers seemed to be mostly unaware of these processes (See Box 3.2. Aboriginal Staff and Cultural Protocols).

3.7. Positionality Conclusion

With my positionalities and subjectivities in mind, I have often doubted whether continuing the research at all was ethical. These doubts were particularly emulated through my positionality as a non-Indigenous researcher as many Indigenous and non-Indigenous critiques have argued non-Indigenous researchers conducting research with Indigenous participants risks continued production of colonialism: placing Indigenous people in positions as objects to be exploited for the production of their knowledges by members of dominant social groups (Anderson, 1996; Smith, L.T., 1999; Humphery, 2001; Nakata, 2004b; Cavanagh, 2007; NHMRC, 2007). However, Skelton (2001:90) argues, ‘...such doubts and dilemmas are good and a productive part of effective and sensitive cross-cultural research.’ Acknowledging the differences between myself as the researcher, and that of my research participants is the best ‘first step’ a researcher can take in planning collaborative and cross-cultural research. This ensures a degree of consciousness about the positionality of the researcher, reflection on what those differences may mean and how they will be dealt with so they can be incorporated into the research (Skelton, 2001).

With these ethical considerations in mind, this cross-cultural project attempted to take another step towards building a better understanding between Aboriginal and non-Indigenous Australians in conservation management, agencies which previously had been almost entirely based on non-Indigenous perspectives. Skelton (2001:90) argues, ‘...as part of the politics of reflective and politically conscious...cross-cultural research, we have to continue our research projects, we must publish and disseminate our research. If we do not, others without political anxieties and sensitivities about their fieldwork processes take the space and may perpetuate negative representations and stereotypes.’ The benefits of increased levels of participation by Aboriginal people in conservation management and an improved understanding between the two social groups, is certainly well worth negotiating the controversy and dilemmas encountered during the research process.
Dowling (2005: 26) urges researchers to consider ‘that you are never simply either an insider or outsider. We have overlapping racial, socio-economic, gender, ethnic, and other characteristics’. This is evident in the dynamic roles and the inherent subjectivities mentioned above. Each highlights shifting insider-outsider perspectives between the researcher and participant groups. Additionally, research for the researcher is a two-way process (Cavanagh, 2007). The research impacts my positionality just as my positionality impacts the research. Martin and Glesne (2002: 218) argue academic research can provide a type of intervention to overcome these positionalities and biases as ‘places and people are continuously being reinvented through the course of knowledge production’. Awareness of these complexities in research is pertinent, but that does not mean these complexities are so detrimental as to prevent the researcher from conducting research altogether. Human Geography, Aboriginal Studies and other social science disciplines provide a basis and tools which allow researchers to step out of their own cultural frameworks in order to conduct cross-cultural and collaborative research, and to work through the ethical dilemmas to ensure both social groups are satisfied with the process and outcomes.

3.8. Ethical Design

Following a review of ethical critiques in geography and Aboriginal studies, a description on the ethical processes and considerations made specifically in the research, and an evaluation of the positionalities and politics of the researcher and participants, this section will identify specific methods and techniques employed to conduct ethical cross-cultural and collaborative research.

3.8.1. Cross-cultural and Collaborative research methods

Howitt and Stevens (2005:32) coin the term, ‘Colonial research’, and they define characteristics of this research as reinforcing domination, exploitation, intrusion, through the use of non-participatory approaches and the utilisation of differential power relationships to dismiss ‘other’s’ rights. Colonial research has been a dominant feature in various disciplines within Western research (Smith, L.T., 1999). Howitt & Stevens (2005:32) argue postcolonial research rejects characteristics of colonial research in which, knowledge is intended to contribute to ‘other’s’ self-determination and welfare through methodologies and the use of
research findings that value their rights, knowledge, perspectives, concerns, and desires and are based on open and more egalitarian relationships.’ When undertaking cross-cultural research with Aboriginal Australians, research methods must consider the cultural sensitivities of the research group, particularly due to the impacts of Western colonisation and a traditional culture which, as Nakata (2004a) argues, was forcibly taken from them. As a result, it is beneficial in cross-cultural research to incorporate collaborative methods with equal partnerships between the researcher and the participants as well as research that brings to the centre and privileges ‘Indigenous values, attitudes and practices’ (Gibbs, 2001). There are no definitive ways to plan cross-cultural research, as every project is relative to the researcher and the participant groups of the researcher’s focus. There are, however, general guidelines to follow in planning cross-cultural research. AIATSIS (2000) has established a working guideline, which was adapted to this project and used as a loose framework (see Table 3.3 below).

### Table 3.3. Guidelines for Ethical conduct in Aboriginal Research

<table>
<thead>
<tr>
<th>AIATSIS (2000) Guidelines: Consultation, negotiation and mutual understanding</th>
<th>Description of Process and Goals</th>
<th>How guidelines were adapted for the Jervis Bay region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consultation, negotiation and free and informed consent foundations for research with or about Indigenous people</td>
<td>1. Consultation with the Wreck Bay Community was conducted through the formal permit approval process, and with the individuals who attempted to act as liaisons to the Communities. All project information was explained to participants and questions asked prior to application approvals and individual consents.</td>
<td></td>
</tr>
<tr>
<td>2. Responsibility for consultation and negotiation are ongoing</td>
<td>2. Consultation with participants was ongoing. I contacted participants and potential participants multiple times through phone and email conversations, and personal visits. Consultation was also two-way as I made it easy for participants to contact me and these were utilised by some participants</td>
<td></td>
</tr>
<tr>
<td>3. Consultation and negotiation should achieve mutual understanding</td>
<td>3. Potential participants were given</td>
<td></td>
</tr>
</tbody>
</table>
### Respect, recognition and involvement

1. Indigenous knowledge systems and processes respected

2. Recognition of the diversity and uniqueness of peoples and individuals

3. Intellectual and cultural property rights of Indigenous peoples must be respected and preserved

4. Indigenous researchers, individuals and communities should be involved in research

1. Given this was a cross-cultural study which attempted to incorporate Indigenous knowledge systems, this was a topic of discussion with participants. Continued consultation and member checking also ensured individuals views and experiences were represented acceptably.

2. Heterogeneous views were recognised from the onset of the research as being a characteristic of all Communities (both Indigenous and non-Indigenous). Interviews were conducted on an individual basis and these views are recognised in the thesis as being individual representations rather than a representation of the entire community.

3. All information provided was negotiated with participants for how it would be used and how it would be stored/returned to the participants.

### Benefits, outcomes and agreement

1. Use of and access to research results should be agreed

2. Researched community should benefit from the research project, not be disadvantaged

3. Negotiation of outcomes include results specific to the

1. The access and use of research results were discussed with participants and potential participants. It was understood the results would be produced in a final report and this report is to be given to individual participants and the community. Due to the inability of the researcher to form relationships beyond liason with the Wreck Bay and Jerrinja Communities culturally sensitive information was not accessed and as such this is not
needs of the community researched

4. Negotiation should result in a formal agreement for research conduct, based on good faith and free and informed consent

an issue in the report.

2. The research was welcomed by both participant groups and viewed as being beneficial in recognising and incorporating cross-cultural ways of knowing a particular species. There was no recognised potential for Communities to be disadvantaged by the project.

3. The idea for the research project was identified through a previously attempted study in the region which failed to consult with the Aboriginal Communities and was based primarily on Western Scientific notions of tagging/touching the White-bellied Sea-Eagle and the understood significance of the species to the Wreck Bay Aboriginal Community. This project highlighted the gap in understanding between Western and Indigenous ways of understanding, knowing and caring for the species. Lessoning this gap will help both the researcher/park staff and the Aboriginal Community in negotiating positive outcomes and as a result will also be beneficial for the White-bellied Sea-Eagle and other species who may be implicated in future research/conservation matters.

4. Participants had the right to withdraw and withdraw information provided from the study at all times. This was communicated to participants and it was noted this would not affect the participant’s relationship with the researcher or the University of Wollongong. At all times, participants were encouraged to direct how they would like research to be conducted.
3.8.2. Cultural Protocols and two-way benefits

While the above guideline were utilised in the research, it was also recognised that each community within the study area retained their own unique cultural protocols. I sought to understand and adhere to these throughout the research process. As so much of the research process involved attempts to receive community approval and community participation, rather than interacting with several community members, my understanding of these protocols is limited. However, negotiations with individuals from both the Wreck Bay and Jerrinja Communities revealed some appropriate behaviour in addition to my experiences approaching potential participants. Appendix M provides a table of the various potential participants and the number of times and ways in which I approached them. Box 3.2 below also outlines initial assumptions made by myself, co-workers, and employers in recruiting potential participants from Aboriginal Communities. These experiences enlightened me to some aspects of the local Aboriginal Communities’ cultural protocols. From my experience, the best attitude a researcher can have when approaching cross-cultural research is to keep an open mind and to be upfront about insufficient knowledge with regards to a particular community’s cultural protocol. Ask if you are unsure. Making assumptions and generalisations is the worst thing a researcher can do and it may offend some people beyond apology. I have also found that limiting the anticipation and expectations inadvertently placed upon potential participants to agree to participate is an excellent way to overcome disappointment when potential participants refuse.

Box 3.2. Indigenous Staff and Cultural Protocols

The Defence Environment Team (DET) Director at Beecroft Peninsula, following the interview I conducted with her, recommended I speak with an Aboriginal staff member on the Defence Environment Team. This Aboriginal staff member is from the Jerrinja Aboriginal community and has also been with the Defence Department at Beecroft Peninsula as a ranger the longest out of any other staff member. The Director suggested I speak with this ranger as she has the longest insight into conservation matters pertaining to the White-bellied Sea-Eagle and could also potentially answer questions I had with regards to the cultural significance of the White-bellied Sea-Eagle to the Jerrinja Aboriginal community. I, along with the DDET Director, assumed that the ranger would feel comfortable speaking with me as a staff member of the DET and potentially allow me to conduct an interview. When I was able to make contact, the ranger explained to me that I should first contact the Jerrinja
Aboriginal Community Council CEO to get council approval and to then identify members of the community who the council deems appropriate and who were willing to participate. In the role as an employee of the Defence Department, there was a degree of anticipation for the Aboriginal ranger to participate in the project by both myself and the ranger’s employer. However, in her role as a Jerrinja Aboriginal Community member, the ranger did not feel comfortable participating in the cross-cultural project without having approval from the Community Council and elders. The process of seeking participants and them declining participation helped to identify certain aspects of Jerrinja cultural protocol, particularly the protective nature of disclosing culturally sensitive information to a non-Indigenous person and the appropriate process that should be followed.

A similar situation occurred in the NPWS regional office in Nowra. Following an interview, the participant suggested I contact a co-worker who was also a member of the Jerrinja Aboriginal Community. The participant naturally considered the co-worker to be a potential participant as he fell within the participant group and also may be helpful in identifying the cultural significance of the project to the Jerrinja Aboriginal Community. However, the participant was not comfortable in participating in the project and felt he was not an appropriate participant from the Community given the topic of the research. There was an embedded assumption that because this co-worker was from the Jerrinja Aboriginal Community and a NPWS staff member, he would be an appropriate participant for the research or would be able to speak on behalf of others knowledge with regards to the research topic and that he would be comfortable participating in the project. These lessons in seeking out participants from the local Aboriginal Communities helped to identify what was culturally appropriate and acceptable for the Communities.

In sum, a total of three participants interviewed in the project were of Aboriginal background. While it is important to gain approval for the initial stages of the research by the relevant community members and adhere to cultural protocol, it is also important to recognise during the research, that individual’s viewpoints of any Aboriginal Community are not homogenous. It is essential to recognise the perspectives included in this project belong to the individual participants and are not representative of the community as a whole. It is also essential to
recognise the strong ties individuals share within Aboriginal Communities; ‘individual participants must not be put in jeopardy in their own community for their contribution’ (Henderson et. al, 2002). All participants in the study are represented with pseudonyms to maintain confidentiality and consistency.

### 3.9. Research Design and Methods: Achieving Rigour

With considerations made for concerns regarding ethics, ethical processes, and the researcher-participant relationship, as well as techniques prepared to address these considerations, the next step was developing a research design and methods.

#### 3.9.1. Literature Review

The literature review was a critical component of the research design and introduced major issues with historical and contemporary Indigenous involvement in conservation management. It drew together literature from multiple disciplines to understand the research topic. A comprehensive literature review is presented in Sections 1.2. and 1.3. of the Introduction Chapter and Chapter 2. Additionally, Section 4.2. provides a review of the available scientific literature pertaining to the White-bellied Sea-Eagle. Finally, Section 4.3 thoroughly examines law relevant to the conservation status of the White-bellied Sea-Eagle. This method provided a comprehensive conceptual framework through which to consider the major research questions. Valentine (2001: 42) notes the significance of a literature review to embed ‘research questions in broader empirical traditions and in doing so provides evidence of the significance of your project’. An examination of the broader topics facilitated understanding of the different participant groups, particularly the historical and contemporary implications within a local Jervis Bay context. Valentine (2001) argues a quality literature review will not only summarize major studies in for the research topic but will also draw on critical analysis when examining ways in which the topic have been dealt with in previous study and identify gaps, strengths and weaknesses. The literature review also provided a critical investigation into previous studies conducted in the research topic and study area to identify methods which may or may not work best with various participants groups and individuals.
3.9.2. Participant Recruitment

Participants were recruited with purposeful sampling (Bradshaw & Stratford, 2005). Potential participants were identified to be from one of the two participant groups of research focus in the study area. In the initial stages, participant groups drew primarily on BNP staff (both Indigenous and non-Indigenous) and Wreck Bay Aboriginal Community. However, as the research process progressed, I was able to identify potential participants from a diverse range of backgrounds, interests, and affiliations (through participants and potential participants in the earlier stages of the research who passed on contact information and recommendations). This was pertinent particularly considering the amount of time it took to work through BNP’s permit application processes. Participants were gradually identified in various NSW NPWS, in the DECCW office in Sydney, previous employees and board members from BNP, previous and current researchers in the Jervis Bay region, and the Department of Defence Environment Team. Most importantly, it was identified through several participants in the NPWS (particularly Aboriginal employees from Jerrinj Community) that it was essential to include participants from the Jerrinj Community. One individual from Jerrinj Community noted the community felt they were often overlooked by researchers working exclusively with BNP and the Wreck Bay Aboriginal Community.

In total I gained participation from a total of 17 people (See Appendix L) across four government agencies (NPWS, DECCW, JBMP, BNP, and Defence), the Shoalhaven City Council, the Wreck Bay and Jerrinj Communities, a previous employee of BNP who was a current NPWS employee, a previous BNP park board member, and one conservation biologist in the field. While most individuals agreed to be identified in the final report, some wished to remain anonymous or would not specify. To remain consistent in the final report, all participants are identified by their position or role in the project: names are not provided. While only some of these participants provided specific information which is represented in the final report by quotes or instances, all participants contributed to my broader understanding of the study area and the issues associated with the research.
3.9.3. Interview, Engagement, Participant Observation and Peer Review

Dunn (2005: 80) suggests interviewing as a qualitative research method and notes the strengths of this method to include the following abilities:

1. to fill a gap in knowledge that other methods, such as observation or the use of census data, are unable to bridge efficaciously
2. to investigate complex behaviours and motivations
3. to collect a diversity of meaning, opinion, and experiences. Interviews provide insight into the differing opinions or debates within a group, but they can also reveal consensus on some issues
4. when a method is required that shows respect for and empowers those people who provide the data. In an interview the informant’s view of the world should be valued and treated with respect. The interview may also give the informant cause to reflect on their experiences and opportunity to find out more about the research project than if they were simply being observed or if they were completing a questionnaire.

Many scholars note the value of using interviews which provide a variety of responses (Dunn, 2005), expose a variety of knowledges as opposed to the use of questionnaires (Valentine, 1997; Winchester, 1996), and the knowledges are quickly generated (Valentine, 2001). Winchester (1996:119) also argues interviews are an essential component to looking beyond the empirical to achieve critical realism, which works to recognise the complexities of underlying structures which may differ from the observations and discourses ‘to which they give rise’.

Interviewing also presents some difficulties as it draws on the interpersonal and listening skills of the researcher, in addition to the quality or appropriateness of the questions the researcher asks (Valentine, 2001). Other difficulties with interviewing as a research method include participants not understanding the interview questions, not feeling comfortable sharing certain information or experiences (particularly with regards to personal or sensitive information), and more generally, the information provided by the participant consists of what the participants ‘say they do rather than their actual practices’ (Valentine, 2001: 44). Some of these difficulties can be overcome or avoided with quality interview design.
Interview design involves determining the type of interviews to be employed with participants, the Interview schedule or guide, types of questions to be asked, and how the mechanical phase will be conducted (Dunn, 2005). Interview types can range from structured to unstructured (Valentine, 2001; Dunn, 2005). This research project employed semi-structured and unstructured interviews. While initially preparing set questions (or an Interview schedule) for participants (a characteristic of a formal interview (Dunn, 2005)), in the actual interviews, these questions were only used as a topic guide in which to direct the interview process. This semi-structured interview method allowed for flexibility in the way issues were addressed by the participant and allowed for further exploration of the participants’ personal experiences (Dunn, 2005). The types of questions asked of participants consisted of primary (original) questions which ranged from descriptive, descriptive (knowledge), storytelling, contrast (hypothetical) and opinion (Dunn, 2005). In some cases, particularly with Aboriginal participants, more unstructured interviews were conducted at their request. This allowed the interview process to be partially directed by the participant rather than a set of prepared questions (Dunn, 2005). The questions asked were unique and determined by the participants’ responses, which approximated a normal conversational interaction (Dunn, 2005). In both interview processes, the research topic was discussed with the participants prior to the interviews and an overview of the interview guide or topics were provided. The interview guide and questions were designed to bare the real life experiences of the participants with regards to the White-bellied Sea-Eagle: ways of knowing the species, conceptualisations of space and how the species is managed within it, and the personal connections formed with the species. A reproduction of the interview questions used as a topic guide can be found in Appendix I. Finally, in the mechanical phase of the interview process (Dunn, 2005), note taking and audio recording were both used. All non-Indigenous participants consented to audio recording. Note taking was also used in these interviews for additional record keeping and observation. Note taking was the only method used for the three Aboriginal participants at their request.

The triangulation method, which uses multiple research methods, was also employed to cross-check interview processes and generate more data (Winchester, 1996). Ethnographic methodologies were employed through observation, interactions with participants and participation in informant activities (Limb & Dwyer, 2001). Observations were employed in the meeting times prior to and following the interviews as well as during the interviews. Observations were also employed over day long periods of time spent in particular participant
offices (to peruse libraries and meet staff), homes (to meet participants, their family, and discuss current issues in the community), and in some cases (particularly with Aboriginal participants who preferred this method), over a prolonged periods of time outdoors in the study area while participants were conducting regular activities. Observations were recorded in a field journal mainly following interactions with participants and to ensure confidentiality I was the only one with access to it. Peer review and member checking were also utilised throughout the research process. Peer review consisted of the involvement of my supervisors and a field expert in the project, and having multiple drafts proofread. Member checking consisted of continued consultation with participants about data they had provided, ensuring I understood the information and represented participant views in the final report satisfactorily.

3.9.4. Discourse Analysis

Gregory et. al (2009: 167) define discourse analysis broadly as ‘the analysis of discourse’ and the methodology employed ‘for studying the production and meaning of discourses’. Hay (2005: 281) describes discourse analysis as the ‘method of investigating rules and structures that govern and maintain the production of particular written, oral, or visual texts.’ To fully understand the analysis of discourse, a researcher must also understand discourse in human geography. Hay (2005) argues there is no set and static definition of discourse. Several geographers refer to Michel Foucault’s previous works and critiques (Waitt, 2005). According to Waitt (2005: 164) ‘Foucault’s constructionist approach challenges conventional disciplinary boundaries of geography by enabling a demarcation that includes the voices of those people formerly excluded’. As a result, the meaning of discourse and its analysis are expanded to include these previously ‘Other’ voices and how those particular voices and associated geographical knowledges have social effects on human perceptions (Waitt, 2005). Waitt (2005:164-165) explains discourse analysis as having the following three points:

1.) to explore the outcomes of discourse in terms of actions, perceptions, or attitudes rather than simply the analysis of statements/texts;

2.) to identify the regulatory frameworks within which groups of statements are produced, circulated, and communicated within which people construct their utterances and thoughts;
3.) to uncover the support of internal mechanisms that maintain certain structures and rules over statements about people, animals, plants, events, and places in existence as unchallengeable, ‘normal’, or ‘common-sense’ rather than to discover the ‘truth’ or the ‘origin’ of a statement.

These guidelines were applied towards the discourse analysis of the interview and observation material for the research project, focusing specifically on the ‘nature-talk’ (Cavanagh, 2007) surrounding the White-bellied Sea-Eagle; the similarities and comparisons between various constructions of knowledge, space, and cultural significance; expressions of law and lore within those constructions; and how all of the above has impacted the conservation management of the species.

### 3.10. Thesis Scope and Acknowledgement of limitations

Any researcher from Indigenous or non-Indigenous background, must take time and care to establish relationships with the Aboriginal Communities they wish to work with for a number of reasons: to ensure community cultural protocols are adhered to, to allow community members enough time in getting to know the researcher and determine if and how they will trust the researcher, and to discuss how the research project will benefit the Aboriginal community. Essentially, the most important acknowledgement to make with regards to the limitations of this research project is the limitation in time for which I was able to work with the Aboriginal Communities involved.

A significant quality of Aboriginal people and their communal entities is establishing all relationships on a basis of trust. Building a relationship of this sort understandingly takes a considerable amount of time. Anderson (1996:154) argues the researcher, regardless of the circumstances or their intent, serves as a memory of ‘...the anthropologist, the missionary and those police who were actively involved in the institutionalisation of Aboriginal children and the coercive regulation of reserve and mission life.’ As a non-Aboriginal person and a non-native Australian, I found it particularly difficult to balance the demands of institutional time constraints and the large amounts of time needed by the Aboriginal Communities to establish trust and identify suitable research strategies (Anderson, 1996).
The institution in this case was the University of Wollongong and the establishment’s thesis submission date for a one year research project. With any university degree requirements, there are time limitations for the project in order to graduate. In this situation, the researcher is extremely limited in their ability to form solid working relationships with the Aboriginal Communities involved in the project: a relationship that, when solid, takes years and years to form (e.g. Sue Feary’s 25 years of experience in the study area working with the Aboriginal Communities). Another institutional constraint for the project was the BNP Board’s permit application process (Section 2.3.1.2 and Appendix D). Due to other management issues of higher priority at BNP, the application process took close to five months before it could be tabled to the board and then sent to the Wreck Bay Community Council for approval. Due to these time constraints at both the start and end of the project, the amount of time I was able to spend with Wreck Bay Community members was severely limited. In the final stages of the write up, an Aboriginal participant was contacting me in hopes of organising a meeting with Community members. There were several potential participants in the Aboriginal Communities with whom I was not able to make contact with due to deadlines of permits and the final report, regardless of the individuals’ interests in the topic. Despite these deadlines and time constraints, the experiences I continue to share with both non-Indigenous and Indigenous Australians will always be regarded as a continuous learning process and a constant exchange of knowledge and friendship. This idea, once again does not ‘fit’ into a Western academic framework, with its various forms of limitation. Though this thesis will eventually be submitted as a ‘final’ piece, as my friendships and knowledge grow, I will always come back to the final copy and consider what I should change and add.

3.11. Conclusion

This chapter has focused on the significance of ensuring rigour and has outlined the key methods incorporated in the project to establish and maintain rigour. The ethical theories and debates were outlined, and ethical processes and concerns specific to this research project were stated. Furthermore, critical reflexivity was examined and confronted through an autobiographical statement, and the identification of positionalities, subjectivities, and power in researcher-participant and participant-participant relationships. Ethics in Cross-cultural research was examined specifically in both theoretical debates and issues specific to this research with cultural protocols. Following all ethical considerations, methodologies were
explained through the literature review, recruitment of participants, methods of participant engagements, and the methods of data interpretation through discourse analysis. With the ethical considerations made and the methodological tools stated in this chapter, the thesis will continue to Chapters 4 and 5 with a cross-cultural examination of the emerging themes in the research.
Chapter 4: Non-Indigenous Ways

NON-INDIGENOUS WAYS

4.1. Introduction

This chapter explores non-Indigenous ways of understanding and relating to the White-bellied Sea-Eagle in the Jervis Bay region. As mentioned in the Introduction, this thesis acknowledges the considerable degree of shared and overlapping knowledge between Indigenous and non-Indigenous people. For example, while Western knowledge maintains particular characteristics, Indigenous people have access to it, have observed it, and have experienced it. Consequently, this Chapter is not limited to only non-Indigenous experiences and observations with non-Indigenous ways.

Section 4.2 broadly examines characteristics of Western knowledge: what is considered, defined and accepted as ‘knowledge’. Expanding upon this analysis further, the section also examines Western knowledge specifically pertaining to the White-bellied Sea-Eagle. Section 4.3 explores non-Indigenous conceptualisations of space within which Western law is expressed specifically pertaining to the White-bellied Sea-Eagle. Next, Section 4.4 explores...
non-Indigenous conceptualisations of space within which conservation interests generally, and the White-bellied Sea-Eagles specifically, are managed. Finally, Section 4.5 examines the cultural significance of the White-bellied Sea-Eagle to non-Indigenous people and, in some cases, the personal connections made with the large raptor.

4.2 Ways of ‘Knowing’ the White-bellied Sea-Eagle

Western knowledge is a conventional knowledge, particularly in post-colonial societies. As a result, its discipline range, data distribution, and theoretical ‘progress’ are extensive. Western knowledge is characterized by intense categorisation, broken up into various disciplines. Of these numerous Western knowledge disciplines, science is the most prevalent branch for non-Indigenous ways of understanding or ‘knowing’ the White-bellied Sea-Eagle, and can be broken up into the sub-category disciplines of biology, ecology, and environmental conservation. These science disciplines, specifically with regards to how each seeks to understand the White-bellied Sea-Eagle, will be discussed further in Section 4.2.1. All Western knowledge disciplines are studied with mostly rational thought, assumingly free of emotive, social and cultural components embedded in other aspects of human nature (Nakata, 2004a), particularly science. The distribution of data in Western knowledge is also significant. Information is easily produced and accessed for use. The geographic distribution of Western knowledge is propagating into all regions, cultures, and semi-peripheral and peripheral countries. Despite its wide-spread distribution, the content which constitutes Western knowledge remains relatively exclusive and privileged, acting as the authoritative and legitimate knowledge system above others (Nakata, 2004a). This is particularly at the expense of Aboriginal peoples’ knowledges, as well as un-formally educated peoples ‘local knowledge’ (Menzies et al., 2006), which will be discussed further in Chapter 5. An emergent theme from non-Indigenous agency staff members were characteristics of Western knowledge generally, and specifically in the discipline of Science.

4.2.1. Science

In a Western academic context, curiosity rules the sciences and the desire to ‘know’ all about the White-bellied Sea-Eagle is evident in most cases. In this desire to know more, Western scientific knowledge is highly characterised by its progress. Several participants noted the
need to know more about the species in a formally educated scientific way, particularly before it could become a conservation priority. Jon argued:

*We need to do more studies. We need to encourage universities to take the time to do more studies. It would be valuable to us at NPWS to be able to get more information on the species.*

Jon, non-Indigenous NPWS employee

Susan, a non-Indigenous participant who had previous experience researching the White-bellied Sea-Eagle, noted motivations for researching the species to be based on knowledge-gaining research interests rather than conservation interests stating:

*...most of the work involving White-bellied Sea-Eagles in the park was focused on research and not directly on conservation initiatives.*

Susan, non-Indigenous DECCW employee

Ben also identified a need to know more about the species and expressed a fear of the unknown:

*...it may have threatening processes. It’s an early warning signal to us that we may need to pay attention to it in a knowledge gaining sort of way and obtain more information. I would say lack of knowledge is a threat*

Ben, non-Indigenous DECCW employee
In an effort to know more, methods are at times relatively intrusive. It is identified (See Identification Chart below), scientifically classified (as *Haliaeetus leucogaster* (Gmelin, 1788)), observed and studied through all behaviours, its wing span and egg thickness measured, its feathers plucked for mtDNA testing, it is touched, captured and tagged. Two participants in this project had experience in researching the White-bellied Sea-Eagle specifically. Nick, a non-Indigenous participant, noted the use of capture and tagging as a method of learning about the White-bellied Sea-Eagle, stating:

…in the 80s I actually undertook a banding project through the Australian Bird and Bat Banding Scheme to trap and band marine raptors… I tried a system that was called a Bal-Chatri…which was basically a brick buried in the sand with nooses attached to it and a bait. So when they came in for the bait they would get their feet taken up in the nooses. So theoretically I’d capture them, but they kept on lifting the brick and the snares would snap so I just decided that if I had to get anymore heavy duty with the hardware, I was going to damage the animal so I didn’t bother with it.

Nick, a non-Indigenous NPWS employee

Production of knowledge pertaining to the White-bellied Sea-Eagle was also an identified characteristic of scientific knowledge. Several participants noted knowledge about the species was produced, widely circulated and easily accessed. Jack, a non-Indigenous participant who has done a considerable amount of research in the study area, commented:

*The conventional scientific literature about Sea-Eagles is readily accessible; I’ve read it and gone back to it, pored over it, so I know quite a bit about the species from that literature.*

Jack, non-Indigenous conservation biologist
Hayley also noted:

*I’m fairly familiar with their habits and distribution…to the extent that the bird books give information…I’m probably not intimately acquainted with it…I’d have to go look it up if you were going to quiz me.*

Hayley, non-Indigenous DDET employee

As this literature is widely available to both non-Indigenous and Aboriginal participants, and is such an integral part of the way in which non-Indigenous participants understand the White-bellied Sea-Eagle for research and conservation interests, a brief review of how this literature expresses Western scientific knowledge of the species is included.

**Scientific Identification Chart of the White-bellied Sea-Eagle**

Source: Pizzey & Knight (1997).
Although not used in this thesis, other common names of identification for the White-bellied Sea-Eagle include: White-breasted Sea-Eagle, White-bellied Fish-Hawk, Sea-Eagle, White-Eagle (Olsen, 1995; Rose, 2002; Baker, 2010, pers. comm). Adult White-bellied Sea-Eagles have ‘a white head, breast and abdomen and the tail is pale grey with a white tip and juveniles are speckled slaty brown with a paler face’ (Department of Sustainability and Environment 2003). At two years, the juveniles are mostly a slate-brown colour above and a light brown colour below, and are easily confused with the Wedge-tailed Eagle (See photograph) (Olsen, 1995). The distinguishing characteristic from a Wedge-tailed Eagle and a juvenile White-bellied Sea-Eagle is a white base to the upper tail, a white patch at the base of the primary wing feathers, and a ‘distinctive broad-winged, short-tailed silhouette’ (Olsen, 1995:145). Sea-Eagles acquire full adult plumage at three to four years of age (Olsen, 1995; Readers Digest, 2002; Department of Sustainability and Environment, 2003). The number of juvenile Sea-Eagles observed is a good indicator of a successful breeding season for scientists and conservationists, though it could be a rather slow indicator of an unsuccessful breeding season due to the Sea-Eagles three to four year fledging and post-fledging period (Olsen, 1995).

The White-bellied Sea-Eagle’s foraging tactics for food are varied. Penny Olsen describes, ‘with a large deep beak, sturdy bare legs (unlike true Eagles), and strong curved talons, it is an aggressive pirate and scavenger, but also a powerful hunter’ (Olsen, 1995: 145). The White-bellied Sea-Eagle’s diet consists of birds, small mammals, fishes (taken by plunging in the water from flight), sea snakes and small turtles (depending on the region) as well as scavenging for carrion (Olsen, 1995; Heinsohn, 2000). The Sea-Eagle’s hunting grounds consist of islands, deep water, reef edges, inland lakes and waterways, and in some cases

Chapter 4: Non-Indigenous Ways
where high levels of human development have occurred, livestock fields (Olsen, 1995; DEWHA, 2009b).

With regards to mating patterns of the White-bellied Sea-Eagle, breeding pairs are for life, except under the circumstances that one of the pair dies in which case the departed Eagle is quickly replaced (Readers Digest, 2002; Department of Environment, Water, Heritage and the Arts, 2009b; Department of Sustainability and Environment, 2003). The White-bellied Sea-Eagle pairs establish mostly sedentary nesting sites within a claimed territory, which is also used for hunting and perching (Readers Digest, 2002; Department of Sustainability and Environment, 2003; DEWHA, 2009b). Breeding season lasts from April to August (Readers Digest, 2002; Department of Sustainability and Environment, 2003). Several scientists have noted the sensitivity of the species at its nesting sites, particularly to human disturbance (Olsen et al., 1993; Debus, 1995; Olsen, 1995; Readers Digest, 2002; Department of Sustainability and Environment, 2003; Shephard, 2005; Spencer and Lynch, 2005; DEWHA, 2009b; Debus, 2009; Thurstans, 2009). According to Debus (1995:4) the peak period of disturbance ‘is from the nest building and refurbishment stage in the month preceding the laying season (June-September) to fledging in October-January’. The White-bellied Sea-Eagle clutch size (the sequence and number of eggs laid) is about one egg per day and ranges from one to three eggs, two being the most common (101/116 Eagles laid two eggs) (Olsen, 1995). Scientists use the clutch size to determine the life-history traits of a given raptor species, with the clutch size per season being a good indicator of lifetime success rates (Olsen, 1995). The clutch size may also indicate occurring threats to the species if the size and frequency are low; for instance, if eggs were breaking due to egg shell thinning or if nests were abandoned due to disturbance (meaning the incubation of the egg will not occur and the egg will not hatch). If a clutch is lost early on in the breeding season, it is possible the Sea-Eagle may re-lay three or more weeks later (Olsen, 1995). The White-bellied Sea-Eagle has the highest mean recorded egg length of Australian raptors at 7.4 cm (Olsen, 1995; Olsen et al., 1993), which obviously makes for an extremely large nest. Suitable nesting sites include tall live or dead trees or remote coastal cliffs (Olsen, 1995; Readers Digest, 2002; DEWHA, 2009b; Department of Sustainability and Environment, 2003). In the Jervis Bay region, preferable nesting habitat includes massive living eucalypts which rest usually within or just below the canopy level of large patches of forest or woodland; though nesting habitat is sometimes located in open habitat or on dead trees or cliffs (Debus, 1995).
The distribution of the White-bellied Sea-Eagle extends along the temperate and tropical coasts as well as some large inland river systems and wetlands in Australia (Spencer & Lynch 2005; Hobbs, 1961). It is also found in the northern hemisphere in parts of India, China and south through Asia and New Guinea (Department of Sustainability and Environment 2003). White-bellied Sea-Eagle populations throughout most of Australia and internationally indicate population decline (Shephard, 2005, Farrier & Adams, in press; Debus, 2009; Thurstans, 2009). The species has been listed as a threatened or vulnerable species in three Australian states (See Section 4.3.4.) and as a result has sparked much interest in research.

Threats to the species are presumed to be due to widespread clearing of coastal forests for urban development and increased human presence which affects nesting patterns and causes an incremental loss of breeding territories (Debus, 1995; Department of Sustainability and Environment, 2003; Spencer & Lynch, 2005; Thurstans, 2009). Other issues which have been studied little such as eggshell thinning, poisoning and secondary poisoning (from consumptions of contaminated prey) are due largely to the human use of organochlorins such as the insecticide DDT and the industrial pollutant PCB (Falkenberg et. al, 1994; Olsen, 1995; Department of Sustainability and Environment, 2003). Even though the use of organochlorins peaked in the 1970s, the pollutants continue to contaminate our environment due to the accumulation and long retention rate in soils and body tissues (Olsen, 1995). As the pollutants are persistent in the environment, the process and thus effects of them are slow, accumulating gradually in both raptors and their prey. The most common harmful effects are eggshell thinning. The White-bellied Sea-Eagle has the second highest mean percentage difference recorded in Australia (behind the Peregrine Falcon) at a -6.2% difference in eggshell thickness with eggs collected between 1946-1990 compared to eggs unexposed to organochlorins (pre-1947) (Olsen et al., 1993; Olsen, 1995) Secondary poisoning could also occur from guns using a lead shot to kill ‘pest’ species on farms which may also be prey of the White-bellied Sea-Eagle. Other threats to the species include ‘PCB seepage from garbage dumps and mercury poisoning from industrial waste’ (Olsen, 1995:145).

While various scientific literatures are privileged, well-circulated and form the basis of many non-Indigenous ways of knowing the White-bellied Sea-Eagle in this study, another emergent theme from participants in this study was a more practical and applied knowledge, which is identified in this thesis as Agency Staff Knowledge.
4.2.2. Agency Staff Knowledge

Another significant component of Western Knowledge, though not consisting of published information and thus not well distributed, is the Agency staff members’ way of knowing which is embedded in agency management and practices. This knowledge was validated as ‘Western knowledge’ by participants, and was the result of the formal training and study within Western Knowledge systems and subsequent qualifications obtained in the field. However, it is significantly different from produced Western knowledge considering people (usually in roles as land managers or researchers who take a personal interest in a particular species) are the holders of knowledge and as such develop their own theories (which may or may not be ‘scientifically proven’) with regards to the scientific knowledge of the species. This knowledge is applied in field and works to manage the species on a day-to-day basis. This section will examine some agency staff observations of the species made by non-Indigenous agency staff participants.

Ben located the species in its role within the ecosystem, stating:

*I’d call it [the White-bellied Sea-Eagle] an indicator or focal species because it has a special role in the ecosystem...it’s the top predator in the marine ecosystem. Healthy populations of Sea-Eagles would tend to indicate a relatively healthy marine environment.*

Ben, non-Indigenous NPWS employee

Jack, in his experiences at Jervis Bay, observed the White-bellied Sea-Eagle’s interactions with humans and specifically their sensitivity at nest sites, stating:

*The interactions they have particularly to humans, is the most important one to my way of thinking. They are fairly easily disturbed at their nest site. The nest site that*
I observed I could never creep up on even from hundreds of meters away. Once I went into the open the Sea-Eagles would flush and fly off...from about 400 metres away. There were several experiences at Jervis Bay where I discovered where nests were because Sea-Eagles flushed off as I was walking in the forest below where their nests were. For a big bird that doesn’t really have much to worry about from animals like humans...it just seems an unusual feature of their behaviour to be so tentative around their nest sites.

Jack, non-Indigenous conservation biologist

Perceived threats to the species were also noted by many participants. Jack noted a less commonly perceived threat stating:

*The threat ...which...in my mind is most significant and that I think we have a poor handle on though we have some anecdotal evidence about is insidiously slow declines. Eagles we know are long lived so we may be seeing Eagles at Jervis Bay [but] what we don’t know is the success of those individuals and breeding pairs. The situation we have is that we really don’t know if we have 1,000 breeding pair, how many we had a decade ago and how many we are going to have in a decade’s time. I think the anecdotal evidence is that there is just a very slow and insidious decline in the number of Sea-Eagles in Australia, and particularly in NSW. You’d expect it with the loss of habitat, disruption of their nesting habitat. I don’t think there is substantial data to demonstrate that but that’s the threat that I think is the worst.*

Jack, non-Indigenous conservation biologist
Jon also noted what he viewed to be potential threats to the species:

I see potential threats to the species being overdevelopment, inappropriate development, and disturbance to nesting sites. I think they are a shy bird and they’ve got a limited tolerance to disturbance around their nesting sites. They get caught up in things every now and then too, like fishing lines.

Jon, non-Indigenous NPWS employee

Hayley also recalled the threat of fishing lines to the White-bellied Sea-Eagle, stating

I would be adamant that fishing related litter…litter generally but fishing related litter… in particular fishing line or a fish that a Sea-Eagle might catch that might have hooks and line that have been released would be a really big potential impact on the Eagles. We do have an ongoing litter problem. We had a joint clean up day and we removed I would say about 3 kg of fishing line. When we were standing there on the rocks talking about the problem…an albatross flew past and you could see the fishing line hanging from its leg glinting in the sun. I’m sure that Sea-Eagle’s must be…because they catch fish from the water and they eat carrion as well…they must be impacted by fishing line

Hayley, non-Indigenous DETT employee

While the basis of agency staff knowledge seemingly reflects science from the production of various literatures, it also expands upon this to include individually applied, observed, and experienced knowledges. These knowledges are intertwined with a specific place, and at times create knowledge about the species which is not found in scientific literature and potentially could be contradictory to the literature.
4.2.3. Nature-Culture Binary

Rose & van Dooren (2009) argue Western thought is characteristically dominated by a ‘nature-culture binary’. A significant part of this binary division is the relationship between humans and animals, and is demonstrated in our classification of ‘human’ as being distinctly separate from ‘animal’ rather than ‘human’ being classified as an animal ‘like the rest of them’ (Rose & van Dooren, 2009). This nature-culture binary is evident in non-Indigenous perceptions of the species as an adored and symbolic feature of the unlived ‘natural’ landscape of Jervis Bay, as observed by both non-Indigenous and Aboriginal participants. Iconography of the species was evident in several participant discourses. Secondly, particular experiences and observations by two participants also notably recognised this nature-culture binary as being a characteristic of Western thought. Within the study area, the White-bellied Sea-Eagle is symbolised on the BNP emblem, as well as being previously displayed on the Department of Defence Environment Team emblem, and still remains on several Department of Defence brochures. The prestige to which the species is regarded is evident through the iconic images of Jervis Bay which permeate several non-Indigenous minds. Hayley, a non-Indigenous employee for the Department of Defence Environment Team stated:

*Out of the bay as a whole...I think if you said to any person in the Shoalhaven, ‘What are the symbols or the icons for you for Jervis Bay?’ I think they would say the Sea-Eagles, dolphins, whales and Point Perpendicular light house.*

Hayley, non-Indigenous Department of Defence Environment Team

This was supported by Emily’s statement:

*It’s an iconic species...for Jervis Bay...It’s like a signature species for the area.*

Emily, non-Indigenous NPWS employee
Jon, another non-Indigenous NPWS employee noted:

_They are very iconic…they are well recognized as a south coast feature._

Jon, non-Indigenous NPWS employee

Though a less common perception of the White-bellied Sea-Eagle, in some cases humans have been observed to fear it. At times such iconography can elude human perspectives into forgetting its real role in the ecosystem as a ‘top predator’ (See Box 4.1 below).

**Box 4.1. Nature-Culture Binary Example**

Greg, an Aboriginal employee of BNP, observed an instance where a non-Indigenous woman was walking a small dog along the beach. She spotted a White-bellied Sea-Eagle soaring above the beach. The White-bellied Sea-Eagle seemed to capture the woman’s attention. She was admiring the Eagle and excited to see it up close. It wasn’t until the Eagle had swooped down and snatched up her small dog that she realised it was circling the beach to hunt for, in this case, a small mammal. It is clear from the woman’s surprised reaction to the Sea-Eagle’s choice of prey, that in the woman’s mind, both she and her pet dog were not actively involved in the ecological processes of the land, but rather that she viewed herself and her dog as mere onlookers, appreciating the size and beauty of the Sea-Eagle.

Another less common perception of the species is particularly aggravated and conflicting. People have been recorded to live in conflict with the species when it poses a perceived threat to human livelihoods. Despite the legal protection the species is afforded by national legislation (discussed in Section 4.3.2.), there have been cases of deliberate killings of the species in other states initiated by pastoralists who suffered flock depredation (Olsen, 1995; Department of Sustainability and Environment, 2003; DEWHA, 2009b). This occurred...
primarily in areas where pastoral development was high and the species experienced loss of habitat and hunting territories. In these cases, Eagles were killed by poisoning (with use of illegal baits laced with strychnine, lucijet or phosdrin) or were intentionally shot (Olsen, 1995). While no known incidents of this sort occurred within the study area, Nick noted the potential conflict between human-species relationships, stating:

They didn’t provide any sort of economic threat to fisherman…where other species that do like seals and stuff down there were shot and killed.

Nick, non-Indigenous NPWS employee

4.3. Law and the White-bellied Sea-Eagle

This section reveals how non-Indigenous conservation interests pertaining to the White-bellied Sea-Eagle are expressed in law and legislative frameworks. First this section looks at International agreements for the species as well as the listing process. Next, Section 4.3.2. examines Australian law pertaining to the conservation status of the White-bellied Sea-Eagle. Subsequently, Sections 4.3.3 and 4.3.4. examine NSW and other states’ conservation statuses and processes concerning the species. In acknowledgment of the time constraints in considering the listing of a species within the various levels of the legislation examined, Section 4.3.5 examines topical research perspectives relevant to the conservation status of the White-bellied Sea-Eagle. Finally, Section 4.3.6 provides Agency Staff perspectives within the study area.

4.3.1. International

The legal conservation status of the White-bellied Sea-Eagle is not listed globally as a threatened species; however, is listed under two international conservation agreements (Debus, 1998; Department of Environment, Water, Heritage and the Arts, 2009b). The Convention on International Trade of Endangered Species of Wild Flora and Fauna (CITES), which regulates international trade on wild flora and fauna, lists raptor species on Appendix II of the convention (Department of Environment, Water, Heritage and the Arts, 2009b). The
convention defines Appendix II as “species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled” (CITES 2009). The international trade of species listed on Appendix II is possible if all conditions are met and it is authorized by the relevant authorities with an export permit (CITES 2009). The White-bellied Sea-Eagle is also listed under the China-Australia Migratory Bird Agreement (CAMBA), which is a bilateral agreement between Australia and China for the conservation of terrestrial, water and shore birds which migrate between the countries. CAMBA works to protect listed species by: limiting the conditions under which migratory birds and eggs are permitted to be captured or traded; protecting and conserving important habitats including nesting sites; and building a more cooperative relationships between Australia and China and to encourage an exchange of information (Australian Legal Institute 2005, Department of Environment, Water, Heritage and the Arts 2009b).

Despite growing international declines for the White-Belled Sea-Eagle recorded in Thailand, Australia and elsewhere, Birdlife international (the official Red List Authority for birds for International Union for Conservation of Nature) has the species listed as ‘Least Concern’ (Birdlife International, 2009a; Department of Environment, Water, Heritage and the Arts, 2009b). While Birdlife International acknowledges a decrease in population trend for the species ‘the decline is not believed to be sufficiently rapid to approach the thresholds for Vulnerable under the criterion’ (Birdlife International, 2009a:1). The justifications for this listing are based on homogenous criterion and measurements, such as, extent of occurrence, population trend and population size. Table 4.1 below outlines Birdlife International criteria in greater detail.
Table 4.1 Birdlife International Methodology: Bird Species Listing IUCN

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
<th>Status of the White-bellied Sea-Eagle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range Size</td>
<td>‘Vulnerable’ if Extent of Occurrence is &lt;20,000 square km combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation</td>
<td>The White-bellied Sea-Eagle distribution ranges widely with international populations. While extent of occurrence is not less than 20,000 square km, other listed indicators such as habitat extent/quality are recorded as impacting the species (Department of Environment, Water, Heritage and the Arts, 2009b).</td>
</tr>
<tr>
<td>Population Trend</td>
<td>‘Vulnerable’ if decline is &gt;30% over ten years or three generations</td>
<td>Birdlife International recognises the species has an unset population trend with several indicators of population trend decreasing</td>
</tr>
<tr>
<td>Population Size</td>
<td>‘Vulnerable’ if &lt;10,000 mature individuals exist with a continuing decline estimated to be &gt;10% in ten years or three generations, or with a specified population structure</td>
<td>Birdlife International estimates the total population size to be between 1,000-10,000 individuals (Birdlife International, 2009a). Australian sources estimate a total of 500 breeding pairs in Australia (Department of Environment, Water, Heritage and the Arts, 2009b).</td>
</tr>
</tbody>
</table>

Table adapted from Birdlife International (2009a).
4.3.2. National

While the White-bellied Sea-Eagle is not listed as a nationally threatened species, the Australian Government lists it as a marine and migratory species on the Environmental Protection and Biodiversity Act 1999 (EPBC Act) (Debus, 1998; DEWHA, 2009b; Thurstans, 2009). As such, it is protected under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). The EPBC Act consists of several sections which work to cover a wide range of wildlife conservation issues. The international agreements listed above, set a standard protocol for Australia’s national conservation and management of the White-bellied Sea-Eagle. Part 13A of the EPBC Act works to uphold the international cooperative conservation agreement mentioned above, the CITES, to reinforce efforts of countries to protect their wildlife. In accordance with the CITES, part 13A of the EPBC Act regulates the import and export of wildlife included on the CITES Appendices. Additionally, part 13A of the EPBC Act works to regulate the export of Australian native species (with the exception of species listed as exempt) and the import of live animals which could potential have an impact on Australian native species and habitats (DEWHA, 2009a). As a native species to Australia, the White-bellied Sea-Eagle is also protected by this part of the EPBC Act.

Part 13, Division 2, Section 209A of the EPBC Act requires the Minister to include all migratory species that are a) native and b) included in annexes established under CAMBA. As adult pairs retain permanent breeding and hunting territories, it is juvenile White-bellied Sea-Eagles that are protected under this section of the EPBC Act (DEWHA, 2009a). This section of the EPBC Act clearly states that any actions which result in the killing, harming, taking or trading of listed migratory species is punishable by law unless a permit is received by the appropriate authorities (DEWHA, 2009a). Part 13, Division 4, Subsection A of the EPBC Act also lists the White-bellied Sea-Eagle as a marine species. All species of birds that occur naturally within Commonwealth marine areas are listed on the EPBC Act as a Marine species and are afforded similar protection from actions listed above for the listed migratory species. As the White-bellied Sea-Eagle is not a listed ‘threatened species’ on the EPBC Act, there are no Action Statements or threat abatement plans explaining how protection and conservation of the species is to be carried out (DEWHA, 2009a). Overall, national protection and conservation of the White-bellied Sea-Eagle remain consistent with international conventions and Birdlife International’s status evaluation.
4.3.3. NSW

Within New South Wales, the White-bellied Sea-Eagle is not a listed species on the Threatened Species Conservation Act 1995 (TSC Act). However, it is considered to be a ‘rare’ species in several NSW urban areas, particularly the Sydney region, due to habitat destruction (DECCW, 2009b). Furthermore, several listed ‘Endangered Ecological Communities’ listed in Part 3, Schedule 1 of the TSC Act, provide suitable habitat (nesting and perching sites) for the White-Bellied Sea-Eagle. Endangered ecological communities with suitable habitat for the White-bellied Sea-Eagle listed on the TSC Act include: the Subtropical Coastal Floodplain Forest of the NSW North Coast Bioregion; the Freshwater Wetlands and Coastal Floodplains of the NSW North Coast Bioregion; The River-flat eucalypt forest on coastal floodplains of the NSW North Coast, the Sydney Basin and Southeast Corner Bioregions; and the Riverina Bioregion of NSW (DECCW, 2008a, b, and c). The key threatening processes identified by the NSW Scientific Committee for these endangered ecological communities consist of fragmentation due to extensive clearing and modified environments with most occurring in agricultural landscapes or in areas close to rural centres, continued threat of clearing and degradation for existing communities, flood mitigation and drainage works, landfill and earthworks associated with urban and industrial development, pollution, weed invasion, and anthropogenic climate change if future flooding regimes are effected (DECCW, 2008a, b, and c). The White-bellied Sea-Eagle faces similar threats with loss of habitat due to land development being the primary threatening process (DEWHA, 2009b). While state legislation pertaining to the White-bellied Sea-Eagle is not fully inclusive, reserving protection of the species within NSW for National legislation standards set within the EPBC Act, it does represent a more localised assessment of the species and its habitat with above mentioned Endangered Ecological Community listings.

Aboriginal involvement in these legislative processes in NSW has improved in the last decade. NSW legislation has recently worked to involve Aboriginal people in water, vegetation and catchment management (English & Baker, 2003). Most recently, the amendment to the Threatened Species Conservation Act 1995 (NSW), the Threatened Species Conservation Amendment Act 2002 (NSW), has provided steps towards involving Aboriginal people in threatened species management pertaining to recovery planning (English & Baker, 2003). From case studies which investigated the effectiveness of this amendment to the TSC Act, it is evident there is much work to be done in considering Aboriginal interests and
perspectives pertaining to threatened species management (English & Baker, 2003; Cavanagh, 2007). As the White-bellied Sea-Eagle is not yet listed on the TSC Act, there are no legislative processes in place to include Aboriginal peoples’ perspectives on its conservation and management, unless co-management agreements are in place and specific negotiations are made. For species which may be enormously significant to a particular Aboriginal Community, there is no framework to include Indigenous knowledge into conservation processes. This is particularly frustrating in situations where indications of threatening processes on the species exist.

4.3.4. Other States

Other states within Australia report a decreasing population trend for the White-bellied Sea-Eagle. The White-bellied Sea-Eagle is listed as ‘Threatened’ and ‘Vulnerable’ in the three south-east states. In Victoria, the species is listed as threatened under the Flora and Fauna Guarantee Act 1988 and as vulnerable under the Advisory List of Threatened Vertebrate Fauna in Victoria 2003 (Department of Sustainability and Environment, 2003; Spencer & Lynch, 2005; DEWHA, 2009b; Thurstans, 2009). While the Scientific Advisory Committee for the Minister declared the species as threatened, the Department of Sustainability and Environment (then the Department of Conservation and Natural Resources) declared the species as Rare and on Schedule 2 of the Act with a total population estimate of about 100 pairs (Department of Sustainability and Environment, 2003; Spencer & Lynch, 2005; DEWHA, 2009b; Thurstans, 2009). Little is known regarding the extent of the White-bellied Sea-Eagle population decline in Victoria; however, the surveys conducted in the Gippsland Lakes Region (at Phillip Island and in the Sunraysia district) revealed extreme decline with factors indicating a more wide-spread decline was likely. Primary causes for decline are attributable to the clearing of coastal forests for agriculture and urban expansion, which is consistent with other regions (DEWHA, 2009b). Loss of habitat in Victoria’s Gippsland Lakes Region, particularly nesting habitat, has caused breeding failure in the species. A study conducted in the area between 1978 and 1981 saw 22% breeding failure in observed active nests with a direct correlation between failures and nests located in exposed and scattered trees, primarily within agricultural tenures (DEWHA, 2009b).

In Tasmania, the White-bellied Sea-Eagle is listed as Vulnerable under the Threatened Species Protection Act 1995 by the Department of Primary Industries, Parks, Water and
Environment (DPIPWE) (Spencer & Lynch, 2005; Thurstans, 2009). It is also listed in the Regional Forest Agreement as a Priority Species Requiring Consideration (Regional Forest Agreement, 2002). The justifications for these listings in Tasmania are based on the criteria: the species has less than 1000 mature individuals within the Tasmanian population, the population is subject to a number of identified threatening processes, the species occurs in a single population within Tasmania due to its geographic isolation from the rest of Australia by the Bass Strait, and the species population within Tasmania may be declining (DPIPWE, 2006). The state has recorded declines in local populations with an estimate maximum of 220 pairs, though it is likely there are less than 200 total pairs remaining (DEWHA, 2009b; State of Tasmania, 2003). The causes for this decline are believed to be due largely to the isolation of the species (though they are not genetically isolated within Tasmania due to juvenile disbursement), habitat loss, and an increase in competition for nesting habitat with the Wedge-tailed Eagle, causing breeding failures in both species (DEWHA, 2009b; Shephard et al., 2005b). The management objectives in Tasmania for the species under the Threatened Tasmanian Eagles Recovery Plan 2006-2010) include identifying potential nesting habitat, conducting nest surveys, protecting known nest sites and protecting breeding birds from disturbance. Furthermore, the plans for identification and protection of breeding habitat extend to all land tenures. The plan indicates ‘owners or managers of private land containing nests will be referred to the Private Property Conservation Program, which provides information on Eagle conservation and encourages long-term nest protection through covenants’ (Regional Forest Agreement, 2002; DPIPWE, 2006).

The Threatened Tasmanian Eagles Recovery Plan (2006-2010) also acknowledges ‘Indigenous Knowledge’, describing the cultural significance of the species to the Tasmanian Aboriginal Communities along with other bird species. The plan states specifically, ‘Contemporary Aboriginal people maintain particular connections to bird species as there still is a form of association which extends to the Wedge-tailed Eagle and the White-bellied Sea-Eagle. The Aboriginal community has grave concerns about the continual and ever-growing threat to the habitat of these large and significant bird species’ (DPIPWE, 2006). While the recovery plan is ground-breaking by acknowledging the cultural and conservation interests of the Aboriginal Communities for the species within the specific recover plan itself, it fails to address how the interests of the Indigenous people of Tasmania have and will be sought.
In South Australia, the White-bellied Sea-Eagle has recently been listed as an Endangered Species, though this listing has not been updated on the DEWHA website for the species’ profile (Debus, 2009; DEWHA, 2009b). While the species is not listed as threatened within Queensland, there have been reported local declines around populated coastal areas (Olsen et al., 1993).

4.3.5. Research Conservation Perspectives

DEWHA acknowledges, ‘Declines in local populations of White-bellied Sea-Eagle are likely to be more widespread than the available records indicate’ (DEWHA, 2009b). Topical scientific literature pertaining to the White-bellied Sea-Eagle indicates existing threatening processes affecting the species. A study conducted by Thurstans (2009) in Tasmania found a 28 per cent loss of nests known from 20 years of recording. While this study indicated a significant loss of nest sites, the methods for counting are quite complicated and can pose a risk of disturbance to the nesting pair. Penny Olsen (1995) notes the difficulty of counting raptors due to the complexity of locating nests in their typical habitat of heavy woodland. It is also difficult to measure the accuracy of this technique as it is complicated counting juveniles and young adults who have not joined the permanent territorial breeding segment of the population (Olsen, 1995). This has generated interest in an even further invasive technique of banding chicks to determine whether they returned to the territory after fledging, dispersed to other regions, or did not survive adolescence (Spencer, pers.comm, 2010). Regardless of research techniques or findings, broader trends of development and increasing populations in the south eastern states are apparent and worrisome to most raptor experts. Debus (2009) predicts it will not be long before the species is listed as Vulnerable within New South Wales.

4.3.6. Agency Staff Perspectives

Another emergent theme in the study was staff debates pertaining to the status of the White-bellied Sea-Eagle both in Jervis Bay and beyond. Much of this talk was generated from topical debates in the scientific literature; however, Local Jervis Bay management bodies, overall, seem to be operating under the assumption that the White-bellied Sea-Eagle is doing
well in the region. A total of five non-Indigenous participants confirmed this belief during interviews, stating the Sea-Eagle was of least concern in the area. Two other participants concurred with these views in personal communications. According to several park staff interviewed, the Eagles can be observed at least once a day if one is out in the bay for any extended period of time. However, others have expressed concerns about the veracity of that assumption. Ben noted:

*I know its profile has been raised in the various literatures and that it may have threatening processes operating on it that might reduce the populations, particularly in Victoria, Queensland, and South Australia, so from that point of view I suppose it's an early warning signal to us that we may need to pay more attention to it to find out what exactly we have in terms of Sea-Eagle populations on the South Coast...if there are trouble signs in other states that populations are declining it may be useful to see what’s happening with our populations and broader even than Jervis Bay.*

Ben, non-Indigenous NPWS employee

Jon explains his fears of not knowing enough about the local populations stating:

*They’re just something we see all the time and think they are okay…but it could be the same birds.*

Jon, non-Indigenous NPWS employee

### 4.4. Conceptualisations of Space

This thesis acknowledges and incorporates two living and working spatial frameworks within the same geographic location known as the Jervis Bay region. The first and most widely accepted spatial definition for the area consists of the bureaucratic and legislative definition. This definition is clearly defined and well established with the help of a Western tenure system, where every part of the land is portioned off, divided, bought, sold and owned by either private owners, corporations, businesses, or any level of government. This concept of
land as tenure is well constructed by various ‘official’ maps produced by the government and tourism bodies (Byrne & Nugent, 2004). These maps and images (some of which are displayed below) are extensively circulated and subsequently permeate individuals’ minds and cultivate a lens through which to view the land. This section examines non-Indigenous conservation theories pertaining to the White-bellied Sea-Eagle. Given the varied tenure of the study area, this section examines each of the major tenure holders. The aims for exploring each of the stake-holders are twofold: to understand how these non-Indigenous conceptualizations of space apply expressions of law and conservation within the given tenure and to examine how these conceptualizations of space affect conservation management generally, and the White-bellied Sea-Eagle specifically.

4.4.1. Local Government Area: Shoalhaven

The local government area of Shoalhaven is run by the Shoalhaven City Council and expands beyond the study area of Jervis Bay (See Map 4.1. below).

Map 4.1. Shoalhaven LGA Boundary and Study Area

Map of the NSW LGA Shoalhaven City Council (SCC) Outline shows Shoalhaven Boundary and the red circle highlights the project study area. Adapted from the Shoalhaven City Council Online GIS Mapping system, Base Map, 2010. The red area highlighted indicates the study area.
According to two non-Indigenous participants, Richard and Ken, who are also Shoalhaven City Council employees, two departments within the City Council play a role in the conservation and management of the White-bellied Sea-Eagle on a reactive basis: the Development Services and Natural Resource Management. Aplin (1998) argues local councils’ roles in Australian environmental protection are most significantly exercised in their responsibilities of planning. Development Services is responsible for upholding aspects of the *Environmental Planning and Assessment Act 1979* (NSW) when receiving Development Applications. While there is limited public information from the Shoalhaven City Council, Hornsby Shire Council has developed a detailed response relevant to this issue. According to section 79C of the *Environmental Planning and Assessment Act 1979* (NSW), city councils are obliged by law to ‘give detailed consideration to the impact a development may have on the social, economic, natural and built environments’ (Hornsby Shire Council, 2006:3). To determine the likely impact of a development on native vegetation or any ‘significant’ impact on threatened species, applications contain a Flora and Fauna Assessment, which is completed by a qualified consultant (Hornsby Shire Council, 2006:3). However, according to Hornsby Shire Council (2006), Flora and Fauna Assessments are only required to be completed if the property encompasses the following characteristics:

1.) Contains native vegetation, or

2.) Contains remnant native trees, or

3.) is adjacent to native vegetation (e.g. National Parks, bushland reserves) or

4.) contains sensitive environmental areas that may contain fauna habitats (although they may not include vegetation) such as riparian areas and wetlands

5.) and the proposal will directly or indirectly impact on this area, vegetation or natural features of the site

If the development proposal contains any of the above characteristics, under section 5a of the *Environmental Planning and Assessment Act 1979*, impacts on relevant species listed under the *Threatened Species Conservation Act 1995* (NSW) must also be considered (Hornsby Shire Council, 2006). According to Ken, protected species under the EPBC Act, such as the
White-bellied Sea-Eagle, and their habitats are also assessed during Flora and Fauna Assessments in the Shoalhaven, though he noted:

*I have never seen an application that would affect the White-bellied Sea-Eagle or their nesting sites, though our responsibility for the species isn’t direct.*

Ken, non-Indigenous Shoalhaven City Council employee

However, it is evident development has long been a threatening process on nesting habitat, prior to the EPBC Act. According to one local Jervis Bay resident in Vincentia, at least one nesting site of the White-bellied Sea-Eagle is found on private property in close proximity to the house and within a developed urban area. Other participants noted fears pertaining to gaps within City Council development processes pertaining to flora and fauna assessments. Jack noted:

...if we don’t have the formal and legal recognition of status as threatened then the Sea-Eagle receives the same level of consideration for conservation as something like, for example, a silver eye of which there are millions. We know that with the Sea-Eagles there is at best a few thousand in Australia. So you can be dismissive of impacts of planning for the silver eye...but if you disrupt one breeding pair of Sea-Eagles, potentially, it is .1 of a % out of 1/1000. So how many times do you do that? If you do that 10 times that 1% of the population you’re effecting. If you do that 100 times that’s 10% of the population you’re affecting. That’s potentially catastrophic for the species...planning and management for Sea-Eagles is long overdue. We aren’t going to be able to bull-doze the houses and replant the habitat for the sea-Eagles. So we are going to have to learn to manage the bit we’ve got left.

Jack, non-Indigenous conservation biologist
The other section of the Shoalhaven City Council, which reactively manages the White-bellied Sea-Eagle, is the Natural Resource Management section. This section is responsible for wildlife and foreshore management. Richard explained the Council tries not to actively manage the White-bellied Sea-Eagle, responding on a reactive basis only. According to Richard, the Shoalhaven City Council works around coastal reserves as a part of foreshore management, a majority of which is perching habitat for the White-bellied Sea-Eagle. With regards to wildlife, National Parks provide information for data compilation. However, the Department’s role in managing the White-bellied Sea-Eagle and its habitat aren’t clear. Richard notes:

*There are agreed management strategies with other stake holders; however, shorebirds aren’t managed as they should be. We are always willing but we depend on others to tell us what to do.*

Richard, non-Indigenous Shoalhaven Council Employee

However, participants from other Jervis Bay management tenures noted the Shoalhaven Council as a having a shared responsibility in management of White-bellied Sea-Eagles in the Jervis Bay region. Ben noted:

*The Shoalhaven City Council doesn’t have a lot of land but are a major player as well. They own quite a few foreshore reserves so they are an important player... particularly for perching sites for the White-bellied Sea-Eagle.*

Ben, non-Indigenous NPWS employee

In sum, with various tenures lying within the Shoalhaven City Council boundary and the Council presumably taking responsibility in managing conservations interests pertaining to the White-bellied Sea-Eagle, the areas and roles for which the local LGA are responsible are
not clear to most participants. Overall, Shoalhaven Council staff members highlight a minimal role in managing conservation interests pertaining to the White-bellied Sea-Eagle. Some participants noted a concern for this, due to the major threatening process of development on the species.

4.4.2. Protected Area Management: Jervis Bay

A substantial portion of the land in Jervis Bay consists of Protected Area tenure. This study examines three major stake-holders within Protected Area Management in Jervis Bay; NSW Jervis Bay National Park (JBNP), NSW Jervis Bay Marine Park (JBMP) and Booderee National Park (BNP). JBNP and BNP manage conservation interests in land tenure, and both BNP and JBMP manage conservation interests in sea tenure.

4.4.2.1. NSW Jervis Bay National Park

National Parks in NSW are established under the National Parks and Wildlife Act 1974 (DECCW, 2010d). Jervis Bay National Park (NSW) was established in 1995 and it covers an area of about 4,854 hectares (DECCW, 2010b), with tenure in the park not being contiguous (See Map 4.2).
The park upholds conservation legislation from both the Commonwealth EPBC Act and the NSW TSC Act. While the White-bellied Sea-Eagle is protected in the park under the EPBC Act, there are no specific conservation initiatives made towards protecting the species. The White-bellied Sea-Eagle has been minimally incorporated into bird monitoring projects. The Jervis Bay Cumulative Impact Monitoring Program was operational from the years 1998-2003, and incorporated a bird monitoring project (Coyte, 2004). The project incorporated the White-bellied Sea-Eagle in its observations, in addition to 123 other bird species. However, due to funding restrictions, Ben notes:
The White-bellied Sea-Eagle is not a species we really focus or spend money on… we have a shorebird monitoring program where we monitor shorelines of Jervis Bay itself and Lake Wollumboola…this indirectly helps to protect the White-bellied Sea-Eagle habitats and to record observations of the White-bellied Sea-Eagle.

Ben, non-Indigenous NPWS employee

4.4.2.2. NSW Jervis Bay Marine Park

The Jervis Bay Marine Park (JBMP) was established in 1998 by the NSW government under the Marine Parks Act 1997 (NSW) and management authority of the park is vested with the NSW Marine Parks Authority (Clements, 2001; Marine Parks Authority, 2010). The marine park consists of about 22,000 hectares in area and shares an invisible boundary with the Commonwealth Booderee National Park (See Map 4.3 below) (Clements, 2001). There were a total of three participants for this study representing the JBMP; however, only one participant was actually interviewed. Non-interviewed participants, who met with me during the initial stages of the research, shared their knowledge with me and provided a solid framework for this study on which other participants were identified and the research topic refined. As a NSW government agency, the JBMP refers to both the TSC Act and the EPBC Act; however, as the landward boundary begins at mean high watermark, the fauna management responsibilities of the marine park fall primarily with aquatic species (Clements, 2001). Susan explains:

...the Marine Park’s legislation only extends as far as the high water mark and so it is difficult to protect nesting and roosting habitat directly.

Susan, non-Indigenous DECCW employee, previous JBMP employee
While the White-bellied Sea-Eagle is a terrestrial species, its interaction with the marine environment is direct as the sea is a major source of food for the species. As a result, previous research plans within the JBMP have paid particular attention to the species. The 2007-2008 research work plan under previous research director, Dr. Tim Lynch, focused on maintaining a relative index of the species abundance and distribution (Lynch, 2007). The research project resulted in a published work which was significant in displaying the temporal and spatial distribution of White-bellied Sea-Eagle populations in the Jervis Bay region: results which showed a concentration of the species on undeveloped sections of shoreline (Spencer & Lynch, 2005). A continuation of this project was sought by Dr. Lynch.
to research Sea-Eagle breeding ecology within Booderee National Park. Susan explained the project:

...had planned to band chicks so that we could see if they returned to the bay after fledging. This was going to be a collaborative project with an experienced bander, Victor Hurley from Victoria Parks and Wildlife...

Susan, non-Indigenous DECCW employee, previous JBMP employee

However, the project was met with disapproval by Booderee National Park, due to particular concerns from the Wreck Bay Aboriginal Community. Susan described:

I can understand why they rejected the application as it involved the banding of young birds and would have been quite invasive.

Susan, non-Indigenous DECCW employee, previous JBMP employee

Recently the JBMP has experienced a changeover in staff, particularly in the research section and as a result, the JBMP research priorities have changed. The White-bellied Sea-Eagle is no longer of research interest to the marine park, particularly due to budget restrictions (Knott, pers. comm, 2010).

4.4.2.3. Booderee National Park

Prior to the establishment of Booderee National Park, the area was initially established as a nature reserve and then was later established as Jervis Bay National Park. The Park lies within the Jervis Bay Territory and takes up about two thirds of the area within the territory (The Parliament of the Commonwealth of Australia, 1991). The remaining one third of the
territory consists of Naval (Department of Defence) land, private leases, unoccupied Commonwealth land and Aboriginal land occupied by the Wreck Bay Aboriginal Community (Commonwealth of Australia, 1991). As Jervis Bay National Park, the area was managed by the Australian National Parks and Wildlife Service agency. The agency also provided environmental management to the remaining parts of the Jervis Bay Territory (MoU in Relation to the Co-operative Management of the Jervis Bay Area, n.d.).

The Jervis Bay Territory was annexed from the New South Wales government to form a part of the Australian Capital Territory (ACT) under the Jervis Bay Territory Acceptance Act 1915 which provided the Federal capital with a sea-port (Commonwealth of Australia, 1991). Provisions under the Seat of Government Acceptance Act 1909 and the Seat of Government (Administration) Act 1910 provided for the continuance of pre-existing laws and interests in land as well as the application of Commonwealth legislation (Commonwealth of Australia, 1991). However, due to the Jervis Bay Territory Acceptance Act 1915, residents of the Jervis Bay territory do not have the right to vote in either territorial or municipal elections, being eligible to vote only for ACT Senators and for the ACT electorate of Fraser (Commonwealth of Australia, 1991). This created disparity for residents who were previously able to vote as a part of New South Wales. Municipal services, rather than being provided by the Shoalhaven LGA, are a shared responsibility of the Commonwealth DEWHA (previously the Department of the Arts, Sport, the Environment, Tourism and Territories) and the Department of Defence (Commonwealth of Australia, 1991).

The Jervis Bay Territory Acceptance Act 1915 ‘provided that no Crown lands in the Territory were to be sold or disposed of for any estate of freehold except in performance of some contract entered into before the commencement of the Act’ (Commonwealth of Australia, 1991: 115). This Act disabled residents from purchasing land or leasing it for periods in excess of twenty-five years, and as a result was a primary concern during a legislative review conducted in 1990 for residents. Furthermore, the Territory (with the exemption of the land owned and occupied by the Wreck Bay Aboriginal Community) was listed on the Interim Register of the National Estate in 1988, making it a priority of the Heritage Commission. This listing established the Heritage Commission as the authority on approvals of ‘any works proposed by or requiring the consent of the Commonwealth which may adversely affect the heritage value of the area’ (Commonwealth of Australia, 1991: 119).
According to Farrier & Adams (in press), the *Aboriginal Land Grant (Jervis Bay Territory) Act 1986* was amended to allow the [Commonwealth] Minister to declare land within what had by then become Jervis Bay National Park to be Aboriginal Land under the ALGA [Aboriginal Land Grant Act]. Booderee National Park was established in 1995 (Farrier & Adams, in press). Subsequently, the Wreck Bay Aboriginal Community owns the entire BNP and under the ALGA, leases the park back to the Director of National Parks (Farrier & Adams, in press). Its tenure consists of the entire southern Bherwerre Peninsula of Jervis Bay as well as a small island off the coast, Bowen Island (See Map 4.4 below).

**Map 4.4 Booderee National Park Boundary**

![Map of Booderee National Park](image)

The Booderee National Park Board is the decision making authority in the park and is comprised of: a majority number of Wreck Bay Aboriginal Community owners (seven nominated traditional owners), the Director of National Parks, a nominal scientific representative, a nominal tourism representative, a Department of Defence representative,
and a Department of Infrastructure, Transport, Regional Development and Local Government (National Parks, 2007). The White-bellied Sea-Eagle is openly acknowledged to be the guardian animal of the Wreck Bay Aboriginal Community and as a result is of considerable interest to the community to protect. However, the application of the community’s interests pertaining to the White-bellied Sea-Eagle was unclear. Many participants noted direct management of the White-bellied Sea-Eagle was little to none. Nick notes:

*They (WBSE) weren’t managed at all when I was there. Conservation initiatives? None basically because they weren’t necessary…they weren’t under any threats that we could perceive from either natural or anthropogenic sort of needs or causes so there wasn’t any point of doing anything.*

Nick, non-Indigenous NPWS employee, previous BNP employee

Edward reiterated:

*The protected listing of the species on the EPBC Act has no significant influence on the conservation priorities of Booderee National Park, because of the large number of species on the list, the large and healthy population in Booderee, and absence of recovery plan. There are no known threats to the species.*

Edward, non-Indigenous BNP employee

According to Edward, a database is kept with White-bellied Sea-Eagle sighted locations; however, this is not specifically an inventory of nesting sites and it is outdated. A report prepared by Stephen Debus in 1995, for the Australian Nature Conservation Agency (previous managers of the park) noted only one known nest site in the area (location will not
be disclosed) and suggested a plan of action to ensure protection of the species and its nesting habitat (Debus, 1995). Debus (1995: 6) suggested

...active nests should be buffered by 100 m disturbance-free radii centred on the nests...within these buffer zones, no further developments should take place. ...if a nest is situated on a cliff, then the 100 m radius should be projected on the cliff top as well as the face and any new developments placed outside this zone. The relevant section of cliff should be closed to rock-climbing activities during the Sea-Eagle’s breading season.

A follow-up report produced by Debus in 1996 (from field work conducted in 1994) located five adult White-bellied Sea-Eagle pairs in the park and located four active nests for these pairs, in addition to four floating juveniles. Debus (1996:11) concluded, ‘The numbers of adult pairs and young raised in 1994 indicate a high density and healthy breeding population.’

Debus (1996) again recommended buffers around active nest sites (particularly for one site which was relatively exposed by a segment of road), as well as regular monitoring of known nest sites in a discreet and appropriate manner.

4.4.3. Department of Defence

Due to the diverse range of tenure groups interviewed for this study and the limited number of staff employed by the Department of Defence Environment Team (4 rangers), only one staff member was interviewed from this agency. The Department of Defence tenure consists of almost the entire northern part of the bay on Beecroft Peninsula. The Department of Defence also owns tenure south of Nowra at HMAS Albatross and a section of tenure on HMAS Creswell within the Jervis Bay Territory, BNP (See Map 4.5 below). The HMAS Creswell Naval College has been operational from 1915-1930 and 1957-Present, with the inoperative period attributed to the College’s relocation to Flinders Naval Depot in Victoria due to economic stresses.
Map 4.5 Department of Defence Location and Boundaries

According to Hayley, a non-Indigenous participant and employee of the Department of Defence’s Environment Team, the navy’s use of Beecroft Peninsula as a weapons training area and weapons firing range goes back to the late 1800s; however, the Beecroft Bombardment Range became ‘official’ in 1944 (We come from the land, 1988; Godden Mackay Logan, 2009).

Both the establishment of this area and its preceded ‘unofficial landing’ were particularly critiqued by Aboriginal Communities due to its richness of cultural heritage and the regular bombing of the land (We Come from the Land, 1988). Beecroft Peninsula has over 200 registered sites of significance to the Jerrinja Aboriginal Community (Mayer, 1996).
contemporary critiques were raised in the 1980s by the Wreck Bay and Jerrinja Aboriginal Communities, as well as environmental groups and members of the general public, due to a proposed armaments depot by the Department of Defence, and as a result the plan was not approved (Mayer, 1996).

Previously, the Australian National Parks and Wildlife Service Commonwealth agency was contracted to manage the Commonwealth owned land on Beecroft Peninsula on behalf of the Department of Defence (MoU In Relation to the Co-Operative Management of the Jervis Bay Area, n.d.). Presently, the Department of Defence employs its own Environment Team (DDET) which works to sustainably manage Beecroft Peninsula using the land as a weapons range while simultaneously working to protect its environmental and cultural values. As a part of the Commonwealth agency, DDET at Beecroft Peninsula is subject to Commonwealth legislation to a certain extent. The Defence Force Discipline Act provides that all Department of Defence personnel, regardless of their location in either NSW or ACT, are not subject to the laws in place (Commonwealth of Australia, 1991). Hayley explains:

_Defence is subject to…Commonwealth legislation. Defence also has a policy that it will comply with the intent of State legislation to the extent that it doesn’t conflict with Commonwealth legislation…what that means is if something requires a permit under state legislation we won’t actually get one but we’ll find out what the conditions are…and we will abide by whatever they would be. So we complied with I guess the intent and the policy of the state legislation without actually meeting it._

Hayley, non-Indigenous DDET employee

With regards to the White-bellied Sea-Eagle, Hayley explains the application of law to the tenure area and some indirect conservation initiatives:

_We do have a very strong environmental management and conservation program driven at all of the EPBC protected species…and of course the Sea-Eagles are considered a migratory species under the act. We also have an internal monitoring program where we do Sea-bird monitoring and that includes the Sea-Eagles._
4.4.4. Integrated Management

Several non-Indigenous participants expressed concerns regarding certain protected areas in the region becoming ‘islands’, meaning ecosystems cannot evolve naturally to allow plants and animals to migrate along environmental gradients. This fear is primarily due to modern tenure systems, the multiplicity of land use objectives, and the disparity of resources between Commonwealth, State and Locally managed conservation areas. Many agency staff employees view this issue as being best overcome by collaborative efforts between various stakeholders in the study area. As a result, there have been attempts for cooperative management in the Jervis Bay region to provide a holistic approach to managing the values of the area. A Memorandum of Understanding (MoU) between the Commonwealth government agency (Australian National Parks and Wildlife Service) and NSW state government agency (National Parks and Wildlife Service of NSW), acknowledges the entire Jervis Bay region (including the waters and bed of Jervis Bay, Lake Wollumboola, streams and naturally vegetated land in the catchments of Jervis bay and Lake Wollumboola, Beecroft Peninsula, Bherwerre Peninsula and adjacent marine foreshore areas) to be an area of national significance and recognises the need for integrated management between the two parties. Furthermore, the MoU establishes a joint commitment by the two Governments to provide efficient protection of the values of the entire Jervis Bay region and coordinate effective management for both Commonwealth owned land and State controlled land (MoU In Relation to the Co-Operative Management of the Jervis Bay Area, n.d.). The agencies agree to cooperate in the protection of the landscape, cultural heritage, native plant and animal populations, and water quality. Additionally, the agencies agree to provide recreational and educational opportunities to the public for the enjoyment and understanding of the Jervis Bay environment and heritage (MoU In Relation to the Co-Operative Management of the Jervis Bay Area, n.d.). The MoU between the two agencies aims to accomplish the above mentioned components specifically through cooperation for:

1.) Consultation on relevant policy formulation, operations, formulations of management plans and amendments;

2.) Development joint or compatible research programs and data bases for natural and cultural resources, fire history, and visitor use. Exchange information, ideas and expertise relevant to the protection of the values of Jervis Bay;

3.) Protection of cultural heritage values;
4.) Development of objectives and programs for conservation of natural systems and of rare, threatened or other significant species and communities;

5.) Development of public information, involvement, liaison and education programs;

6.) Establishment of a liaison committee consisting of senior officers from both agencies as well as the establishment of working groups of appropriate officers for the consideration of particular issues (MoU In Relation to the Co-Operative Management of the Jervis Bay Area, n.d.).

A more wide-spread integrated management approach was implemented in 2000 and worked to incorporate all stakeholders in the Jervis Bay region, including all agencies from Commonwealth, State and Local governments (Mackay, 2001). However, the effectiveness of this management approach is less certain. Ben explains:

_The vision was to get everyone together who had a role in managing Jervis Bay: the Navy [Department of Defence], BNP, NSW JBMP, NSW JBNP, Shoalhaven LGA, State Forests, JB State Park reserves, the Aboriginal Communities, Department of Lands…everyone. This was to get everyone together to start speaking the same language and to identify actions we can all take to ensure ecological sustainable management of this wonderful natural area. A lot of money was thrown at it, including a big conference with people coordinating different parts of it and even the production of a book highlighting the conference series._

Ben, non-Indigenous NPWS employee

Jon explained further:

_It was a good idea. We [stakeholders] are different by name and by the status of the land but it’s all the same country._

Jon, non-Indigenous NPWS employee
Several participants argued the approach was not successful in the region, particularly due to varying legislation across the divisions of tenure, which drive Western environmental management approaches.

Realistically, in the end it just fizzled out. Fell over in the end because we are all subject to our own legislations and that’s what drives us all...so we all went back to our own silos but there was a greater awareness of who the major players were. We still have collaborative programs around pest control. Really any collaboration is purely on the basis of knowing people. There’s no formal collaborative arrangements in place they are just based on who you know and who you’ve developed a working relationship with.

Ben, non-Indigenous NPWS employee

Other participants acknowledged some successful outcomes and cooperative arrangements, though these were generally driven by the sharing of adjacent boundaries or by specific or widespread conservation issues (e.g. pest management). Toby explained:

We had good liaison with NSW JBNP because we had adjacent boundaries. We wanted to ensure we maintained similar regulations. Though this did not always happen, I think the planning for corridors was done in a sensible way...one stopping and one starting. We also had a shared boundary with the JBMP in the bay. We tried to make regulations as close as possible due to the ‘invisible boundary’. We were in a fortunate position as Commonwealth land. We didn’t have to interact with the local governments

Toby, non-Indigenous previous BNP Board Member
Emily also noted some successful cooperative relationships from the integrated management program, particularly with stakeholders who shared boundaries with her park. She explains:

_text_It’s kind of happened a little bit but it hasn’t happened at a really high level._

_Because JBNP abuts to Booderee, obviously we have to work cooperatively in the pest, research and fire management._

Emily, non-Indigenous NPWS employee

Jon, in his experience with cooperative programs, demonstrated cooperative arrangements are probably most widespread and efficient when they are dealing with large-scale widespread issues such as pest control. Jon states:

_text_We have regular liaison with the Marine Park guys and we know all the guys out at BNP. We coordinate with Defence a little bit but primarily through the cooperative fox baiting programs everyone does. There’s a lot of cooperative fox baiting programs._

Jon, non-Indigenous NPWS employee

Similarly, Ben explains:

_text_We have good working relations with BNP and Defence, particularly with the control of pests. Though cooperation with Defence is within the confines of Defence Environment Team’s requirements to access their mode of operation._

Ben, non-Indigenous NPWS employee
Hayley also notes:

*We [DDET] sit on joint committees with BNP and JBNP with the fox threat abatement committees as well as recovery planning committees and working groups for the eastern bristlebird and the ground parrots.*

None of the stakeholders in the area have an independent management plan for the White-bellied Sea-Eagle as it is not listed as a threatened species on any legislation for which the various stakeholders are subject to. However, there are some broader cooperative projects in place which broadly examine and monitor the species (in addition to other species). Jon explains a cooperative arrangement with BNP for bird projects, as well as some independent talks he does to cooperate with stakeholders in the area. He states:

*We've [NPWS] worked out there [BNP] doing shorebird things and doing various other bird things. I also go up and do regular talks about the birds.*

Jon, non-Indigenous NPWS employee

As a whole, participants demonstrate that while the concept of integrated management theoretically presents some positive changes for the area including a more holistic approach to managing the Jervis Bay area, the application of the concept is limited due to the driving forces behind Western environmental management systems: division of tenure, the corresponding legislation, and the disparity of resource distribution between those tenures. The concept of integrated management as an approach to involve all stakeholders in the Jervis Bay region appears to be most effective when dealing with extensive environmental issues for which all parties share a common interest. Overall, cooperation arrangements are more common when they are negotiated between fewer parties, are of a smaller geographical scale, or the environmental issues have a narrower focus. Despite the difficulties of managing the landscape holistically and cooperatively monitoring the White-bellied Sea-
Eagle (a species which is not a management priority for any of the stakeholders in the study area), in theory both are demonstrably favoured by a majority of the participants.

4.5. Personal Connections and Cultural Significance

Despite the common perception of Western science being an entirely rational thought, one respected raptor specialist acknowledges an emotive component to the selecting a research topic/species. Penny Olsen, an Australian raptor expert explains:

Raptors are difficult to study in the field and, given the choice, few interested in basic ecology would choose them as subjects for study. They generally occur and breed at low density, often nest in relatively inaccessible and isolated places (dead trees, towering cliffs!), they may be resistant to trapping and vulnerable to disturbance by the research or other humans, and much of their life is difficult to observe...So, why do apparently sane people become avid raptor researchers? The emotional answer is that they are challenging, exciting and simply stunning creatures. The scientific response is that they have many special features, such as the division of labour between the sexes while breeding, size dimorphism, fidelity to traditional nest sites, long life, and sometimes unusual reproductive and social systems...(Olsen, 1995:15).

While making mostly scientific observations with regards to the species, an unexpected and interesting result for this project was that some non-Indigenous land managers and biologists in the study area had formed distinctly non-scientific and personal connections with the White-bellied Sea-Eagle, which perhaps has generated and influenced much of their Western interest in the species.

Ben noted the cultural significance of the species to the Jervis Bay landscape, stating:

*The Sea-Eagle is a notable bird...animal in our landscape.*

Ben, non-Indigenous NPWS employee

Hayley also explained a life-long interaction with the White-bellied Sea-Eagle:

*I’ve been coming here since 1962…and we lived on the other side of the bay right on a cliff edge…and the Sea-Eagles are a predominant feature here…So I’ve been*
seeing them as a small child and they’ve always been an important part of the environment here for me.

Hayley, non-Indigenous DDET employee

Jack described a long standing personal connection to the White-bellied Sea-Eagle, explaining:

I have the Sea-Eagle as my personal ‘totem’...there is something about being on the coast. I live on the coast and I go down to the beach almost every morning. I swim in the ocean all year round. There is something about that which gives me an affinity to the Sea-Eagle. I love to see them and I always smile when I see a Sea-Eagle, and of course I am a Sea-Eagle.

Jack, non-Indigenous conservation biologist

This connection is displayed further in art and symbolism. The same participant carries a Sea-Eagle broach which his wife had made for him upon the completion of his PhD. The participant also displayed the significance of this species to him through poem which, to him, encapsulates his feeling about ‘being’ a Sea-Eagle:

Serene in my place
Floating on a coastal breeze
Soaring above the earth’s turmoil
Detached from the angst
A calm strength of mind and wing
At peace, for now

Jack, non-Indigenous conservation biologist

A previous land manager at BNP and an avid and talented photographer for the Jervis Bay region also discussed a personal connection he formed, which began as an interest in photographing the species and progressed to a relationship with a particular pair of White-bellied Sea-Eagles. Nick explained:
My experience with them [White-bellied Sea-Eagles] was filming them down at Jervis Bay. I did that for maybe 4-5 years. I tried filming them at Beecroft Peninsula to start with but the orientation of the light was not right so Hyams beach turned out to be the place to do that because afternoon sea-breeze was coming from the right direction so they’d be landing into the wind with the sun on them. I used to go down there every afternoon when the weather was okay and I put down baits just small bits of baits and mostly during breeding season if I could so the excess food was going into the young. It got to the point where they saw me walking down the beach with my tripod and camera and they’d just start circling and waiting. I just built up a bit of an attachment to them.

Nick, non-Indigenous NPWS employee

From this personal connection, Nick also ascertained specific or ‘local’ knowledge about the White-bellied Sea-Eagles he filmed:

I just got to see where they were going to and coming from in a number of locations. Wherever I saw them I was interested in watching what they were doing…I discovered a couple of nest sites…which I never photographed because of the potential disturbance.

Nick, non-Indigenous NPWS employee

The findings for this section were surprising. Some participants, who came from Western scientific backgrounds, had developed non-scientific and personal attachments to the White-bellied Sea-Eagle.

4.6. Conclusion

This chapter has presented and interpreted non-Indigenous ways of knowing, conceptualisations of space and the laws which govern how that space is managed, and the personal connections formed: all pertaining to the White-bellied Sea-Eagle. The Western managers’ discourse indicated reliance upon Western science epistemologies which
perpetuate a fear of the unknown and a hierarchy of knowledge; however, discourse demonstrated a separate agency staff ‘way of knowing’. Several had encounters with the White-bellied Sea-Eagle, demonstrating an incorporation of that knowledge, which was gained from those experiences, into the field. Embodied Western knowledge constructs perpetuate the belief of a nature-culture binary, which is evident in the Western nature-knowledge discourse in this chapter. The complexities embedded within the discourse, demonstrate that the White-bellied Sea-Eagle has the capacity to influence the ways in which it is viewed; as iconic, magnificent, feared, hated etc. This reveals a falsity of the modern Science subject-object dualism.

Participants’ discourse encapsulating Western conceptualisations of nature are primarily influenced by law and tenure, which appears to be constricting. These components shape policy and action generally due to funding of economic resources and being bound by law. However, ‘agency staff” demonstrated their own local interpretations of these components. Firstly, agency staff revealed a fear of inaction and of unknown threatening processes on the White-bellied Sea-Eagle, particularly those participants who had experience in the field with the species. Secondly, agency staff displayed a fear of protected areas becoming ‘islands’. This highlighted a keenness on the theory of integrated management: managing the landscape holistically.

Personal connections shared by some agency staff members and scientists, shed light on a number of interesting points which draw from Lorimer (2007). While some non- Indigenous participants shed little light on their personal interest in the White-bellied Sea-Eagle, others spoke of these interests generally. Hayley’s childhood connection to the White-bellied Sea-Eagle suggests an epiphany form of nonhuman corporeal charisma. Other participants were incredibly open to sharing their interests. Jack’s perspective of ‘being’ a Sea-Eagle suggest both an aesthetic and corporeal nonhuman charisma. Nick’s attachments to the species suggest ecological charisma, firstly in the nonhuman’s ability to distinguish itself from others for Nick to desire to capture it in photo, and secondly through shared life patterns and frequencies in Nick’s continued desire to photograph and see the species. Overall, these experiences shared contend that the scientist or conservationist manifests forms of nonhuman charisma with a nonhuman agent (the White-bellied Sea-Eagle) and that the Western science framework for which they somewhat unconsciously perpetuate, is not entirely objective in the selection of the object, as raptor expert Penny Olsen explains, and is not the study of an object but rather an agent who can emotively shape its researcher.
ABORIGINAL WAYS

5.1. Introduction

This chapter explores Aboriginal ways of understanding and relating to the White-bellied Sea-Eagle in the Jervis Bay region. In Australia, the White-bellied Sea-Eagle is culturally significant to clan identifications within several Aboriginal Communities. One documented case study in particular, Deborah Rose’s (2002) ‘Country of the Heart’, provides a detailed account of the significance of the species to the Aboriginal Community in the Wagait region of the Northern Territory. Subsequently, this chapter will draw partially on Rose’s work with the MakMak people and their relationship to Country and the White-bellied Sea-Eagle. However, it is acknowledged that the various Aboriginal cultures and thus knowledge systems are individual and unique. As a result, this chapter will be primarily constructed from the field work conducted in the Jervis Bay region.

It is essential to note again the complexities mentioned in Section 3.10 of this cross-cultural research project. There is significant conflict in the research due to the limited time and nature of this Master of Science research project and the contrasting time which should be taken to establish solid relationships built on trust with the Aboriginal Communities involved, which generally extends over multiple years. Consequently, this project was only able to obtain participation from three Aboriginal people from both the Wreck Bay and Jerrinja...
Aboriginal Communities. As no community is homogenous, these views are representations of the individual. Furthermore, this thesis acknowledges the shared and overlapping knowledges between Aboriginal and non-Indigenous people. For example, while Indigenous knowledges maintain particular characteristics and are owned by their Indigenous people, non-Indigenous people have observed it, judged it, and considered it. Subsequently, this Chapter includes both Aboriginal and non-Indigenous experiences with ‘Aboriginal ways’. In the study area, the significance of this species, like Aboriginal culture generally, is understood holistically. While the White-bellied Sea-Eagle individually is significant, it forms just a small part of the cultural and ecological web that the Communities themselves are a part of. Similarly, the ways in which the Communities relate to the White-bellied Sea-Eagle are blurred, with knowledge and cultural significance being closely related. Consequently, the cultural ties to the Sea-Eagle and knowledge of the Sea-Eagle are one and the same. Both are directly influenced by a third attribute, Aboriginal conceptualisations of space.

While the topics of knowledge, space and cultural significance are understood holistically in Aboriginal culture, Chapter 5 presents these components separately. Section 5.2. explores characteristics of Aboriginal knowledge within the Jervis Bay region, examining both general characteristics (including its continued contestation) as well as knowledge specifically related to the White-bellied Sea-Eagle. Section 5.3. considers Aboriginal conceptualisations of space expanding from the traditional, to the contemporary, as well as other living frameworks. Section 5.4. explores the Cultural Significance of the White-bellied Sea-Eagle to Aboriginal people nationally and in Jervis Bay specifically, as well as the various ways in which this is expressed.

5.2. Ways of ‘Knowing’ the White-bellied Sea-Eagle

5.2.1. Contested Knowledges

Components of Western knowledge have developed their own observations and perspectives of Aboriginal Australia. Indigenous peoples’ cultures and knowledge systems have surfaced in some Western disciplines prior to the 1980s (e.g. Anthropology, Sociology and
Geography), being observed and scrutinized by non-Indigenous scholars within a Western knowledge framework (Nakata, 2004a). European History, which is well documented through Western knowledge productions, recorded observations of Aboriginal Australians and a mostly assumed link to the White-bellied Sea-Eagle. During early European settlement in the Port Jackson area, it is documented that an Aboriginal man by the name of Colebee was associated with the totem, the White-bellied Sea-Eagle. A pencil portrait was taken of Colebee by a Scottish convict artist named Thomas Watling. Watling recorded the Aboriginal name of the White-bellied Sea-Eagle as *gulbi* in the caption of one of his drawings, though no other information was recorded (NLA, 2005). It is evident Western knowledge has a long history of excluding Indigenous knowledges, primarily by its Western dominated observations and the resultant lack of including Indigenous perspectives, which were defined as ‘primitive’ and ‘inferior’ during the colonial era, and at times viewed as ‘an obstacle to progress along the path to modern civilisation’ (Nakata, 2004a:19). At present, many Aboriginal people feel Indigenous environmental knowledge is not incorporated or acknowledged enough in society. Some Aboriginal people in the study area also feel the parks make little or no effort to try to incorporate what they themselves validate as Indigenous environmental knowledge. Matt, an Aboriginal participant, shares his view:

*I’d say Aboriginal knowledge is contested. In society in general, it’s not acknowledged enough... Western Science is accepted. I don’t think the parks do try to incorporate that [Aboriginal knowledge].*

Matt, Aboriginal participant from Jerrinjua Aboriginal Community

While all settler stakeholders in the Jervis Bay area are, at various levels, attempting to incorporate Aboriginal knowledge into their conservation plans, some contestation around Indigenous environmental knowledge was highlighted by some non-Indigenous participants during the research. This contestation worked to define what knowledge is validated as Indigenous environmental knowledge and what was not. On one side of the debate, Aboriginal environmental knowledge is critically measured by the retention of traditional Aboriginal knowledge and practices. Areas such as NSW were significantly affected by colonisation (it being the first point of contact). These areas were largely exposed to settler dispossession and assimilation policies which dispossessed Aboriginal people from Country. As a result, some Aboriginal scholars argue parts of their traditional culture, including
knowledge, were stolen from them (Nakata, 2004a). Others, such as Langton (1998), view Indigenous knowledge as validated merely by the existence of an Aboriginal customary system. Some non-Indigenous participants view the effects of dispossession and assimilation policy on Aboriginal people as a loss of traditional culture which is now too fragmented to validate and incorporate as ‘real’ Indigenous knowledge, perceiving validated Indigenous environmental knowledge. When initiating this project, a NPWS employee at JBNP initially doubted whether any traditional knowledge existed regarding the White-bellied Sea-Eagle within the Wreck Bay Aboriginal Community. Establishing the existence of traditional knowledge and the applicability of that knowledge seems to be difficult for some agency staff in the study area. Emily explains her viewpoint, stating:

*There’s a huge loss of traditional information and when Aboriginal people are being honest, they will tell you they ‘don’t know that’. Aboriginal peoples’ theories are not represented in the parks...for down here [Jervis Bay]. It’s different in Northern Australia, but down here I honestly seriously do not see how any kind of traditional knowledge is going to contribute. It’s very hard to incorporate knowledge when it’s so fragmented.*

Emily, non-Indigenous NPWS employee

Similarly, Jon notes:

*It might be that a lot of that stuff has been lost. A lot of the Aboriginal people here came from other areas, a lot of them were from different tribes and they were all sort of herded together and moved out to these Communities, like Wreck Bay. Quite a lot of the cultural significance has disappeared...but then I guess if you dig deep enough, you may find that there are still some people who remember the stories and remember what it did mean.*

Jon, non-Indigenous NPWS employee

Nick explained a diversity of traditional knowledge, some of which could be validated and others which could not be or was more difficult to validate, stating:
It depends on the people when it comes to traditional knowledge. One of the things people in Australia don’t recognise is that there’s a huge diversity of Aboriginal culture. You’ve got people who’ve lived in Redfern all their lives and all they know about traditional culture is what they’ve read and what they’ve been told from people whose knowledge may not be all that reliable. And then you’ve got Aboriginal people who still live sort of traditional life in Kakadu or Uluru and other places in Western NSW. So you’re dealing with a very diverse range of knowledge and attitudes and histories of people and some of its reliable and some of its not, some of its made up and some of its bastardised.

Nick, non-Indigenous NPWS employee and previous BNP employee

Similarly, Emily explained her process of validating Aboriginal knowledge and conducting responsible research. She states:

We like to have corroboration as Western people... The rule of thumb is, if there seems to be a reasonable number of Aboriginal people referring to the same place for roughly the same reason then that would be identified as validated. Whether it’s enough oral histories or archival evidence...you have to have some kind of validation...at least a rough validation.

Emily, non-Indigenous NPWS employee and previous BNP employee

On the other side of the debate, Indigenous environmental knowledge, though not well understood by non-Indigenous participants, is accepted in both its continuity and change. The term ‘traditional’ in the context of knowledge implies continuity, accumulated knowledge, long-term practices, and an unchanging way of life and knowing. However, it is
most important to remember the dynamics of ethos and its transforming nature; people, just like all ecological systems, are always changing and evolving. Archaeological evidence shows patterns of change in pre-colonial Aboriginal people of New South Wales (McBryde, n.d.). Menzies and Butler (2006:7) argue, ‘TEK [Traditional Environmental Knowledge] is rooted in, and informed by, a traditional or customary lifestyle, but it adapts to change and incorporates contemporary information and technology. New information is continually added and old information deleted as the environment is transformed, as weather patterns shift, or as species are wiped out or introduced.’ Some non-Indigenous participants supported this argument, though the incorporation of Indigenous environmental knowledge into conservation and management was either not clear, or was challenged by Western knowledge systems, or was believed to be nearly non-existent. Ben stated:

We value Aboriginal knowledge...they do educational programs for the public for Indigenous and Marine environment interpretation. The NSW NPWS certainly respects the culture of Aboriginal people and is a major employer of Aboriginal people. This provides an osmosis, if you will, of understanding, though it is only involving the tip of the iceberg of Aboriginal people in conservation management.

Ben, non-Indigenous NPWS employee

In his experience with BNP from 1985-2007, Toby recalls:

Aboriginal knowledge was presented and taken into account…most members were sensitive and appreciative of that…I won’t say everybody. Difficulties occurred sometimes. What the Aboriginal Community [Wreck Bay] wanted with actual action sometimes conflicted with Commonwealth legislation. It didn’t happen often but when it did it brought about difficult situations in terms of trying to manage the park. I often found myself sitting in the middle…Commonwealth members stating commonwealth policy, which they had to abide by, and the community wanting their particular views to be dominant. Generally I would stay with the community but we were not always able to ensure their views prevailed if there was a direct conflict with commonwealth legislation in terms of management. We couldn’t
override that otherwise you were in breach and could find yourself financially penalized.

Toby, non-Indigenous previous BNP Board member

Jon argues:

Aboriginal people’s theories are probably not incorporated into conservation management, at least not as much as they should be. The fact is I don’t know that much about what the Aboriginal people think because I haven’t talked to enough of them.

Jon, non-Indigenous NPWS employee

Nick, while strongly supporting Aboriginal employment into management level positions within the parks, argued having a Western knowledge background was essential for those positions. He states:

University education is absolutely essential for those sorts of positions. Aboriginal people might have traditional knowledge but there is a system that you’ve have to work within to run a park...a lot of technical stuff you need to know from finance right through to ecology.

Nick, non-Indigenous NPWS employee, previous BNP employee
Similarly, Ben argues the need for ‘modern’ management:

_We are trying to employ Aboriginal people in our reserves and develop their capacity to gain skills for modern management of those lands._

Ben, non-Indigenous NPWS employee

Overall, most non-Indigenous participants in the study area maintain the belief that Indigenous environmental knowledge is most easily validated by Aboriginal societies who have been minimally exposed to colonisation and who continue to lead a ‘traditional’ way of life (or a life similar to it). However, this interpretation can be extremely limiting, particularly in its denial of characteristics which define all human societies, continuity and change. It is also works to restrain the incorporation Aboriginal culture and knowledge into environmental management, which is detrimental to building collaborative relationships. Emily made a particularly good argument for what role she thinks non-Indigenous agency staff should play in forming collaborative relationships with Aboriginal Communities: to build incorporation into environmental management. She explains:

_Feeling a real partnership is the first thing to do...so Aboriginal people don’t feel shamed if they don’t know something so people don’t feel like they have to justify being Aboriginal...so they feel what they are saying is actually going to contribute to environmental management. Then we need to REALLY try to meld those cultural knowledges with western systems and see how they work together, giving them equal value and respect. What can easily contribute is an Aboriginal way of doing things. There’s a big difference between knowledge and the Aboriginal way...which is about talking to elders...which is about taking a bloody long time to do anything...but it’s also about seeing the landscape much more holistically. That’s not about knowledge...it’s just about being Aboriginal...it’s cultural. I think we get much too caught up in knowledge and what we should be getting caught up in is more about that cultural approach to things._

Emily, non-Indigenous NPWS employee
It is important to consider all Aboriginal people uphold their cultural beliefs and practices: both customary and contemporary. Judgement of Indigenous environmental knowledge, what is validated and not validated, is best left to the Aboriginal Communities. These issues are underlined by the construction of Western scientific knowledge, which theoretically embeds the notion of universal knowledge applicability, constant challenge and burdens of proof. Indigenous knowledge systems conversely tend to enshrine the continuity of knowledge, honouring the knowledge of Elders, acknowledging the boundedness of knowledge and place, and including spiritual dimensions (Berkes, 2008).

### 5.2.2. Guarded Knowledge

Another significant characteristic of Aboriginal ‘ways of knowing’, acknowledged by both Aboriginal and non-Indigenous participants, referred to the nature with which knowledge was held. There is a huge amount of skepticism from Aboriginal people with regards to sharing knowledge, particularly for research. The issues of knowledge ownership and intellectual property rights is associated to the significance of both the research and sort of information provided, as well as the overall sense that research by outsiders has not benefited Indigenous people over time (Berkes, 2008; Smith, L.T., 1999). Nakata (2004a) argues Western knowledge systems have been exploitative of Indigenous knowledge. In addition to some Aboriginal people’s skepticism to provide knowledge to Western knowledge systems and research, some Aboriginal knowledge within its own rights is not suitable for sharing and is highly guarded. Rose (2002), from her extensive experience with Aboriginal people in Australia, acknowledges Aboriginal knowledge to be held within a system of use and access rights from which both the knowledge holder and the knowledge holder’s secrecy is respected. Several participants highlighted their experiences and views regarding the ownership of knowledge and the sacred nature of which information is held by Aboriginal people.

Jessica, an Aboriginal participant living in the Jerrinja Aboriginal Community shared with me her views regarding Aboriginal knowledge and its sacred nature. Please note that while Jessica lives in the Jerrinja Aboriginal Community, she personally identifies with the Bundjalung Aboriginal Nation in Northern NSW and as a result was not interviewed for this project. Rather, she offered to work as a liaison between the individuals she knew in the
Aboriginal Communities and myself. Jessica warned prior to an interview with one of the Aboriginal Community members:

_This person will probably not want to tell you much about the White-bellied Sea-Eagle. He has a lot of respect for the knowledge and the elders; he doesn’t like to share it easily. You have to show that you can give back to the Community and that you have their best interest in mind. It usually takes a while for you to build up a kind of trust with people…for them to start talking to you._

Jessica, Jerrinja Aboriginal Community member, identifies with Bundjalung Aboriginal Nation

Similarly, during our meeting, Greg explained the sort of information he would be able to tell me, identifying multiple layers of Aboriginal knowledge stating:

_There’s only certain things that are okay to say. That’s our law. There’s more surface level knowledge which is okay to talk about and okay to know…but there’s other…deeper layers of that knowledge which I can’t talk about…and some that I myself don’t even know._

Greg, Wreck Bay Aboriginal Community member and BNP employee

Several non-Indigenous participants also shared their experiences with Aboriginal knowledge as a guarded knowledge. Emily, in her experiences with Indigenous environmental knowledge, explained the difficulties of incorporating a ‘guarded’ knowledge into Western models of environmental management:
There’s a big difference between Aboriginal knowledge and Western knowledge. That is…Aboriginal knowledge is private and held tightly…our [Western] knowledge…we can’t do enough to talk about ourselves and everything. It’s just exactly the opposite. So if people aren’t going to share that knowledge for whatever reason or only let it out in tiny little ways…our Western system just can’t deal with it. When you ask an Aboriginal person for information, many people don’t know and are shamed, or they might know but they don’t know much, or they might know but they can’t actually pass it on.

Emily, non-Indigenous NPWS employee

Similarly, Jon raises the difficulties in retrieving information with regards to what is culturally significant to the Aboriginal Communities. He states:

It [the White-bellied Sea-Eagle] obviously could be a totem but then a lot of the things are sacred as well and they aren’t really spoken about.

Jon, non-Indigenous NPWS employee

Overall, it appears most non-Indigenous environmental managers in the study area are aware of the complexities from which Indigenous environmental knowledge is held. Some knowledge can be spoken of, some knowledge cannot. All Aboriginal knowledge has holders who determine this. It is apparent that ownership of knowledge and the guarding of particular knowledge are other significant traits for Aboriginal ‘ways of knowing’. Recognising and respecting these traits is another fundamental component for building successful collaborative relationships generally and also for seeking out specific knowledge pertaining to the White-bellied Sea-Eagle.
5.2.3. Indigenous Environmental Knowledge at Work

While Western knowledge (particularly science) often seeks to challenge and validate Indigenous environmental knowledge, Berkes (1999:13) argues Indigenous knowledge can also be ‘treated as a challenge to the dominant positivist-reductionist paradigm in Western science.’ Indigenous environmental knowledge, while displaying its own ‘scientific’ components, also demonstrates the emotive and the relational components of that knowledge, as well as its continued existence. Matt, an Aboriginal participant, explains:

*I think pre-European, our understanding of species... of flora and fauna...it fits somewhat into what is now known as ecology and biology. But it also relates to different beliefs... how one should care for Country and manage natural resources and how to survive. It all fits together both then and now.*

Matt, Aboriginal participant from Jerrinja Aboriginal Community

While in the previous section it is apparent the retention of Aboriginal knowledge systems is challenged, Battiste (2000a: 199) argues, ‘Where Aboriginal knowledge survives, it is transmitted through Aboriginal language.’ The withstanding of some Aboriginal language, despite living in an area which experienced high levels of colonisation, is a testament to the resonance of traditional knowledge and culture in the Jervis Bay region. Consequently, Aboriginal language is significant. NSW Aboriginal people are constantly faced with non-Indigenous judgements regarding the supposed lack of retention of their ‘traditional’ culture. However, language pertaining to the White-bellied Sea-Eagle, as well as many other species remains strong in the study area. For the Jerrinja Aboriginal Community, the White-bellied Sea-Eagle is known as Manyanya. This word forms a part of the larger Tharawal/Dharawal language and tribal group (Lowe, 2010, pers. comm). For the Wreck Bay Aboriginal Community, the White-bellied Sea-Eagle is known as Bugain, a word from the Dhurga language of the larger Yuin tribal group (Pallinjang Saltwater, 2009). There is no doubt that the Aboriginal people of Jervis Bay have been affected by colonisation and have had change
forced upon them; however, they have adapted well to that change, retaining their Aboriginal way of knowing and way of relating to Country.

Some non-Indigenous participants, while showing varying levels of contestation (in Section 5.2.1.) of Indigenous environmental knowledge, also appeared to individually acknowledge Indigenous environmental knowledge was ‘at work’ in the study area. shared their experiences with Aboriginal knowledge in the Jervis Bay region. Ben explains his experience, stating:

*I work with quite a few Aboriginal people and have talked to them about many things. I know they have an affinity with the White-bellied Sea-Eagle and the Wedge-tailed Eagle. When you talk to Aboriginal people about the landscape, it’s a big picture. There may be individual sites where they do activities etc., but in terms of the Sea-Eagle, it too has such a broad home-range.*

Ben, non-Indigenous NPWS employee

During the cross-cultural field research, knowledge systems and how they affected the ways in which people relate to the White-bellied Sea-Eagle became apparent. The story told in the previous Chapter in Box 4.2. ‘Nature-Culture Binary Example’ is just one example of how different non-Indigenous and Indigenous perceptions of the nature, and the White-bellied Sea-Eagle can be perceived to be. Greg, an Aboriginal participant from Wreck Bay, observed the situation and immediately related to the White-bellied Sea-Eagle’s circling behaviour and non-discriminatory life needs. However, discussions with participants demonstrate Aboriginal people have also been affected by Western knowledge. While the Wreck Bay Aboriginal Community refused to allow the proposal (see Section 1.2) for the banding of White-bellied Sea-Eagle to be approved, some participants suggested that not all Western knowledge is viewed so negatively in the Aboriginal Communities. Jon, who gives several talks on the Sea-Eagle, explains:
Definitely with the Wreck Bay Community...they are all very interested to learn anything new about the birds and what their status is and how well they’re doing. The South Coast Communities as well, they are recognised as a totemic species for a lot of people, so they want to know they are doing well.

Jon, non-Indigenous NPWS employee

Emily spoke specifically with regards to the scientific research proposal introduced in Section 1.2. stating:

I think the reaction to Tim Lynch wanting to do whatever he wanted to do...I think it is a pretty normal sort of reaction...they are not used to that Scientific work. They don’t do it much in Booderee or if they do...they [the Wreck Bay Aboriginal Community] aren’t involved much so it would have just come as a shock. If it had been done in a different way or he’d taken them out while he was doing surveys, I think he would have gotten a completely different response.

Emily, non-Indigenous NPWS employee

5.3. Conceptualisations of Space

Unbeknown to most settler people, an overlapping spatial framework beyond settler conceptualisations of space (provided in the previous Chapter 4, Section 4.4) exists and works within the minds of local Aboriginal Community members within the Jervis Bay region, which challenges Western conceptualizations of space and tenure division. This Aboriginal spatial framework includes but is not limited to: Aboriginal physical archaeological sites of significance, Aboriginal cultural and historical attachments to Country, Dreaming, and the natural world (Rose, 1996; Rose, 2002; Byrne & Nugent, 2004).
### 5.3.1. The Yuin and Tharawal Nations

It is traditional Aboriginal belief in Jervis Bay that the thirteen Aboriginal tribes of the South Coast were created by Bundoola and his thirteen wives (*We Come From the Land*, 1988). The region has been a focus for Aboriginal people for at least 3,000 years, and some argue up to 20,000 years (Shoalhaven City Council, 1992). Potentially two separate Aboriginal countries and language groups fall within the study area of Jervis Bay, the Yuin and Tharawal nations. However, the boundaries and the very separation of the two ‘countries’ is not clear. The AIATSIS map (shown below in Map 5.1) shows a blurred division between the southern and northern halves of the bay, with the southern half forming a part of the Yuin Aboriginal country and the northern half forming a part of the Tharawal Aboriginal country. The Encyclopedia of Aboriginal Australia (1994) also makes this distinction between the two tribal groups; however, the descriptions of where one boundary ends and the other begins is ambiguous, stating the Tharawal tribal group ends at ‘about Wreck Bay’ and the end of the Yuin tribal group begins at ‘about Jervis Bay’ (Horton, 1994). More recent publications, such as *Pallingjang Saltwater* (2010) describe the Tharawal tribal group as being a part of the Yuin nation and exclude the contemporary Jerrinja, (or ‘Jerrinjah’) people from both Yuin and Tharawal tribal groups. Cavanagh (2007) also includes areas within the Tharawal group, as far north as Wollongong (the traditional Wodi Wodi Aboriginal people) as being a part of the Yuin Nation.

It is important to note the blurred boundaries between the various tribal/language groups in the AIATSIS map are intentional. Boundaries in a traditional Aboriginal context were remarkably indistinct when compared to modern Western contexts of tenure division. Bordering Aboriginal countries would share areas of overlap (and the responsibilities that area entailed) between each other, acknowledging and respecting differences for purposes such as gathering resources, trading, performing cultural activities (e.g. ceremonies, weddings, etc.) and other needs (Sutton, 1995; Rose, 1996; Adams, 2001). Aboriginal people within the study area share similar viewpoints. It is a fundamental traditional belief of the Aboriginal people of Jervis Bay that no person can own the land but that it is there to be shared (*We come from the land*, 1988). Specifically, Brown (1988) states, ‘If we do not share with others, our incomplete soul would wonder forever alone in eternity’. According to Rose (1996:6) traditional Aboriginal belief also acknowledged Country’s ‘sacred origins’, ensuring Country was passed down to and looked after by its own traditional people; Country was a
‘promised land’. An Aboriginal person of Jerrinja Aboriginal Community shared this belief of Country, stating ‘...for a long time now we have felt responsible for caring for it [the land] because this is something that has been given to us, so it cannot be unbroken’ (Lowe, 1988).

**Map 5.1 Aboriginal ‘Country’ in a traditional context, Jervis Bay**

Map of Aboriginal Language/Tribal groups around Jervis Bay adapted from Australian Institute of Aboriginal and Torres Strait Islander Studies, 2007. Map of Australia inset map adapted from the National Library of Australia, Maps of Australia, 2010. The red area highlighted indicates the study area in Australia.

### 5.3.2. Aboriginal Communities in a Bureaucratic framework

The relatively recent formation of Aboriginal Communities was largely the result of herding traditional Aboriginal societies into missions, reserves and pastoral stations (Peters-Little, 2000). With the Aborigines Protection Board (APB) in place, it being their duty was to assimilate Aboriginal people into non-Indigenous society (Peters-Little, 2000). Ironically, in the era of the APB, contrasting segregation laws enforced kept Aboriginal people isolated in
their make-shift societies (Peters-Little, 2000). This was the beginning of the Aboriginal ‘community’. Peters-Little (2000:4) explains, ‘It is arguable that being restricted to the missions and reserves actually assisted those families to keep their links to their history and each other.’ From Byrne & Nugent’s (2004) work, where the post-contact heritage for Aboriginal people was mapped, it is demonstrated that the assimilation era and the process of establishing an ‘Aboriginal community’ were still very much a significant part of Aboriginal peoples’ cultural heritage. Ardler (2004:ix) argues for Aboriginal people ‘The places that comprise their heritage are not museum objects: they are a living part of Aboriginal culture. They are, in a very real sense, a lifeline between living generations and the country they belong to.’ The mid 1970s brought about some major changes for Aboriginal Communities. Abandoning assimilation policy, the Whitlam Government established the Commonwealth Department of Aboriginal Affairs and the Aboriginal Land Rights (Northern Territory) Act 1976 was passed to begin the recognition of Aboriginal land rights in Australia (Peters-Little, 2000; Baker et al., 2001). These changes provided Aboriginal Communities with autonomy by empowering Aboriginal people to begin managing their own communities and allowing for the filing of Aboriginal land claims to gain back some of their traditional lands.

Presently, Aboriginal Communities are bureaucratically organised through their Local Aboriginal Lands Council (LALC). Membership to a Local Aboriginal Land Council within NSW is based on the criterion of Aboriginality and local residence, rather than a traditional relationship with the local Country. Aboriginal Community members may be traditional owners of the local Country. Aboriginal Community members may also be Aboriginal people with traditional ties to Country elsewhere in Australia but who are resident within the local boundaries of the Local Aboriginal Land Council. This organization serves as a way for non-Indigenous bureaucratic organization to interact with the communities more efficiently, particularly for protected area managers who seek to incorporate Aboriginal Communities. However, (Peters-Little, 2000:3, 7) it is a challenge for Aboriginal people to seek ‘an ‘authentic’ Aboriginal cultural identity within the confines of a colonial framework…It is particularly unrealistic to expect all loyalties to kin and tribe to disappear when the structure of ‘community boards’ is based on western notions of representativeness.’

Below is a map (Map 5.2) displaying the Jervis Bay region’s NSW LALC organisation, depicting the Jerrinja Aboriginal Community as a part of that spatial organisation. Wreck Bay Aboriginal Community, being installed by the Commonwealth government and falling within the Jervis Bay Territory, forms its own separate bureaucratic organisation. While a
modern bureaucratic and spatial organisation is a significant representation for the Aboriginal Communities, it only forms a one part of the overall Aboriginal conceptualizations of space. This representation is more so a necessary organisation for Aboriginal Communities to have land granted to them, to arrange formal co-management agreements with conservation agencies, and to have a point of contact for consultation purposes. However, representations of the ‘community’ are conflicting with Aboriginal traditional values, promoting the view of a homogenous community and seeking individual representation for the entire community. Emily argues:

_No Aboriginal person can represent another Aboriginal person…being talked to and being properly consulted is the most important thing._

Emily, non-Indigenous NPWS employee

Due to the conflicting nature of representation in Aboriginal Communities, consultation is a process for which much time and effort should be invested, though this is not consistently found to be the case within the study area.
In addition to the challenges of determining Aboriginal community representation and appropriate consultation, the challenges discussed in the literature review (in Section 2.5.1, ‘nature as contested’) with negotiating co-management arrangements between Aboriginal Communities and conservation agencies can also be a source of conflict. Conservation objectives for Western environment management systems can vary considerably from Aboriginal worldviews of managing Country (Feary, 2008). These differences can also be detrimental to the formation of successful collaborative relationships and must be negotiated.

The following two subsections will outline the current and preceding spatial and legislative organisation of both the Wreck Bay Aboriginal Community (Section 5.3.2.1.) and the Jerrinja Aboriginal Community (Section 5.3.2.2.). These sections, being highly political, will present
both non-Indigenous and Aboriginal perspectives on how Aboriginal Communities are involved in land and environmental management processes in the study area.

5.3.2.1. Wreck Bay Aboriginal Community Council and Booderee National Park

A significant Act for the Wreck Bay Aboriginal Community was the Commonwealth Aboriginal Land Grant (Jervis Bay Territory) Act 1986, which established the Wreck Bay Aboriginal Community Council and granted the Council Commonwealth land on Bherwerre Peninsula. The act specifically granted the Council 403 hectares of land outside of the then Nature Reserve as a living area for the Community Council. Furthermore, the act established the Council as a company which is both representative of the Wreck Bay Aboriginal people and has perpetual succession rights (Farrier & Adams, in press). When the Nature Reserve was declared Jervis Bay National Park under the National Parks and Wildlife Act 1975 in 1992, the Wreck Bay Aboriginal people were offered two positions on the board of management (Farrier & Adams, in press). Further negotiations between 1992 and 1995 led to the passing of unique legislation (it was not a successful native title claim under the Native Title Act 1993) called the Aboriginal Land Grant and Management (Jervis Bay Territory) Legislation Amendment Act 1995, which granted the entire park to the Wreck Bay Aboriginal Community Council (Farrier & Adams, in press). As this was a special legislative arrangement and not a native title claim, traditional owners from the wider Aboriginal Community were left out of the arrangement, with no ability to serve on the park board as a traditional owner and no protection for future claims to traditional Country (Feary, 2001; Lowe & Davies, 2001; Farrier & Adams, in press).

With regards to the Wreck Bay Aboriginal Community’s role in managing the park, there are the legislative arrangements and the actual application of those arrangements. The park’s management procedures are laid out explicitly in the general stipulations for Commonwealth reserves under the EPBC Act (Farrier & Adams, in press). These stipulations were somewhat ‘modified and supplemented to take into account the special circumstances of reserves on land leased from Indigenous owners’ (Farrier & Adams, in press: 8). The BNP Board of Management was established, with the majority number going to the traditional owners from the Wreck Bay Aboriginal Community (Farrier & Adams, in press). The board’s three main
objectives are to maintain ‘the interests and aspirations of the traditional owners, the need to protect and conserve the Park, and the interest of the wider community’ (Farrier & Adams, in press). Edward explained the Wreck Bay Aboriginal Community’s involvement further stating:

_The local Community have a majority on the Park board which produces the Park Management Plan...this is a 10 year strategic plan. The Community is also involved in day to day management through the Community Liaison functions which are provided for by the Park. Another way they community is involved is through employment. Most employees...about 79 percent...in the park are Aboriginal identified, Wreck Bay Aboriginal Community members._

Edward, non-Indigenous BNP employee

While the legislative arrangements in place between the Commonwealth and the Wreck Bay Aboriginal Community, the application of these arrangements is not clear. While certain Wreck Bay Aboriginal Community members sit on the park board, and this seemingly works well to incorporate the Wreck Bay Aboriginal Community into park management procedures and the development of the park management plan, the perceived level to which Indigenous environmental knowledge and cultural values are incorporated into the park varies between participants. Toby explained a relatively positive viewpoint of the current level of incorporation stating:

_Wreck Bay is really just trying to facilitate an arrangement to ensure an appropriate level of protection for the area but also allowing them commercial development for economic reasons. Parks are doing a good job trying to find ways to both document Aboriginal knowledge and understanding and experiences and build that into the park management strategies._

Toby, non-Indigenous previous BNP board member
However, Emily explains a contrasting viewpoint from her interactions with BNP, arguing:

*At Booderee, there’s no evidence of Aboriginal influence. There’s lots of Aboriginal employees but the way they manage the park is far more bureaucratic than most normal national park managers...they have thousands of committees. They are more Western in their approach.*

Emily, non-Indigenous NPWS employee

While there are a large number of Wreck Bay Aboriginal employees within the park, very few are in senior management positions (Farrier & Adams, in press). Though the recognised goal of the park is to lead to Aboriginal sole management and thus providing Aboriginal self-determination for the Wreck Bay Aboriginal Community (Farrier & Adams, in press), the continuation of non-Indigenous staff appears to be a major hindrance to this. Nick argues:

*They [BNP] have to get Aboriginal people into those management positions and treat them seriously not treat them as token employees. They need to be managers.*

Nick, non-Indigenous NPWS employee, previous BNP employee

With regards to species management generally and the White-bellied Sea-Eagle specifically, participant’s perceptions regarding the level of incorporation of Wreck Bay Aboriginal Community member’s knowledge and theories also differ. Toby, in his experience at BNP explained:
The Community was very determined to ensure any key areas for the Eagles’ ecology were thoroughly protected as we developed the zones for the park in terms of different levels of protection zones. Any areas the Eagles were using in a significant way, they wanted to ensure it was in the highest level of protected zones.

Toby, non-Indigenous previous BNP board member

While theoretically this was the Aboriginal Community’s desired outcome for management of the White-bellied Sea-Eagle, as presented in Section 4.4.2.3., BNP’s conservation and management priorities are largely influenced by the EPBC Act and other relevant legislation. Nick recalls from his time at BNP:

Species management was separate: white fella, scientifically based. Aboriginal knowledge and cultural ways of doing things with regards to species management...it wasn’t incorporated into park management much...not at all that I’m aware of. This was basically scientific...based on research in the conventional sense. Consultation to me...and I might have a very jaundiced view of it...I think that consultation was information one way. ‘We are going to do this...what do you think?’ and the ‘What do you think?’ part was just meaningless to feed into that feel good aspect... ’you know, we talked to you about that...don’t you remember?’

Nick, non-Indigenous NPWS employee and previous BNP employee

While it is apparent that BNP still has a long way to go in building their collaborative relationship with the Wreck Bay Aboriginal Community, particularly in building further incorporation of Aboriginal Community members’ knowledges and placing members into higher levels of park management, the arrangement has many positive outcomes. As outlined in Section 1.2, due to the Aboriginal majority on the park board, the community is able to ‘exercise cultural control over proposed activities which may be culturally inappropriate (Farrier & Adams, in press). Another positive outcome, through ownership of the park, is the ability to connect to Country and conduct cultural activities. White the EPBC Act has many
provisions with which to protect conservation of the natural environment, the Act’s provisions also work to exempt Aboriginal owners from its controls for traditional uses such as ceremonial and religious purposes, food-gathering, and non-commercial hunting (Farrier & Adams, in press). While Wreck Bay Aboriginal Community members are permitted to live within the park, several are not able to. The Wreck Bay Aboriginal Community’s arrangements with the Commonwealth also provide for members who do not reside within the park. Toby explains:

*Only a proportionate number of the Wreck Bay Aboriginal Community live within the park. There is still a significant number that live outside the park. Having the park provides the opportunity for ones living outside of the park to return and take advantage of the links they would have with it. If you didn’t have the park I think that would be lost completely.*

Toby, non-Indigenous previous BNP board member

Overall, the lease arrangements for Booderee National Park and the Wreck Bay Aboriginal Community have helped to overcome issues of unemployment, poor public transport due to isolation, and a low financial base particularly through Aboriginal employment in the park, the distribution of 25 percent of the annual park visitor fees to the community, in addition to monies paid by the Commonwealth to lease the park (Feary, 2001; Farrier & Adams, in press). These funds also help to cover community housing, health, and education expenses for the Wreck Bay Aboriginal Community (Feary, 2001). The arrangement the Commonwealth Government has arranged with the Wreck Bay Aboriginal Community is considerably different from the alternatives offered by the State government to the Jerrinjaj Aboriginal Community.
5.3.2.2. Jerrinja Local Aboriginal Land Council and the Jerrinja Tribal Council

The Jerrinja people were placed in Roseby Park in 1900, a government established reserve for Aboriginal people (Lowe & Davies, 2001). Though the reserve was small, at the time of establishment the surrounding land was undeveloped and allowed for common usage. However, with the location of the reserve and surrounding land falling within NSW and local government jurisdictions, the land was gradually subdivided and developed (Lowe & Davies, 2001). Wreck Bay Aboriginal Community managed to maintain its isolation since its establishment in the early twentieth century, primarily due to its location on Crown land. The area Wreck Bay Aboriginal Community occupied, being administered by the Commonwealth government, had no encouragement for coastal development and as a result the area remained mostly unoccupied (Egloff, 1981; Lowe & Davies, 2001). Unlike Wreck Bay, Jerrinja Aboriginal Community’s previous establishment by the government as an Aboriginal reserve provided only a small area of land to live on and no protection from surrounding development. Particularly due to its prime coastal location, the continuously growing settlements of Orient Point and Culburra have carved up any hope of securing an area of land surrounding the present day community which would be large enough to provide for all of the needs of the Jerrinja Aboriginal Community such as housing, economic development, cultural activities, and access to resources, such as fisheries (Lowe & Davies, 2001).

In 1967, the Jerrinja people established the Jerrinja Tribal Council and began to fight for their claim to the title of the Roseby Park reserve and surrounding traditional lands and heritage sites (Lowe & Davies, 2001). However, this process is difficult for a number of reasons. Due to the arrangement between BNP and the Commonwealth, Jerrinja Aboriginal Community members who may have had traditional ownership rights to the land at Wreck Bay and Booderee, were excluded from the process (Feary, 2001; Lowe & Davies, 2001). As Feary (2001:279), an archaeologist with over twenty-five years experience in working with the Aboriginal communities in the area, explains:

> Although there are familial ties between the two groups, the creation of a Commonwealth territory on the southern shores of Jervis Bay and the subsequent disparity in the provision of resources by the Commonwealth and the New South Wales government has always been a source of tension between the Jerrinja and Wreck Bay communities. This souring of relations between and within families was not helped by the handing back of Booderee National Park (the former Commonwealth Jervis Bay National Park) to the Wreck Bay Community in 1996. The artificial boundary between New South Wales and the Jervis Bay Territory [Commonwealth] had effectively excluded Jerrinja people from participating in
negotiations and, although it has been argued that several Jerrinja people could claim traditional ties to and knowledge of what is now Booderee National Park (Egloff et al. 1995), none sits on the board of management.

While the NPWS in JBNP are increasingly seeking Jerrinja Aboriginal Community involvement with different park management issues, the park is not operating under a co-management agreement.

Due to limitations in both NSW State legislation and resourcing, the Jerrinja Aboriginal Community does not feel at this time that a joint management arrangement with the NSW NPWS for JBNP is in the Community’s best interest (Feary, 2001; Lowe & Davies, 2001; Lowe, pers. comm., 2010). According to Feary (2001:280), Jerrinja Aboriginal Community members have expressed the need for Country to have ‘a place to look after, a place to live in and a place from which to derive economic benefit.’ However, NSW protected area legislation ‘places restrictions on Aboriginal owners living in national parks and on deriving economic benefit from it through commercial exploitation of its natural resources’ (Feary, 2008: 274). Feary (2001) explains that any rent monies paid to the community would need to be used for management of the park, due to the NSW National Parks and Wildlife Act. Resultantly, opportunities for permanent employment would be little (Feary, 2001).

Other constraints for the Jerrinja Aboriginal Community are establishing traditional owners within the NSW system (as discussed in Chapter 2), establishing a park board to transfer the power of managing the park, and vesting power in the LALC to hold all land titles (Feary, 2001). Some Jerrinja Aboriginal Community members have expressed concern over the LALC’s right to hold titles due to previous inequities in the access and use of land (granted to the LALC) among land council members as well as annual elections for LALC members which affects consistency in administrative organisation and procedures (Feary, 2001).

Despite an apparent halt in negotiations towards co-management, NPWS employees have been optimistic of the arrangement since JBNP’s declaration in 1995 (Feary, 2008). Several non-Indigenous participants have expressed a hope for continued negotiations. Ben explains:

*Joint management has not progressed because there is too much conflict...and conflict within the Aboriginal Community. There is not enough strategic direction within the community who work within DECCW. Land was recently purchased by*
DECCW on Mt. Coolangatta, which is a culturally significant to the Aboriginal Communities (including Ceremonial, living and burial sites). NPWS have been taking the management of that land forward and consulting with the Aboriginal Community. We are hoping this and some of the recent land claims will help to break down some of the barriers that seem to be in place over the progression of JBNP towards joint management.

Ben, non-Indigenous NPWS employee

Similarly, Emily states:

There’s a strong desire to go on Country to do certain things. And the great thing about the protected area system is that it’s the only system that allows that to happen. There’s nothing else that allows that to happen. So even though Aboriginal people have a lot of problems with protected areas, it’s the best deal that they are ever going to have...except for the lands that they own themselves.

Emily, non-Indigenous NPWS employee

Overall, it appears NPWS employees recognise the limitations for the Jerrinja Aboriginal Community to enter into a co-management arrangement with NSW JBNP; however, are still working hard to build collaborative relationships with the Jerrinja Aboriginal Community. However, some Jerrinja Aboriginal Community members are very determined in their land rights initiatives and have been very explicit in what they need as individuals and what they believe they are entitled to as traditional owners of Jervis Bay. Lands on Beecroft Peninsula are also significant to the Jerrinja Aboriginal Community, containing over 300 archaeological sites (Feary, pers. comm., 2009). However, due to the establishment of Defence on Beecroft Peninsula, ownership claims and involvement in land management are extremely limited.
(Lowe & Davies, 2001). Some initiatives have been made to allow the Jerrinja Aboriginal Community access to those recognised traditional lands, including an exclusive campground (See photo below). Hayley explains:

*We have a second campground...at Bindijine and that campground is reserved exclusively for the traditional owners and we have Jerrinja people camping here whenever we are opened for camping and we have pretty good relationships with them.*

Hayley, non-Indigenous DDET employee

Emily shares her viewpoint on the granting of the Bindijine Beach as an exclusive Jerrinja Aboriginal Community camping area by the Department of Defence, stating:

*They [Defence] gave them a very exclusive camping area at a place called Bindijine beach. That’s exclusive use only for Jerrinja people. So that was a huge kind of negotiated outcome which allowed really Defence to do whatever they want.*

Emily, non-Indigenous NPWS employee

With regards to consultation, Hayley explains the DDET’s processes for consulting with the Jerrinja Aboriginal Community. She states:

*We consult here with the Jerrinja Community, who we regard as the traditional owners on most things and we have one Jerrinja ranger here. Defence has given a*
commitment that one of the rangers positions here will always be filled by a Jerrinja person provided one’s available. It’s not an identified position but we are working towards having it made one. We are very lucky to have our Jerrinja ranger here...she also sits on the Jerrinja Local Aboriginal Lands Council so she’s a strong link between us and the Land Council. Sometimes we’ve tried very hard to consult and we’ve come up against a brick wall and so some things we’ve had to put the word out through Krissy that these things are happening and hope that if people are concerned, that we are going to get feedback.

Hayley, non-Indigenous DDET employee

From discussions with both the DDET and the Jerrinja Aboriginal Community, it seems consultation with the Aboriginal Community is not very good. Incorporation of Aboriginal cultural values and practices into management of Beecroft Peninsula primarily consists of the one employee who is from the Jerrinja Aboriginal Community. However, it cannot be assumed that this one individual can serve as both a representative for the entire Jerrinja Aboriginal Community, nor to serve as the one point of contact between DDET and the Jerrinja Aboriginal Community.

Due to the previously demonstrated limitations, it appears the Jerrinja Aboriginal Community has invested most of its ambition for land rights and self-determination towards private Aboriginal land claims. However, this has been a long process. From 1986 to 1994 both 8 land claims in the Jervis Bay region were filed either by the Jerrinja LALC or by the NSW Land Council on behalf of the Jerrinja LALC (Feary, 2001, Lowe, pers. comm., 2010). Feary (2001) explains earlier land claims were not decided on by the government due to the known conservation values of the land and the later claims made during that period were conflicting with the government’s intention to establish a national park at Jervis Bay. There was little consultation by the government with the Jerrinja Aboriginal Community members during this period of inaction and resultantly, was a source of frustration for several Jerrinja Aboriginal Community members (Feary, 2001; Lowe, pers. comm., 2010). In 2010, the decision was made and five land claims were successful for the Aboriginal Community. Matt explains his experiences with the land claims process and his knowledge of the successful claims, stating:
From 1986 to the early 1990s we filed several land claims. These were individual land claims in succession they were filed for Crown land which was claimable under the Act. For one of them we had to go to court and stuff. We’ve only just been successful with five of the claims this year. There’s one land grant along a strip of land in between the Department of Defence land and Beecroft Head. There’s another along the beach at Currarong. There’s one out at Red Point which is pretty significant to us. There’s another one adjacent to the southern side of Currambene creek...and the last one’s out at Hyams beach...about 300 hectares. So in total there’s five successful land claims in the bay for the Jerrinja LALC. These just went through so how the lands are going to be used and managed is really yet to be determined.

Matt, Aboriginal participant from Jerrinja Aboriginal Community

With Jerrinja Aboriginal Community’s new land grants in hand, the next task falls to determining how the land will be managed. Despite owning the lands, there are already several issues regarding cross-cultural differences in land use and conservation associated with the land grants. Any successful land grants must comply with national park objectives due to the zoning of the land claims as a part of the Jervis Bay Regional Environmental Plan (Feary, 2001). Additional conflicts were highlighted with the land granted at Red Point, a site where Aboriginal people traditionally fished (shown by several midden sites located on the property). Jerrinja Aboriginal people would like to continue fishing in this area; however, it is also a site which contains ‘some of the most significant sea-grass beds in NSW’ (Feary, 2008: 274). As a result, it is a designated sanctuary zone in the JBMP and no fishing is permitted (Feary, 2008). The area is also a site where campers flock during the summer. As evident in the photo below, during a field visit to the property, the area was overcrowded by travellers. This has been an issue previously responsible for severe degradation of the area’s natural and cultural values, and due to the long awaited decision on the land grant, the area has not been actively managed for some time (Feary, 2001).
Despite the new challenges the Jerrinja Aboriginal Community faces with land management, they now have an opportunity to connect to Country and to directly negotiate the ways in which the land granted to them should be managed and used.

5.3.3. Country as tangible, Country as intangible

A final yet significant Aboriginal conceptualisation of space apparent in the study area, that is both contemporary and customary, derives from cultural and spiritual attachments to Country. In Rose’s work in northern Australia (2002), sites of significance relating to the White-bellied Sea-Eagle for the MakMak clan include Kalngarriny (MakMak hill) which is the Dreaming place for MakMak. In reference to Country, Deborah Rose (2002: 14) argues it is ‘not just imagined or represented, it is both lived in and lived with’ (Rose, 2002). Map 5.1, (displayed below), is a graphic representation of Wagait Country, showing clear connections between animals and places.
While it is unknown if there are specific Aboriginal sites in Jervis Bay related to the White-bellied Sea-Eagle, it is often viewed as a significant part of the Jervis Bay landscape by both Aboriginal and non-Indigenous participants. Although the species is not a totem species for Matt, as an avid fisher, he often associates the Sea-Eagles with particular areas he frequents. Matt explains:

*I do a lot of fishing at the lake and every time I go I always look for the two pairs of Sea-Eagles I see there a lot. I’ve had one fly right over me while I was fishing and dive for a feed.*

Matt, Aboriginal participant from Jerrinja Aboriginal Community
Some non-Indigenous participants observed associations between Aboriginal people and the White-bellied Sea-Eagle in Jervis Bay as well as a bit further south of the study area. Nick describes:

_The association between the bird and the place and the people [Wreck Bay]...they’re pretty strong and they’re very obvious...more so than in other areas. It’s a fairly inspirational sort of creature._

Nick, non-Indigenous NPWS employee, previous BNP employee

Jon notes an association he recognised, though it is not a formally recognised connection, stating:

_Brush Island is a cultural heritage site and the Sea-Eagles do use that a lot. It’s not so much recognised culturally for the Sea-Eagles...but it’s a really important cultural site for the Aboriginal people and it is very important for the Sea-Eagles too. They definitely play a major part in the whole scene._

Jon, non-Indigenous NPWS employee

Emily was aware of a recognised Aboriginal site related to the White-bellied Sea-Eagle, just south of BNP. The Aboriginal community Emily mentions, like Wreck Bay Aboriginal Community, form a part of the larger Yuin tribal group and share kinship with several Wreck Bay Aboriginal Community members. Emily tells:

_When we were doing oral history work there, the Sea-Eagle was identified as a totem. I know from these discussions there are some significant sites related to the Sea-Eagle for Aboriginal people further south, though I’m not the holder of that knowledge._

Emily, non-Indigenous NPWS employee
5.4. Personal Connections and Cultural Significance

5.4.1. Creative Art as Expression: Aboriginal Artists

The White-bellied Sea-Eagle features in many works of Aboriginal artists, poets, song-writers, and story tellers (Ryan, 1997; Rose, 2002; Davison, 2009). Deborah Rose, an anthropologist who has worked extensively with Aboriginal people from all over Australia, argues that the use of creative arts to communicate something of the fullness of people’s relationships to the ‘nourishing terrains’ of their lives is an enhancement upon the worded explanations to describe this connection. Western language and explanations often ‘run the risk of acquiring the pedantic quality of expository communication’ (Rose, 1996). A poem, while often ‘worded’ in Western language, draws on ambiguous language which carries multiple layers and meanings. A poem the MakMak clan from the Northern Territory shared with Deborah Rose, describes what they call their ‘good country’ (their own homeland) and its ties to the White-bellied Sea-Eagle and to the people (Rose, 2002):

‘My Strength.
The Strength of that land.
You can feel it in yourself,
you belong there
It’s your country, your dust,
your place.
You remember the old people.
The White Eagles always greet me.
It’s home.
Safety and security.
You see the birds, you see the country,
and your senses come back to you.
You know what to do and where to go’
- The MakMak people

As its intention, this poem’s ambiguity portrays multiple meanings and multiple layers, representing life in Country for the MakMak. It is clear that the ‘White Eagles’ are central to that life, to home in MakMak Country. Other significant artists in NSW have portrayed a deep connection to the species.

Ginger Riley Munduwalawala, is an Aboriginal artist from Maria Lagoon (by the Limmen Bight River which features in several artworks), the coastal ‘saltwater Country’ of the Mara Aboriginal people (Ryan, 1996). Ginger Riley is known for his unique artwork displaying a
‘superlative colour sense’ which he argues captures his colour Country: ‘the colours of the land as seen in his imagination…in art’ (Ryan, 1996: 1). Ginger Riley connects to Country in his works, which are mostly inspired by a series of events that took place in his mother’s Country. Ngak Ngak (the White-bellied Sea-Eagle) features in a few of Ginger Riley’s works and is a significant species in the Limmen Bight Country in its role as a guardian protecting Country (See painting below) (Ryan, 1996: 2). For Ginger Riley, painting is a way to unite with his ‘strong sense of identity and place, of knowing where he belongs and where he comes from’ (Ryan, 1996: 1). In so doing, Ginger Riley also creates a connection between the White-bellied Sea-Eagle and Country.

Source: Museum Victoria (2010), *Ngak Ngak in Limmen Bight River Country* by Ginger Riley Munduwalawala

Georgina ‘Coopy’ Parsons, an Aboriginal Artist and community elder from the Walbunja clan of Batemans Bay, NSW (which is in close proximity to the Jervis Bay region), often paints her personal totem, the White-bellied Sea-Eagle, in addition to other experiences and stories (Pallinjang Saltwater, 2009). Through her artwork, Georgina is able to tell stories of her own life experiences as well as those passed down to her by her ancestors (Pallinjang Saltwater, 2009). Georgina has a lifelong history of living in saltwater Country, and through her artwork she is able to relive many of these experiences and relate to other species which

5.4.2. Sharing

Deborah Rose found in her experience with the MakMak Sea-Eagle clan in the Northern Territory:

*MakMak* people share a way of life with other predators; they all live off many of the same foods. The white-breasted sea-Eagle [*MakMak*] is the most prominent of these other predators with which *MakMak* people share a way of life. The people are good hunters, and so are the birds; and they share many of the same foods (Rose, 2002: 105).

Aboriginal people from the Wreck Bay community, owners and co-managers of BNP, share significant cultural ties to the White-bellied Sea-Eagle, though there is limited academic literature with reference to this relationship (*Pallinjang Saltwater*, 2009; Farrier & Adams, in press). The Wreck Bay community openly acknowledges the White-bellied Sea-Eagle as their guardian animal and it is found on the BNP’s emblem (Farrier & Adams, in press). Due to the Wreck Bay Aboriginal Community’s fortunate geographic location within an isolated area, and their recent grant for ownership of BNP, they have managed to maintain a relatively uninterrupted relationship with Country. While the ownership and management of BNP has been a difficult process for Wreck Bay Aboriginal Community (see Section 5.2.3.2.), the ability to live on Country for some members has allowed for a unique and continuing relationship with the White-bellied Sea-Eagle (See Box 5.1 below).
Box 5.1. Sharing with the White-bellied Sea-Eagle

When I first met with Greg, an Aboriginal participant from the Wreck Bay Aboriginal Community, I was immediately taken aback by his idea to leave the office and get out onto Country. Greg explained he was ‘introducing me’ to Country. By familiarising me with Country, he was also providing me with some sort of understanding of the people who belong to it. We went for a drive to the Wreck Bay Aboriginal Community and after passing most of the community housing, Greg slowly edged the four-wheel drive up over this steep dirt road. When we reached the top, we had a view of Summercloud Bay. The entire community it seemed were all out fishing and gathering shell fish. I could see the fishing stand the beach haulers would use to spot any fish coming into the bay. To my surprise, just a little to the left of this hut, I could see a (seemingly) tiny white figure perched in a tree. I asked, ‘Is that..?’ and Greg confirmed that the resident White-bellied Sea-Eagle was also out looking for a feed. Greg explained that the resident Sea-Eagle pair and the beach haulers sometimes work together in their fishing endeavours. Both the beach haulers and the Sea-Eagle spot fish moving past the entrance of the bay. The Sea-Eagle then flies out and begins to dive on the fish, herding them into the bay. The beach haulers are then able to haul a good lot of fish in for the catch and the Sea-Eagles share in the spoils. Their nesting and perching sites are also in close proximity to the Wreck Bay Aboriginal Community. This is the way Greg explained most aspects of his relationship with the Sea-Eagles. They fish together. They live in the same space for rest and for breeding. They seemingly share a life together and as a result, they have what Greg explained as a mutual respect: for one another and for Country.

Greg shared a story, which displays in some small degree the significance of the White-bellied Sea-Eagle to him. Greg shared:

_A few years ago, I went away to go on this ranger exchange program to the Northern Territory. ...After a few days I was really having a hard time and was really missing home Country. So I took one of the boats out and was trying to decide whether to go home or try to stay and then all of a sudden a White-Eagle flew right over me. I knew then...I felt at home and knew I had to stay. That Eagle_
was looking out for me. And because I stayed, I was able to bring back all of these new ideas about how to make changes in the park and in the Community...to make things better.

Greg, Wreck Bay Aboriginal Community member and BNP employee

Emily raised another interesting point regarding the cultural significance of the species over large distances, which corroborates Greg’s experience stated above. Emily explains:

One thing that is interesting is that the White-bellied Sea-Eagle actually exists over a very large area. So many different and separate Aboriginal groups all have connections to that Sea-Eagle for different reasons. They will call it different names and they’ll have different stories. What’s always interested me is whether the movement of the Sea-Eagle actually reflects some kind of traditional movement of information from one place to another. I’m sure that’s the way some things work in Aboriginal societies that it is actually things that move across the landscape and the sea, like the Sea-Eagles, that actually provide connectivity. So when people from a long way apart come together, they have that commonality.

Emily, non-Indigenous NPWS employee

Loss, death, is also a part of life in Country. Greg shared with me his experience of losing a resident pair of White-bellied Sea-Eagles in the park. The White-bellied Sea-Eagle pair was performing a mating ritual, where they lock claws and spiral down. He explained:

We could see them up there circling all day...they were doing it right near the community. I just had a feeling that day and sure enough I got the call. Another one had broken them up and they all hit the electrical wire. It was hard. Someone
suggested we take them over to this place where they stuff them. I wasn’t too keen on the idea, but I was the one that took them over. When they were finished I was glad we did it. Now they are always here with us.

Greg, Wreck Bay Aboriginal Community member and BNP employee

Below is a photo of the Sea-Eagle (a young adult) that broke up the pair, displayed in the BNP visitors centre. The community has the pair held in their Botanical Gardens Office.
Toby argued the esteem with which the Wreck Bay Aboriginal Community held the White-bellied Sea-Eagle, was in fact not unique, noting:

*Large Sea birds have always held a major ecological position with many traditional communities. It is not just this particular group. You go around the world…large birds of prey have been significant for many different traditional communities. I think this is just another example of what is global interaction between human beings as groups and major raptor species around the globe. I don’t think there is anything unique about what we find at Wreck Bay but that particular relationship seems to be quite a strong one, both at Wreck Bay and between communities right around the globe…and they aren’t necessarily Sea-Eagles, just large birds of prey.*

Toby, non-Indigenous previous BNP board member

While there are several commonalities between Indigenous Communities and their connections to large raptor species (some of which are highlighted in Chapter 2), it also appears to encapsulate human relationships in general, Indigenous and non-Indigenous, to these prominent nonhumans.

### 5.4.3. Separated

The most significant and emerging themes from discussions with the two Aboriginal participants from the Jerrinja Aboriginal Community revisit the issues discussed generally in Chapter 2, and specifically in Section 5.3.2.2. regarding land rights legislation, the disparity between Commonwealth and State managed protected areas, and Aboriginal involvement in natural resource management. While the Jerrinja Aboriginal Community shares many close connections with the Wreck Bay Aboriginal Community, their experiences with Country and the White-bellied Sea-Eagle differ significantly primarily due to their geopolitical circumstance (Lowe & Davies, 2001). Due to this forced separation from Country, participants argued parts of Jerrinja’s traditional knowledge and cultural heritage have been taken from them. Sarah shared:
There’s a rock art site on Beecroft Head that has a White-bellied Sea-Eagle on it, but what that means to us...what cultural significance that has...that knowledge has been taken from us.

Sarah, Jerrinja Aboriginal Community member

Jerrinja Aboriginal Community’s hope falls into the ability to have land that they can access, connect to (or re-connect to) their traditional Country, and be directly involved in its management. In a traditional sense, the significance of the White-bellied Sea-Eagle to the individuals interviewed from the Jerrinja Aboriginal Community, or to other members they know, is unclear. However, the species was recognised several times to be a prominent species in their landscape, particularly during some of their interactions with Country (e.g. fishing).

5.5. Conclusion

This chapter presented and interpreted perspectives pertaining to Aboriginal ‘ways of knowing’, conceptualisations of space, and cultural significance, all in relation to the thesis’ underlying theme, the White-bellied Sea-Eagle. This chapter uncovered both Aboriginal and non-Indigenous discourses and perspectives pertaining to these themes of ‘Aboriginal ways’, which uncovered firstly, the continued contestation and validation of Aboriginal knowledge by non-Indigenous people. Furthermore, several participants indicated the characteristic of Aboriginal knowledge as being ‘guarded’. Non-indigenous participants explained the difficulty of incorporating Indigenous environmental knowledge, due to its ‘questioned existence’ or ‘validation’ as well as the nature with which that ‘potential’ knowledge was held (i.e. guarded). Furthermore, some non-Indigenous participants acknowledged how this critical judgement of Aboriginal knowledge systems by non-Indigenous people at times impacts Aboriginal people’s confidence or willingness to be involved, particularly when confronted with Western approaches. However, Section 5.2.3. Indigenous environmental knowledge at work highlighted both the existence and functionality of Indigenous environmental knowledge in the study area, which was recognised by both Aboriginal and
some non-Indigenous participants. Additionally, this section demonstrated Aboriginal peoples’ acceptance of and influence by Western Science.

Secondly, Aboriginal conceptualisations of space were uncovered in both Aboriginal and non-Indigenous discourses, deriving from both published material in the study area as well as field data collected. Traditional conceptualisations of space were uncovered for both the Jerrinja Aboriginal Community and the Wreck Bay Aboriginal Community, as well as the ‘fluid’ boundaries with which those divisions were held. Results demonstrated this was an important conceptualisation of space for which to draw traditional attachments to land, particularly in the effort to reclaim traditional lands back. Aboriginal Communities in a bureaucratic framework are confirmed to be immensely complicated yet necessary spatial organisations in liaising with Western bureaucratic organisations for involvement in environmental management and or making land rights claims. Discussions with Aboriginal participants in particular revealed that they are individuals of a group which is often viewed as one entity. Furthermore, in Jerrinja Aboriginal Community’s case, they must deal with a multitude of surrounding stakeholders to be involved in land and species management, though both participant groups confirmed this involvement was extremely limited. The complexities of living by perpetuated Western constructions of land and ‘nature’ in addition to maintaining traditional conceptualisations of space was easily demonstrated. However, a final spatial component which was easily maintained due to its holistic nature as well as the species mobility, consisted of the collective landscape and the prominent nonhumans in it: in this case, the White-bellied Sea-Eagle.

The final theme for this chapter presented the personal connections and cultural significance of the White-bellied Sea-Eagle to Aboriginal Communities. Firstly, this section presented some national, regional and local artwork which incorporated the White-bellied Sea-Eagle. While this art was primarily a tool seeking individual identity, Aboriginality and one’s stories with Country, it was also a device for connecting to Country and the nonhuman life forms which are central to it. In these artworks, the White-bellied Sea-Eagle was central. The next two sections in this theme, presented and interpreted Wreck Bay Aboriginal Community participant and Jerrinja Aboriginal Community participants’ connections to Country and the White-bellied Sea-Eagle. The results demonstrated considerable contrasts between the participants from the two communities and their connection to the species; with Wreck Bay Aboriginal Community have the ability to live on large parts of their traditional Country and to live with the White-bellied Sea-Eagle, and with Jerrinja focussing primarily on gaining
self-determination with land rights. However, general commonalities were demonstrated in the species association to the landscape with which both groups live. Additionally, Toby argued the well known connection between the species and the Wreck Bay Aboriginal Community was not a unique situation. As displayed in Chapter 2, many Indigenous Communities throughout the world have an affinity to large birds of prey. However, it is not only Indigenous Communities who maintain this nonhuman charisma, but rather it is a commonality between both the non-Indigenous (as shown in Chapter 4) and Aboriginal participants in this study area.
COMPARISON AND DISCUSSION OF IMPLICATIONS: JERVIS BAY

6.1. Introduction

Chapters 4 and 5 presented and interpreted the Indigenous and non-Indigenous participant narratives: results and findings. With the dialogue of knowledge, space and cultural significance unfolded, this Chapter serves as a synthesis of the theories applied and the resultant themes this research project uncovered. Firstly, Section 6.2. revisits the research question, ‘ways of knowing’, and reconnects to the theoretical framework to provide a discursive analysis of the cross-cultural dialogue and knowledge-nature constructions. Next, Section 6.3. re-examines the research question, ‘conceptualisations of space’, drawing together the major themes and multiple spatiality’s presented in the results, as well as initiating an overlapping spatiality onto the rest with the White-bellied Sea-Eagle: both a nonhuman agent and a mobile organism for which to be managed. Next, Section 6.4., re-examines the research question ‘personal connections and cultural significance’, understanding what connections are made and recognising the cross-cultural commonalities. Finally, Section 6.5. provides an overview of the research aims, discusses implications generally, as well as specifically for the Jervis Bay region, and highlights possibilities for future research.
6.2. Ways of Knowing: What Counts as Knowledge

This research acknowledges that multiple nature-knowledge constructs exist within the Jervis Bay region, and that while being a cross-cultural study, results demonstrated a considerable amount of overlapping, as well as conflicting traits between the two participant groups’ ‘ways of knowing’. Additionally, contradictions within systems of nature-knowledge construction were demonstrated by both participant groups. To bare these complexities in a clear and organised fashion, I will first discuss the contradictions demonstrated by the Western science nature-knowledge construction.

Scientific thought is wrought with the perception of a separate and objective observer, who then studies the object of interest. This idea stems from larger Western nature constructs suggesting the existence of a culture/nature hierarchical dualism; humans are separate and superior to the nature-nonhuman encounters. However, for the environmental manager or the scientist, the production of an interest for an object of study indicates an emotive component for which the scientist is drawn to the ‘object’ of interest. The Western science practitioners’ discourses for this research project, laid bare the embodied and affective dimensions of their encounters with the White-bellied Sea-Eagle in a number of ways.

Three of the Agency staff participants specialised in research on the White-bellied Sea-Eagles, interests which they continued to pursue following initial studies. This demonstrates what Lorimer (2007) notes as ecological charisma for a nonhuman agent. Something about the White-bellied Sea-Eagle, its attributes, allowed the Agency staff participants to recognise the species and to distinguish it from others. Despite not being of a Western science background, the traditional role of the White-bellied Sea-Eagle in the Wreck Bay Aboriginal Community as a guardian species, as well as the Sea-Eagle displayed on the BNP symbol, both indicate that this species was and remains a focal species for the community. Secondly, ecological charisma involves the concurrence of the White-bellied Sea-Eagle’s natural patterns and occurrence with that of the human’s. Given the White-bellied Sea-Eagle is diurnal (occurring during the day) it is widely seen by several humans. Two agency staff participants recognised the daily patterns (from hunting areas, perching areas, to breading areas) of the species, one for photography the other for a nesting site study. While both emulate ecological charisma, through seeking out the White-bellied Sea-Eagle in its daily patterns and thus learning to be affected by the nonhuman organism, they also represent
forms of aesthetic and corporeal charisma (Lorimer, 2007). The agency staff participant seeking photographs embodied an aesthetic charisma; something about the White-bellied Sea-Eagles behaviour or physical form triggered the desire within the agency staff participant to capture these in photos. The agency staff participant who surveyed for nesting sites manifested corporeal charisma through jouissance; the agency staff participant derived some form of enjoyment from being able to identify the nonhuman in the field. Similar to agency staff ‘learning to be affected by the nonhuman organism’, a participant from the Jerrinja Aboriginal Community often, when fishing, sought to look for the White-bellied Sea-Eagles he knew he would find in their regular spaces. While the ‘sharing’ relationship described by the Wreck Bay Aboriginal participant is due to the shared place of residence, he too knows where to look for the species. The primary difference in these examples; however, is the Aboriginal participants have not explained a presupposition of being a Scientist and of being a human outside of nature. As a result, agency staff are demonstrating that the Western science model thus reveals the falsity of its own binary logic.

Several academics have previously suggested a binary between scientific and Indigenous knowledge (Gregory et. al, 2009). While it is evident that some contestation of Indigenous environmental knowledge exists within the study area, as well as conflicting patterns of knowledge production and holding, it is also apparent that the ‘privileged’ Western knowledge construct does not form a finite binary in its relationship to Indigenous environmental knowledge. While perceptions of Western knowledge as an exclusive entity permeated non-Indigenous participants’ perceptions of their knowledge constructs, their actual knowledge of the White-bellied Sea-Eagle drew only somewhat from scientific sources and overwhelmingly from practical or ‘local’ knowledge: an often defined characteristic of Indigenous knowledge. Likewise, Indigenous people have also been influenced by Western knowledge, such as the Wreck Bay Aboriginal Community welcoming Dr. Stephen Debus in the mid 90s to conduct surveys on the resident White-bellied Sea-Eagle (a previous study to the proposal mentioned in Section 1.2.).
6.3. Conceptualisations of Space: Conservation Interests Managed, the White-bellied Sea-Eagle, and Expressions of Law

6.3.1. Aboriginal and non-Indigenous perspectives

This research acknowledges that multiple conceptualisations of space are ‘at work’ within the Jervis Bay study area, as demonstrated in Chapters 4 and 5. In fact, spatial conceptualisations in practice appear to be one of the most significant conflicts between Aboriginal people and agency staff in Jervis Bay. Western spatial constructions are divided up into multiple tenures, and organised into bureaucratic structures, which are guided by Western law and policy: usually a governing force outside of the local area. Even within the protected area framework in Jervis Bay, tenure is fragmented (aside from BNP). This makes it both difficult to manage and difficult for the Jerrinja Aboriginal Community to get involved when dealing with so many tenures. Contrastingly, Aboriginal traditional conceptualisations of Country are widespread and holistic. These traditional conceptualisations of Country still play a vital role for Aboriginal Communities in filing land claims over traditional land. However, land grants go hand in hand with the establishment of an Aboriginal bureaucratic entity which represents the community and holds title to any land granted. This contrasts significantly with Aboriginal world views and particularly the belief in the local area (at least) that no Aboriginal person can represent another.

Amongst all of these complex topical issues with land rights and modern tenure systems, is Western theory of integrated management, a ‘holistic’ approach to managing the land. While this is difficult in operation due to various tenures and stakeholders, it is a small commonality among spatial outcomes between Aboriginal people and agency staff. Despite the main concern for holistic management is the fear of protected areas becoming islands, the outcome is similar to traditional Aboriginal beliefs and practices.

6.3.2. ‘Managing’ a Mobile Organism

An overlapping spatiality onto the other presented tenure multiplicities in Jervis Bay is the White-bellied Sea-Eagle’s own land uses and territory claims. Though the species is somewhat deterred from high human settlement densities, the White-bellied Sea-Eagle ranges widely throughout these various tenures. Which makes ‘management’ of this species
incredibly difficult with different areas have varying resources and conservation priorities. Kremen et. al. (2007:36) argue:

Managing for mobile organisms...requires considering not only the local scale...but also a landscape scale that reflects both the spatial distribution...and the foraging and dispersal movements of the organisms.

A study conducted by Thurstans (2009) sought to conduct a large scale mapping of Sea-Eagle nesting sites; however, only a small portion of these nests were mapped. Another consideration to make is that nesting sites, though the most vulnerable part of the Sea-Eagles behaviour patterns, is only one aspect of their life cycle. Perhaps, this is why management of the White-bellied Sea-Eagle is really non-management. Either the concept of managing a mobile organism doesn’t really work, or it is much too difficult for fragmented protected areas to take on such a large scale project.

6.4. Personal Connections and Cultural Significance

Rose & van Dooren (2009) quote the conservation biologist, Michael Soule in his argument, ‘People save what they love’. This statement was corroborated by the fieldwork conducted for this study within the Jervis Bay region. In a Jervis Bay Bird Monitoring Program Report, which the White-bellied Sea-Eagle was a part of, Coyte (2004: 1) argued, ‘...public interest in many species...requires management actions to be taken.’ This was found to be a major commonality between the two participant groups. Most participants from both groups desired the species to be protected, as it is noted to be iconic to or an integral part of the landscape at Jervis Bay. While contrasts in world views were noted between most Aboriginal participants and agency staff, with the former categorising themselves amongst the other species and into landscape conceptualisations, and the latter recognising the species as iconic to the landscape within a perceived nature-culture binary.

Toby made a significant argument with regards to the uniqueness of the Aboriginal connection to the White-bellied Sea-Eagle in Jervis Bay. He argued that relationships like this are found all over the world between Indigenous people and large birds of prey. An added component to consider is that perhaps this is yet again another commonality that these
significant, and easily identified nonhuman agents have the power to shape and teach us how to ‘become-animal’.

6.5. The Road Ahead

This thesis aimed to cross-culturally investigate ways of knowing, conceptualisations of space and the cultural significance of the White-bellied Sea-Eagle, a nonhuman-human interaction. This was achieved through the application and investigation of the theories, ‘nature as contested’ and ‘nature as more than human’ in cross-cultural discourses in the Jervis Bay region. This project, given its short duration, is aimed to serve as a foundation for future works in cross-cultural human geography and nature conservation realm. This thesis provided a solid ethics and methodology section for confronting cross-cultural research. Future research could include further investigations into the complexities of ‘managing a mobile species’. Further cross-cultural investigations into the complexities of knowledge-nature constructs in the Jervis Bay region would be appropriate, particularly for projects which may have more time invested.

This discussion has analysed the commonalities and differences between the Aboriginal participants and the agency staff participants from the Jervis Bay region: evaluating ways of knowing, conceptualisations of space and managing a mobile organism, and cultural significance, all pertaining to the White-bellied Sea-Eagle. ‘The Road Ahead’ has been discussed. The following Chapter 7 will thus give a brief summary conclusion, connecting what we have learned to the initial issues raised when identifying this project in the Jervis Bay region.
BRIEF SUMMARY CONCLUSION

With the application of theory and the interpretation of the results presented in Chapters 4 and 5, as well as the discussion from the previous chapter fresh in mind, this chapter serves as a brief summary of the commonalities and differences identified between the two participant groups. It is clear in the major themes discussed in this thesis that the two participant groups’ ways of knowing, ways of conceptualising space, and ways of relating to Country and nonhumans, stand in stark contrast to one another due to the differences in world views. However, several common interests were identified between the participant groups, which have the potential to drive similar and desired physical outcomes for both groups. The most significant commonality identified in this thesis, is the overlapping interests in the White-bellied Sea-Eagle. Both the Scientists and the Aboriginal Communities take an avid interest in the species. Whether the interest is in the form of research for conservation purposes, or for the interest that the species remains a focal point in the landscape and the guardian of Country: both are driven by the nonhuman charisma and the desire to continue the human-non-human interaction. This desire is powerful, enough to drive positive and realistic results for both participant groups.
Referring back to the identification of this research project, some participants mentioned that had the scientists who approached the Booderee National Park Board for approval of their research, done so in a different way (i.e. in consultation with the Wreck Bay Aboriginal Community) that the Wreck Bay Aboriginal Community may have given a different response. It is clear the Wreck Bay Aboriginal Community is not opposed to Western Science knowledges, as scientist were previously engaged in the mid 90s to conduct surveys on the parks resident White-bellied Sea-Eagles. However, consultation, negotiation and incorporation of the Aboriginal Community is essential. Failure to recognise firstly that ‘nature is contested’, that there are different ways of perceiving it, managing it, adapting to it, and living with it, is detrimental to any scientist who wishes to conduct research on Aboriginal owned land; the research should be collaborative. These differences must be recognised and negotiated. Furthermore, in this case in particular, the scientists failed to see the one clear commonality they shared with the Aboriginal Community...the common ground which exists in the nonhuman charisma which inspires them both. Recognising the emotive power of that interest, as well as the non-objective nature of that interest, is a way to relate cross-culturally and negotiate a way forward.
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Flora & Fauna Guarantee Act 1988 (VIC)

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Native Title Act 1993

Native Title (NSW) Act 1994

Seat of Government Acceptance Act 1909

Seat of Government (Administration) Act 1910

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Threatened Species Conservation Amendment Act 2002 (NSW)

Threatened Species Protection Act 1995 (TAS)
Appendix A: Structure Charts of DECCW and NPA

DECCW Organisational Chart

(Source: DECCW, 2010)
National Parks Australia Organisational Chart, See Booderee National Park

(Source: Director of National Parks Annual Report 2006-2007)
Appendix B: University of Wollongong, Human Research Ethics Committee Application

Research Office use only

HE 08/_____

UNIVERSITY OF WOLLONGONG/SOUTH EASTERN SYDNEY & ILLAWARRA AREA HEALTH SERVICE

HUMAN RESEARCH ETHICS COMMITTEE
APPLICATION FOR APPROVAL TO UNDERTAKE
RESEARCH INVOLVING HUMAN PARTICIPANTS

A. GENERAL INFORMATION

1. Descriptive Title of Project:

White-bellied Sea Eagles in the Jervis Bay region: An exploration of the cultural, ecological, and conservation significance for Aboriginal community boundaries and surrounding spaces

2. 7 line summary of project aims:

This research project aims to explore and document the cultural significance of white-bellied sea Eagles to various Aboriginal communities in the Jervis Bay region. This project will also investigate both ‘scientific’ ecological knowledge and ‘traditional’ ecological knowledge of the sea Eagles as well as conservation theories and initiatives ranging from a global to a local scale. Participant groups will be asked to participate in the mapping of significant cultural sites related to sea Eagles to explore different conceptual frameworks of space.

3. Participating Researchers

Summarise the qualifications and experience of all personnel who will be participating in the project.

NB: For student research, a Supervisor must be the Principal Investigator.

<p>| Principal Investigator/Supervisor |</p>
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<th>Title</th>
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<tr>
<td>Professor</td>
<td>Lesley</td>
<td>Head</td>
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<tr>
<td>Qualifications</td>
<td>PhD, Fellow of the Australian Academy of Humanities (2004)</td>
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<tr>
<td>Position</td>
<td>Professor and Head of School of Earth and Environmental Science</td>
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<tr>
<td>Role in project, relevant research experience (if no experience, describe how relevant experience will be obtained)</td>
<td>Lesley’s role in this project is supervisory. Lesley is an eminent researcher with extensive research experience and skills, evident from numerous published works.</td>
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**Second Investigator (in absence of PI)**

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<th>Title</th>
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<td>Dr.</td>
<td>Michael</td>
<td>Adams</td>
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<tr>
<th>Qualifications</th>
<th>Bachelor of Arts (Hons) University of Sydney; Bachelor of Landscape Architecture University of Sydney; Doctor of Philosophy University of Wollongong</th>
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<tr>
<td>Position</td>
<td>Lecturer, Woolyungah Indigenous Centre</td>
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<td>Role in project, relevant research experience (if no experience, describe how relevant experience will be obtained)</td>
<td>Michael’s role in this project is supervisory. Michael has carried out collaborative research with Aboriginal and Torres Strait Islander peoples in numerous contexts, including ‘remote’ Aboriginal and Islander communities (Cape York), and Aboriginal people from regional centres (Townsville, Bowen, Wollongong) and urban areas (Sydney). He has 20 years employment and consultancy experience with Aboriginal organisations across a spectrum of responsibilities, as well as professional roles in environment NGOs and state agencies. Michael also has an extensive record of publications in academic and applied fields, including geography, biodiversity conservation, Native Title mediation documents, bioregional and conservation planning reports, and technical reports and manuals in community participation and environmental management.</td>
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Co-Investigator/Student

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<tr>
<td>Role in project, relevant research experience (if no experience, describe how relevant experience will be obtained)</td>
<td>Amanda’s role in this project is primary researcher. Amanda completed a final year undergraduate research project for a thesis requirement. Project from July 2007-May 2008 titled “Dawn and New Dawn or Dawn of the Dead: A Rediscovery of Australian History”, <em>The Effects of Pastoral Expansion and Government Legislation in New South Wales and Queensland on Aboriginal Women and Children, 1820-1967</em> (2008), Final Mark: A (98/100). While Amanda’s field research experience is minimal, guidance from supervisor’s Prof. Lesley Head and Dr. Michael Adams, and continuous oversight from targeted participants will help her complete the project in an ethical manner.</td>
</tr>
</tbody>
</table>

Please add extra boxes for additional researchers

4. Contact details for correspondence

Name: Amanda Baldwin  
Postal Address: 19/26 Market St.  
Wollongong, NSW 2500  
Email: amb354@uow.edu.au  
Phone: 0401906622 (mobile)

If principal contact is not the Principal Investigator, please provide the contact details for the PI:

Name: Lesley Head  
Postal Address: Building 41 Room G14, Faculty of Earth and Environmental Science, the University of Wollongong, NSW  
Email: lhead@uow.edu.au  
Phone: 4221 3124
5. **Expected duration of Research** (Please specify as near as possible 'start' and 'finish' dates for the conduct of research):

   FROM: 10/2009  TO: 03/2010

6. **Purpose of Project**

   Indicate whether the research is one or more of the following:

   - [ ] Staff Research (University of Wollongong)
   - [ ] Staff Research (SESIAHS)
   - [✓] Student Research - specify:
     - Course undertaken: THES924
     - Unit/Faculty/Department: School of Earth and Environmental Science
     - Supervisor/s: Dr. Michael Adams and Prof. Lesley Head
   - [ ] Other (Please specify)

7. **Has this research project been reviewed by any other Institutional Ethics Committee?**

   YES [✓] NO [ ]

   If no, go to Section B. If YES:

   7.a What committees has the application been submitted to?

   7.b What is the current status of these applications? Please include copies of all correspondence between the sponsor or researcher and the other Ethics Committee(s) to this point.

B. **FINANCIAL SUPPORT FOR RESEARCH**

8. **What is the source and amount of funding from all sources for this research?**

   N/A

<table>
<thead>
<tr>
<th>Source (Name of Organisation / Funding Scheme)</th>
<th>Amount</th>
</tr>
</thead>
</table>

Appendices 193
For sponsored research please include the budget for the trial including information about capitation fees, payments to researchers, institutions or organisations involved in the research, current and consequential costs and costs which may be incurred by participants.

If the research is sponsored:

N/A

8.a Is there any affiliation/association or financial interest between the researcher(s) associated with this research and the sponsor/funding body/supplier of a drug, surgical device or other therapeutic device to be used in the study?

YES ☐ NO ☐

If Yes, Please detail.

8.b Are there any conditions placed on this research by the funding body?

YES ☐ NO ☐

If YES, please provide details and provide a copy of the contract/letter of agreement with the funding organisation detailing the terms on which the research is being supported.

8.c Is a copy of the HREC approval to be forwarded to the Granting Body?

YES ☐ NO ☐
If YES, please advise of any deadlines.

C. RESEARCH METHODS

9. Research Categories

Please mark the research categories relevant to this research proposal. At least one category should be marked for each grouping. You should mark as many categories as are relevant to the proposed research. For "Other", please specify.

A Research procedures used

☐ Anonymous questionnaires/surveys
☐ Coded (potentially identifiable) questionnaires/surveys
☐ Identifiable questionnaires/surveys
☐ Examination of student work, journals etc
☐ Examination of medical, educational, personnel or other confidential records
☒ Observation (overt)
☐ Observation (covert)
☒ Interviews (structured or unstructured)
☒ Telephone interviews
☐ Procedures involving physical experiments (e.g. exercise, reacting to computer images)
☐ Procedures involving administration of substances (e.g. drugs, alcohol, food)
☐ Physical examination of participants (including eg. blood glucose, blood pressure and temperature monitoring)
☐ Collection of body tissues or fluid samples
☐ Surgical procedures
☐ Other:
B  Research areas

☐ Qualitative research
☐ Social Science research
☐ Humanities research
☐ Educational research
☐ Health research
☐ Psychological research
☐ Comparison or evaluation of drugs or surgical or other therapeutic devices
☐ Comparison or evaluation of clinical procedures
☐ Comparison or evaluation of counselling or training methods
☐ Investigation of the effects of an agent (drug or other substance)
☐ Investigation of bio-mechanical processes
☐ Biomedical research
☐ Epidemiology
☐ Genetic research
☐ Other:

10. Does the project involve: the use of drugs, a surgical device, a therapeutic intervention, or a physiological trial?

YES ☐ NO ☒

If no, go to Q11. If YES:

10.a Please give details of the type of intervention and provide evidence that appropriate indemnity and compensation arrangements are in place to ensure adequate compensation to participants for any injury suffered as a result of participation in the trial (Indemnification forms and, if the research is being undertaken in a private practice, evidence of adequate and appropriate insurance coverage).

10.b Is the research registered:
11. Research design and justification

Describe what you want participants to do and justify the design. Please provide an explanation in terms understandable by a non-expert reader. A flow chart or other diagram illustrating the sequence of research activities should be included if possible. For research involving a treatment or physical intervention (eg clinical studies, physiological trials, mental health interventions) a protocol should be provided.

Participants (Age >18): Two Target Groups

1. Employees of a specific company/organization: Booderee National Park, Jervis Bay National Park NSW (DECCW), Jervis Bay Marine Park

2. Aboriginal people from the Wreck Bay community and other surrounding communities

Research procedures: In order of sequence

1. Review of published literature on an international scale relevant to the research topic
2. Review of documentation compiled during the establishment of Booderee National Park, Jervis Bay National Park (NSW), and the Jervis Bay Marine Park
3. Interviews within both target groups (structured and semi-structured) conducted using methods approved by the interviewed persons (recorded or through notes; whichever is acceptable to the interviewee)
4. Information compiled by Geographic Information Systems within Booderee National Park
5. Consulting participants with the project’s findings
6. Writing of the research findings in the Master’s thesis
7. Consulting participants with the thesis and the dissemination of data
8. Dissemination of Data

Continuous procedures:

1. Both members of park staff and the Aboriginal communities involved with the study will be overseeing the project throughout the duration of the study through consultation. This will ensure that the methods
and literature review are consistent with what both target groups hope to achieve overall with the project.

12. Statistical design

Any research project that involves the collection of data should be designed so that it is capable of providing information that can be analysed to achieve the aims of the project. Usually, although not always, this will involve various important statistical issues. It is important that the design and analysis be properly planned in the early stages of the project. You should seek statistical advice. The University of Wollongong has a Statistical Consulting Service that provides such advice to research students and staff undertaking research.

Are statistical issues relevant to this project?

YES ☐ NO ☑

If no, go to Q13. If YES:

12.a Have you discussed this project with the Statistical Consulting Service or any other statistical advisor?

YES ☐ NO ☑

If NO, please explain why not.

12.b Provide the calculations used to determine the appropriate sample size. If no power calculations have been done please explain the reason for choosing the sample size.

D. ETHICAL CONSIDERATIONS

13. What are the ethical considerations relevant to the proposed research, specifically in relation to the participants’ welfare, rights, beliefs, perceptions, customs and cultural heritage? How has the research design addressed these considerations? Consideration should be at both individual and collective level.

Ethical conduct in Aboriginal research: Any information collected from Aboriginal participants must/will be taken back to that particular participant seeking their approval before including it in the final report of this research. At all times the participant’s right to withdraw from the research and
remove any prior contributions they may have made to the research will be upheld and respected.

Informed consent: an information sheet will be available to all participants to outline the aims, purpose and focus of the project, and the organisation promoting the research (UoW). Furthermore, all the information set out on the sheet will be verbally communicated to groups prior to any interviews being conducted.

Freely and knowingly consent: All participants will be required to sign a consent form to be able to participate in this project. In any circumstances where people refuse to sign a form but wish to participate, verbal consent will be accepted. Consent will only be accepted after the participant has been fully informed on the aims and purpose of the research. Any concerns that participants have in regard to the way the information they provide will be used and stored must also be answered before consent will be acknowledged. The participant will be advised throughout the research process that they are free to withdraw from the project at any stage and remove their contribution.

Confidentiality: For all the interviews conducted, the information sheet, consent form and verbal information will clearly state how participants’ identity will be kept confidential. Any data used in the final report will not contain the names of participants, unless otherwise requested by the participant.

E. RISKS AND BENEFITS

14. Does the project involve the risk of emotional distress or physical harm, or the use of invasive procedures (e.g. blood sampling)?

   YES □ NO ❌

   If YES

   14.a What are the risks?

   14.b Explain how the risks of harm or distress will be minimised. In the case of risks of emotional distress, what provisions have been made for an exit interview or the necessity of counselling?

15. Is information about criminal activity likely to be revealed during the study?

   YES □ NO ❌
If YES, have you included a caution regarding any relevant mandatory reporting requirements in the Participant Information package?

16. Detail the expected benefits of the study to the participants and/or the wider community.

Giving rise to any harm whatsoever is highly unlikely. Initial conversations with all potential participants thus far have shown support for the research. Participants from surrounding Aboriginal communities within the study area and park staff are likely to support the outcome of this research as it will promote a better understanding of the various local Aboriginal people and their cultural heritage. A better understanding of cultural heritage and conservation theories of both Aboriginal and non-Indigenous people will likely promote a more positive relationship between both groups targeted and lead to an improved understanding of conservation techniques.

F. PARTICIPANTS

17. Mark the categories relevant to this proposal.

- Healthy members of the community
- University students
- Employees of a specific company/organisation
- Members of a specific community group, club or association
- Clients of a service provider
- Health Service clients (e.g. users/clients of a health service)
- School children
- Hospital in-patients
- Clinical clients (e.g. patients)
- Aboriginal/Torres Strait Islander people
- Members of socially disadvantaged groups
- Cadavers/ cadaveric organs
- Other (please specify): _____
18. Expected age(s) of participants – please mark one or more

☐ Children (under 14)
☐ Young people (14-18)
☒ Adults (> 18)

19. What is the rationale for selecting participants from this/these group/s?

Aboriginal people from the Wreck Bay community share significant cultural ties to the White-bellied sea Eagles, though there is limited academic literature about this relationship. Sea Eagle populations throughout the rest of Australia and internationally are declining, yet within the study area (Booderee National Park, Jervis Bay Marine Park, and NSW Jervis Bay National Park), these populations thrive. This study will target the cultural significance of these raptors to the Aboriginal communities within the study area through voluntary interviews, looking at heritage sites related to the species, and investigate the community’s traditional knowledge regarding conservation theories. This study will also use participatory mapping methods to map sites of cultural significance using the park’s Geographic Information Systems.

Both Aboriginal and non-Indigenous staff members from Booderee National Park, Jervis Bay Marine Park, and the NSW Jervis Bay National Park will be targeted for this study to comment on observed cultural significance of the white-bellied sea Eagles, to provide scientific knowledge and conservation theories for the white-bellied sea Eagles, and to provide additional information on significant sites for this project. Staff members will also provide integral information related to the parks already well established maps created with their Geographic Information Systems.

G. RECRUITMENT

20. How will potential participants be approached initially and informed about the project? e.g. direct approach to people on the street, mail-out to potential participants through an organisation, posters or newspaper advertisements, etc. Please explain in detail and include copies of any letters, advertisements or other recruitment information.

My supervisors and I have undertaken initial consultations with both members of the Wreck Bay Aboriginal Community and staff members within Booderee National Park, Jervis Bay Marine Park, and NSW Jervis Bay National Park. Prior to these initial consultations, discussions took place between Dr. Michael Adams and various members of Aboriginal
communities about this issue. The project received positive feedback from individuals within both target groups.

Please see table below displaying potential participants who have already been consulted informally and have shown support and interest in the study.

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Date/Contact</th>
<th>Description of consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matt Carr</td>
<td>Jervis Bay Marine Park Manager</td>
<td>31st August, 2009</td>
<td>Telephone conversation with supervisor Michael Adams</td>
</tr>
<tr>
<td>Steve Moore</td>
<td>NSW Jervis Bay National Park Ranger</td>
<td>31st August, 2009</td>
<td>Telephone conversation with supervisor Michael Adams</td>
</tr>
<tr>
<td>Martin Fortescue</td>
<td>Booderee National Park Manager</td>
<td>13th June, 2009</td>
<td>Multiple email correspondence with supervisor Dr. Michael Adams (*see attached)</td>
</tr>
<tr>
<td>Markeeta Freeman</td>
<td>Family member of Wreck Bay Aboriginal community</td>
<td>31st August, 2009</td>
<td>Email correspondence with supervisor Dr. Michael Adams</td>
</tr>
<tr>
<td>Julie Freeman</td>
<td>Family member of Wreck Bay Aboriginal Community and Park Staff at Booderee National Park</td>
<td>Previous relationship with supervisor Michael Adams</td>
<td>Earlier discussions with supervisor Dr. Michael Adams; potential participant</td>
</tr>
</tbody>
</table>

Also find attached, email correspondence between some of these individuals and supervisor Dr. Michael Adams.

21. Where will potential participants be approached by the researchers to seek their participation in the research, and where will research activities involving participants be conducted?
Potential participants will only be approached by the researcher after receiving prior initial consent to participate in the project. Activities will be conducted in an area agreed upon by the participant who will arrange the location of the interview.

22. How many participants in total do you anticipate will be involved in the project? If the research has several stages and/or groups of participants, please provide the total number of participants expected as well as the number and participant group involved in each stage.

With the initial consultations, I can estimate a minimum of 5 participants. If approved, the number of participants could grow as the project progresses; however, I do not foresee over 30 people participating in the study.

H. CONSENT PROCESS

Generally the consent of participants must be obtained prior to conducting research. If you do not intend to seek people’s permission to use information about them which may be identifying, you may need an exemption from State and Federal Privacy requirements. This is addressed in Section I. Attach copies of any letters of invitation, information packages, consent forms, proxy/substitute consent forms, debriefing information, identification cards, contact detail cards, etc.

23. Will consent for participation be obtained from participants or their legal guardians?

YES ☒ NO ☐

If NO, go to Q31.

24. How will consent for participation be obtained?

☒ in writing
☒ verbally
☐ tacit (eg indicated by completion and return of survey)
☐ other (please specify)
☐ consent not being sought

Please explain why the method chosen is the most appropriate and ethical.

Written consent will be required for involvement in this project. However, if in the situation that Aboriginal people refuse to sign a contract on the basis
that the information being shared is part of their cultural practice, verbal consent will be accepted. Written consent will be required however from participants from the non-Indigenous staff members of Booderee National Park, Jervis Bay Marine Park, and NSW Jervis Bay National Park.

No research will be done or data/information be included without the consent of the participants.

25. Is it anticipated that all participants will have the capacity to consent to their participation in the research?
   
   YES ☑ NO ☐

   If NO, please explain why not (e.g. children, incompetent participants, etc.) and explain how proxy or substitute consent will be obtained from the person with legal authority to consent on behalf of the participant.

26. For participants who have the capacity to consent, how does the process ensure that informed consent is freely obtained from the participant?

   Participant information sheets will be given to all potential participants to ensure each participant fully understands the nature of the project and what it will require of them. This research will involve collecting information from two participant target groups. As a result, multiple information sheets, consent forms, and interview questions are required to suit each target group.

   Please see attached copies of consent forms, information sheets, and interview questions for potential participants from both target groups.

27. Are any participants in a dependant relationship with the researcher, the institution, or the funding body (for example the researcher’s clinical clients or students; employees of the institution; recipients of services provided by the funding body)? If so, what steps will be taken to ensure that participants are free to participate or refuse to participate in the research?

   N/A

28. How does the project address the participants’ freedom to discontinue participation? Will there be any adverse effects on participants if they withdraw their consent and will they be able to withdraw data concerning themselves if they withdraw their consent?
Participants are free to withdraw involvement in the research at any stage, as stated in the information sheet, consent form, and to be verbally discussed. No adverse effects will be incurred by the participant if they wish at any stage to withdraw. Furthermore, the data which they have provided as part of the research will be removed from the research project if they request its removal.

29. Does the project involve withholding relevant information from participants or deceiving them about some aspect of the research?

   YES ☐   NO ☑

   If YES, what is the justification for this withholding or deception and what steps will be taken to protect the participants’ interest in having full information about their participation?

30. Will participants be paid or offered any form of reward or benefit (monetary or otherwise) for participation in the research? If so, please detail and provide a justification for the payment, reward or benefit.

   There is no financial compensation or reward for participating in the research; however, the research may benefit both the Aboriginal communities and the park authorities within the study area to promote a better understanding of cultural heritage and various conservation theories regarding the white-bellied sea Eagle.

   I. CONFIDENTIALITY AND PRIVACY

31. How will the privacy of individual subjects be protected when recording and analysing the data?

   Data that will be collected through the course of the research will be viewed only by me and my supervisors, Dr. Michael Adams and Professor Lesley Head.

   Confidentiality will be achieved by using pseudonyms in the final report (unless otherwise requested by the participants who will be aware of methods used). Data will be kept on a private and password protected computer.

32. Will information collected from data or interview be published or reported?

   YES ☑   NO ☐

   If YES, what form this will take? All uses of data must be explicitly consented to.
The data collected will be used in the results of the project for the Master’s thesis, published at the beginning of March, 2010. Participants will be offered feedback of the findings through the course of the study orally and in an informal setting. At the completion of the project a ‘plain English text’ will be compiled to give back to participants, detailing the findings of the research.

33. Will any part of the research activities be placed on a visual or audio recording (eg audiotape, photograph or video-tape)?

   YES ☐ NO ☐

If YES,

33.a What will the recording be used for?

Data will consist of written notes, audiotape, and possibly photographs if participants permit. These tapes will be used for interview transcription, which will then be critically analysed by the researcher. Audiotapes will also be used so that the participants who are involved in the research will have access to the information communicated as part of the interview process after the research has been completed. (note: should participants not wish to consent to audiotape recording, these wishes will be respected).

33.b Who will see/hear the recording?

The recording will only be viewed by the researcher and supervisors, Dr. Michael Adams and Professor Lesley head; and at the request of the participant, they may hear recordings only of their own interview.

34. Data (including questionnaires, surveys, computer data, tapes, transcripts and specimens) must be securely stored at all times. Where will the data be held and who will have access to it:

a. during the project?

During the research, the data will be held by the researcher on a password protected computer and audiotapes/transcripts will be kept with the researcher in secure locations.

b. on completion of the project?

See question 35.

35. Data should be held securely for a minimum of 5 years (15 years for clinical research) after completion of the research. How long will the data be stored for? If it is not being stored, please provide an ethical justification for this.

On completion of the project the audiotapes will be held in secure storage at the University of Wollongong for five years by Michael Adams or Lesley.
Head; or at the request of Aboriginal participants, the audiotape of their interview will be returned to them where the information remains their intellectual property. As this study undertakes inter-cultural perspectives, the rights of the Aboriginal people participating must be respected.

If in the event that a participant dies while I have access to the information they have provided, all data and information will be returned to the family as quickly as possible. Any information supplied up until that data will not be included in the final report or be held by myself, unless specifically requested by the participant’s family.

36. **Does this project involve obtaining identifiable information (e.g. data) from a third party without prior consent from the participant or their legal guardian?**

   **YES ☐ NO ☑**

   If NO: You have completed the questionnaire. Please ensure that the form has all the appropriate signatures and attachments (see checklist) before submission.

   If YES: go to question 37.

37. **Who will be providing the information? Please include copies of any correspondence regarding permission to access this information from a responsible officer of the Agency.**

38. **Will the information be deidentified during collection, use, or disclosure?**

   **YES ☐ NO ☑**

   If NO: You must apply for an exemption to the State and Federal Privacy Acts. Please complete the Privacy Exemption Application Form available from the 'Forms' section of the Ethics webpage.

   If YES:

   38.a Who will be deidentifying the information? Is this a person who would normally have access to the information?

   38.b How and when will the data be deidentified?

**J. DECLARATION BY INVESTIGATORS**
**Principal Investigator:**

- I certify that I am the Principal Investigator named on the front page of this application form.

- I undertake to conduct this project in accordance with all the applicable legal requirements and ethical responsibilities associated with its carrying out. I also undertake to take all reasonable steps to ensure that all persons under my supervision involved in this project will also conduct the research in accordance with all such applicable legal requirements and ethical responsibilities.

- I certify that adequate indemnity insurance has been obtained to cover the personnel working on this project.

- I have read the *National Statement on Ethical Conduct in Human Research* and the *Australian Code for the Responsible Conduct of Research*. I declare that I and all researchers participating in this project will abide by the terms of these documents.

- I make this application on the basis that it and the information it contains are confidential and that the Human Research Ethics Committee of The University of Wollongong/SESIAHS will keep all information concerning this application and the matters it deals with in strict confidence.

<table>
<thead>
<tr>
<th>Name (please print)</th>
<th>Signature</th>
<th>Date</th>
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</table>

**Signature/s of other researcher/s:** The first named researcher will assume responsibility for the project in the absence of the Chief Investigator. All investigators must sign the application.

<table>
<thead>
<tr>
<th>Name (please print)</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (please print)</td>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

Include additional lines if necessary.

K. **APPROVAL BY HEAD OF UNIT**
This person must not be a member of the research team.

I am aware of the content of this application. I am satisfied that:

- All appropriate safety measures have been taken;
- The research is in accordance with UOW/SESIAHS Policy;

and approve the conduct of the project within this unit.

__________________________
Name (please print)       Signature       Date

**NOTE: RESEARCH MUST NOT COMMENCE UNTIL THE APPLICATION HAS BEEN APPROVED BY THE HREC.**
CHECKLIST (for applicants use)

Applications should be sent to:  
Ethics Unit  
Research Services Office  
University of Wollongong  
Wollongong  NSW  2522

Applications for the full HREC require 15 copies plus the original. Applications to the Executive Committee of the HREC (expedited review) only require the original.

☐ Original Ethics Application plus appropriate number of copies (See Web)  
☐ Participant Information Sheet/Package  
☐ Consent Form(s)  
☐ Copies of Questionnaire(s)/Survey(s) or Interview/Focus Group Questions  
☐ Copies of all material used to inform potential participants about the research, including advertisements and letters of invitation.  
☐ Evidence of permission to conduct research from site managers (Not required for research sites within NSW Dept of Health)  
☐ Evidence of approval/rejection by other HREC(s), including comments and requested alterations to the protocol  
☐ Copies of Confidentiality Agreement templates for any third parties involved in the research  
☐ Copy of Research Contract for sponsored/contract research  
☐ Copy of ‘Clinical Trial Insurance Requirements’ Form (UOW researchers answering Yes to Q10 only)  
☐ Privacy Exemption Application (researchers answering No to Q38 only)

For **Clinical Trials** you should also include:  
☐ Protocol (16 copies)  
☐ Summary Sheet (16 copies)  
☐ Budget (16 copies)  
☐ Investigator’s Brochure (6 copies)  
☐ Indemnity Form/s (3 copies)  
☐ CTN or CTX Form (1 original copy)  
☐ Insurance information (1 copy)  
☐ Clinical Trial Agreement (1 copy)
Appendix C: Correspondence, University of Wollongong, Human Research Ethics Committee

INITIAL REVIEW - RESPONSE REQUESTED
In reply please quote: HE09/292
Further Information Phone: 4221 4457

7 October 2009
Ms Amanda Baldwin
19/26 Market St
Wollongong
NSW 2500

Dear Ms Baldwin,

The HREC has REVIEWED your application in accordance with the National Statement on Ethical Conduct in Human Research.

Ethics Number: HE09/292
Project Title: White-bellied Sea Eagles in the Jervis Bay region: An exploration of the cultural, ecological and conservation significance for Aboriginal community boundaries and surrounding spaces.
Researchers: Ms Amanda Baldwin, Professor Lesley Head, Dr Michael Adams
Reviewed Date: 24 September 2009

The Committee decided that approval can be granted if satisfactory responses are received to the matters detailed below.

i) This project involves the exploration of the cultural significance of the Sea Eagles for Aboriginal communities. A basic requirement for research involving Aboriginal communities is community involvement in the development of the project; this means negotiation of the project details with clear consent/approval from appropriate community members (normally from appropriate local boards/councils); detailed agreement regarding the use and ownership of the data; a process for ongoing negotiation of consent; and some form of clear benefit for the communities (agreed to by the community). Formal consent from individuals may be a part of the agreed process, but does not constitute evidence of community support.

While the HREC appreciates that this negotiation has probably taken place, this is not clear in the application. Please provide details of the negotiations that have taken place and some form of supporting evidence (eg a signed agreement or a letter from an appropriate community representative).

ii) The proposal mentions that photographs may be taken. It is not clear who will see these or how they will be used. This needs to be explicitly agreed to by the communities and individuals.

iii) Please provide a signed Principal Investigator Declaration (page 18 of the ethics application) from Professor Head.

Please send a written response to the Ethics Officer, Research Services Office, University of Wollongong. The response can be emailed to evcs@uow.edu.au. This response will be reviewed by the Executive Committee and can be submitted at any time, you do not need to consider the agenda deadline for the next meeting of the full Committee.

Yours sincerely

A/Professor Steven Roddenrys
Chair, Human Research Ethics Committee

Cc: Professor Lesley Head, School of Earth and Environmental Sciences, 41, G14
Dear Joanne Bussey and members of the Human Research Ethics Committee,

I am writing in response to the Ethics Committee’s decision regarding the research project proposal titled, “White-bellied Sea Eagles in the Jervis Bay region: An exploration of the cultural, ecological and conservation significance for Aboriginal community boundaries and surrounding spaces”, and researchers Ms. Amanda Baldwin, Professor Lesley Head, Dr. Michael Adams. Three conditions were placed upon the approval of the project and I will address these now.

i) We have made a formal application to Booderee National Park seeking approval for this project. Booderee is jointly managed by Parks Australia and the Wreck Bay Aboriginal community through the Wreck Bay Aboriginal Council. A reply is pending, and approval from Booderee will accordingly incorporate approval from the Wreck Bay Aboriginal Council. The reply from Booderee is likely to deal with issues of use and ownership of data. Once a reply is received, the decision will be forwarded to the Ethics Committee.

In addition, conversations between M. Adams and Aboriginal individuals from both the Jerrinja Aboriginal community and the Wreck Bay Aboriginal community have indicated willingness to participate. There have also been positive responses to verbal approaches from Baldwin and Adams to management at Jervis Bay Marine Park and Jervis Bay National Park. Both of these organisations have Aboriginal as well as non-Aboriginal staff. Please see attached table and email correspondence.

ii) It is highly likely photographs will be taken during this study; however, ownership of private information will be honoured particularly with sacred sites and individuals. Permission will be obtained before a photo is taken for any images an Aboriginal community or any individuals may consider to be private or who wish to maintain ownership of the image. Furthermore, should photographs of this sort be approved, the desired use will also be explicitly explained. If the use is also approved by the individual/community involved any conditions placed on the use of such images will be followed directly and exclusively.

iii) Professor Lesley Head has signed a Principal Investigator Declaration and the original has been submitted to your office.

Please let us know if there are any other issues we must address prior to the approval of this project or if any clarification is needed to the response above.

Kind Regards,

Amanda Baldwin
INITIAL APPLICATION APPROVAL
In reply please quote: HE09/292
Further Enquiries Phone: 4221 4457

1 November 2009
Ms Amanda Baldwin
19/26 Market St
Wollongong
NSW 2500

Dear Ms Baldwin

Thank you for your response dated 15 October 2009 to the HREC review of the application detailed below. I am pleased to advise that the application has been approved, subject to the approval of the project by the managers of Booderee National Park.

Ethics Number: HE09/292
Project Title: White-bellied Sea Eagles in the Jervis Bay region: An exploration of the cultural, ecological and conservation significance for Aboriginal community boundaries and surrounding spaces.
Researchers: Ms Amanda Baldwin, Professor Lesley Head, Dr Michael Adams
Approval Date: 22 October 2009
Expiry Date: 31 March 2010

The University of Wollongong/SESIAHS Humanities, Social Science and Behavioural HREC is constituted and functions in accordance with the NHMRC National Statement on Ethical Conduct in Human Research. The HREC has reviewed the research proposal for compliance with the National Statement and approval of this project is conditional upon your continuing compliance with this document. As evidence of continuing compliance, the Human Research Ethics Committee requires that researchers immediately report:

- proposed changes to the protocol including changes to investigators involved
- serious or unexpected adverse effects on participants
- unforeseen events that might affect continued ethical acceptability of the project.

You are also required to complete monitoring reports annually and at the end of your project. These reports are sent out approximately 6 weeks prior to the date your ethics approval expires. The reports must be completed, signed by the appropriate Head of School, and returned to the Research Services Office prior to the expiry date.

Yours sincerely

[Signature]
Chair, Human Research Ethics Committee

Cc: Professor Lesley Head, Earth and Environmental Sciences
Appendix D: Booderee National Park, Permit

Ms Amanda Baldwin
Woolyungan Indigenous Centre
University of Wollongong
Northfields Ave
Wollongong
NSW 2522

Dear Ms Baldwin

PERMIT TO CONDUCT A RESEARCH ACTIVITY IN
BOODEREE NATIONAL PARK

Thank you for your application for a permit to conduct a research activity in Booderee National Park. Permits to conduct research activities in a Commonwealth reserve are a requirement of the Environment Protection & Biodiversity Conservation Act 1999 and Regulations 2000.

Please note that the local Wreck Bay Aboriginal Community has a close affinity with the White-bellied Sea Eagle and your permit has been of particular interest to members of the Wreck Bay Aboriginal Community Council (WBACC). After recent deliberations, the Council has requested that a number of conditions be placed on your permit. Accordingly, these conditions are outlined under the section titled ‘special conditions’ within the attached permit documents.

The WBACC has further requested that, if you intend to provide employment opportunities over the course of the research, that you consider appointing Indigenous people. They have also requested that the final report and research be jointly owned by the researcher and the Wreck Bay Community. I would encourage you to make contact with the CEO of the WBACC to discuss these arrangements before commencing with your project.

Please find attached to this letter is a copy of your permit, associated conditions and an indemnity statement. The operation of your permit is subject to your agreement to the associated conditions and as such, the permit holder must sign and submit a copy of the conditions and indemnity statement before commencing the proposed research activities. If you require further information, please contact myself or the Manager of Park Services, Ms Louise Oliver at this office on 02 4442 2225 or by email: louise.oliver@environment.gov.au

Yours sincerely

Martin Fortescue
A/g Park Manager
Booderee National Park
14 December 2009

Booderee National Park
Village Road
Jervis Bay Territory 2540

Telephone (02) 44421006
Facsimile (02) 44421036
booderee.mail@environment.gov.au
CONDITONS OF PERMIT TO CARRY OUT AN ACTIVITY
IN BOODEREE NATIONAL PARK

Permit Type: Research
Permit Number: BDR09/00011

PERMITTEE(S)
- Dr Michael Adams
- Ms Amanda Baldwin
  Woolyungah Indigenous Centre
  University of Wollongong
  Northfields Avenue  Wollongong
  NSW  2522

CONDITIONS – PERMITTEES COPY

Interpretation
In these conditions, unless the contrary intention appears-
*Board of Management* means the Board of Management for the Park.
*Director* means the Director of National Parks, and includes any statutory successor to the Director.
*Park* means Booderee National Park
*Permittee* means the holder of this permit and any person employed or otherwise engaged by the permit holder in or in relation to the conduct of the activity to which this permit relates.
*Permittee’s clients* means all persons taking part in the activity to which this permit relates, other than any person employed or otherwise engaged by the permit holder in or in relation to the conduct of the activity to which this permit relates.
*Plan of Management* means the Plan of Management for the Park made pursuant to the Act.
*Wildlife* means animals and plants that are indigenous to Australia including the Australian coastal sea or sea-bed and subsoil beneath that sea.

General Conditions
1. The Permittee cannot transfer this permit to another person or organisation except in accordance with regulation 17.11 of the Regulations.
2. The permittee must contact the Resources Office, Booderee National Park (telephone 02 4442 2202) on each occasion before starting work in the Reserve, give details of the vehicle(s) and personnel the permittee will be using, and must comply with the Park Manager instructions.
3. Vehicles must be kept to public roads and tracks unless authorised by the Park Manager.
4. The permittee must not enter restricted areas unless authorised by the Park Manager.
5. The permittee is required to cause the least possible environmental interference to the Park.
6. Wherever possible, research is to be conducted out of view of the general public.
7. The permittee shall be familiar with and comply with any notices, information, guidelines, codes of conduct, or protocols relating to the Park.
8. A report on the research carried out under this permit must be provided to Booderee National Park, Resource Management Section. Copies of all other reports and publications arising from this work must also be provided to Booderee National Park, Resource Management Section.
9. If specimens collected include undescribed taxa, then holotypes of the plant kingdom must be lodged with the Australian National Herbarium, holotypes of the class Insecta must be lodged with the Australian National Insect Collection, and all other holotypes must be lodged with the Australian Museum.

Booderee National Park – Research Permit Conditions

Page 1 of 4

Appendices 215
10. The permittee and a witness shall sign and attest the indemnity below and return one copy to the Research Permits Officer, Resource Section, Booderee National Park prior to commencing activities in the Reserve under this permission.

11. Exemption from Park Use Fees is granted to the permit holder and associated staff for the purpose of undertaking research as approved by this permit.

12. The permittee shall at all times be responsible for the general safety, well being, compliance with the conditions of the permit and behaviour of:
   (a) all persons employed or otherwise engaged by the permittee or in relation to the conduct of the activity to which this permit relates, and
   (b) The permittees clients.

13. The permittee shall have possession of a copy of this permit (including these conditions) at all times whilst engaged in any activity to which this permit relates.

14. The permittee shall be familiar with and shall comply with the Act, the Regulations and the Plan of Management.

15. The permittee shall be familiar with and shall comply with any notices, information, guidelines, codes of conduct, or protocols relating to the Park.

16. The Permittee shall not employ or engage in the conduct of the activity to which this permit relates the services of any person who has been convicted of an offence against the Act or the Regulations within the previous five years.

17. If any person whose services are used in the conduct of the activity to which this permit relates contravenes any of the conditions of this permit the Park Manager may:
   (a) Notify the permittee of the contravention; and
   (b) Direct the permittee to cease using the services of that person within the Park.
   and the permittee shall forthwith comply with that request.

18. The permittees clients shall not engage in activities or conduct themselves in a manner:
   (a) which causes or is likely to cause annoyance, inconvenience or disturbance to the Aboriginal Owners and other Park visitors; or
   (b) which is inconsistent with the appropriate use, appreciation and enjoyment of the Park.
   The permittee will comply with any instructions and directions given by the Park Manager in relation to the activities and conduct of the permittees clients.

19. This permit shall not confer on the Permittee any rights to the exclusive use, enjoyment or occupancy of any areas or locations nominated herein, unless expressly provided for in this permit.

Note: These permit conditions may be varied, revoked or new conditions imposed in accordance with regulation 17.09 of the Regulations. The Director may decide to vary or revoke the conditions or impose new conditions, but must do so where it is necessary to make sure that the matters or circumstances the Director is required to be satisfied about when issuing the permit continue to apply.

Booderee National Park – Research Permit Conditions
Special Conditions

1. The permittee must not trap, harm, touch or tag any White-Breasted Sea Eagles (Haliaeetus leucogaster).
2. The permittee must not touch or collect any eggs of White-Breasted Sea Eagles (Haliaeetus leucogaster).

Note: These permit conditions may be varied, revoked or new conditions imposed in accordance with regulation 17.09 of the Regulations. The Director may decide to vary or revoke the conditions or impose new conditions, but must do so where it is necessary to make sure that the matters or circumstances the Director is required to be satisfied about when issuing the permit continue to apply.

The Permittee fully understands and agrees to abide by these Permit conditions.

Signed................................................................. Dated......................................................

Name of Person signing: ..........................................................

(The acknowledgment is to be signed by the Permittee if the Permittee is an individual, or if the Permittee is a company or other body by its duly authorised officer)

In the presence of .................................................. Dated...

Booderee National Park – Research Permit Conditions

Page 3 of 4
INDEMNITY

THIS DEED made the day of 2009

WITNESSES as follows:

in consideration of the above grant of permission, the Permittee indemnifies the Commonwealth of Australia, the Director of National Parks and their servants and agents against any liability and costs whatsoever arising out of any tortious or otherwise unlawful conduct of the permittee or its servants or agents in the course of the activities authorised by this permission.

SIGNED SEALED AND DELIVERED

by the Permittee

/ 2009

in the presence of

/ 2009

NB: (1) A copy of the above indemnity form must be signed witnessed and returned to the Resources Manager, Booderee National Park before commencing operation under this Permit.

(2) Permits issued under the Environment Protection & Biodiversity Conservation Regulations 2000 may be cancelled or suspended under regulation 17.12 and permit conditions may be revoked or varied under regulation 17.09.
Australian Government  
Director of National Parks

Environment Protection and Biodiversity Conservation Regulations 2000

PERMIT FOR AN ACTIVITY IN A COMMONWEALTH RESERVE

<table>
<thead>
<tr>
<th>Reserve for which this permit is issued</th>
<th>Booderee National Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of issue</td>
<td>01/11/2009</td>
</tr>
</tbody>
</table>
| Name/address of each person/group to whom permit issued | Ms Amanda Baldwin  
Dr Michael Adams  
Woolyungah Indigenous Centre  
University of Wollongong  
Northfields Avenue Wollongong  
NSW  2522 |
| Provision of these Regulations for which this permit is issued | 12.06(2) for 12.10 |
| Activity permitted                     | Conduct a series of social science interviews with target groups from WBAC and BNP, to explore and document the cultural significance of white-bellied sea eagles. |

Failure to adhere to the attached conditions is an offence and may also result in suspension or cancellation of this permit.

Delegated by the Director of National Parks

OFFICIAL USE ONLY

<table>
<thead>
<tr>
<th>Permit Number:</th>
<th>BDR09/00011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipt date:</td>
<td>N/A</td>
</tr>
<tr>
<td>Amount Received:</td>
<td>$0.00</td>
</tr>
</tbody>
</table>
PARTICIPATION INFORMATION SHEET FOR ABORIGINAL COMMUNITY MEMBERS

Title: White-bellied Sea Eagles in the Jervis Bay region: An exploration of the cultural, ecological, and conservation significance for Aboriginal community spaces and surrounding boundaries

Purpose of the research: This is an invitation to participate in a study conducted by researchers at the University of Wollongong.

This project aims to investigate and document the cultural significance of white-bellied sea Eagles to various Aboriginal communities in the Jervis Bay region. This project will explore both ‘traditional’ ecological knowledge and ‘scientific’ ecological knowledge of the white-bellied sea Eagles. Conservation theories surrounding the status of the sea Eagles ranging from a global to local scale will also be investigated. While the conservation and ecology analysis will be completed by desk-top research, this study will primarily explore the cultural significance of the white-bellied sea Eagles by fieldwork within the Jervis Bay region. To explore the cultural significance further and to investigate different conceptual frameworks of space, mapping of significant cultural sites related to sea Eagles may also be carried out.

The focus of the project: The focus of this project will be on semi-structured interviews with:

   a) Aboriginal people from the Wreck Bay Aboriginal Community, Jerrinja Aboriginal Community and surrounding Aboriginal communities

   b) Staff members from Booderee National Park, the Jervis Bay Marine Park, and the NSW Jervis Bay National Park

These interviews will be conducted to explore the cultural significance and various perspectives of the biological/ecological knowledge related to the white-bellied sea Eagles within the Jervis Bay region.

Researcher:

Amanda Baldwin (Master of Science student)
School of Earth and Environmental Sciences
University of Wollongong
Phone: 0401906622
Email: amb354@uow.edu.au
**Project supervisors:**

Professor Lesley Head  
Earth and Environmental Sciences  
University of Wollongong  
Phone: (02) 4221 3124  
Email: lhead@uow.edu.au

Dr. Michael Adams  
Woolyungah Indigenous Centre  
University of Wollongong  
Phone: (02) 4221 5392  
Email: madams@uow.edu.au

**Why is this project significant?** By exploring the cultural significance of white-bellied sea Eagles in the Jervis Bay region, the understanding of this species and its’ ties to the Aboriginal communities can be enhanced. The mapping of particular cultural sites may enhance the protection of these birds of prey from future development plans in the region and safe guard the cultural connection that is shared with this species. Overall, a more developed understanding can promote a respectful outlook on these cultural ties and perhaps help conservation methods for a declining species population nationwide and globally.

**What would you be asked to do?** This project will require 60 minutes of your time to complete an interview with Amanda. As a participant you will have the right to withdraw from the project at any time, and withdraw any or all information you have given. Refusal to participate will not affect your relationship with the University of Wollongong. As a participant your answers to interview questions will be at all times confidential and only with your permission will the interview be recorded on audiotape and included in the final report. For the purpose of the final report, all participants will remain anonymous unless otherwise requested by the participant.

Information that you provide in interviews may be used in the final document which will be published by the University of Wollongong as a Master’s thesis in March 2010. However, the researcher will not use any information without the consent of the participant, and follow up meetings will be required to discuss the use of any information in the final report. During this discussion you will be able to inform the researcher of how you will want the audiotapes and/or notes from the interviews stored. This data/information can be returned to you at completion of the project, or stored securely by the University of Wollongong.

Please note that verbal consent to participate in this project will be accepted if it is preferred.

**Ethics review and complaints:** This study has been reviewed by the Human Research Ethics Committee of the University of Wollongong. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the university’s Ethics Officer on (02) 4221 4457.

If you have any further questions regarding this project please to not hesitate to contact me or the supervisors of this project on the number or email address provided above. Thank you for your time in considering this request and participating if you are able.

Sincerely,

Amanda Baldwin
Appendix F: Participant Consent Form for Aboriginal Community member

CONSENT FORM FOR ABORIGINAL COMMUNITY MEMBERS

RESEARCH TITLE:
White-bellied Sea Eagles in the Jervis Bay region: An exploration of the Cultural, Ecological, and Conservation Significance for Aboriginal community spaces and Surrounding boundaries

RESEARCHER'S NAME:
Amanda Baldwin, September 2009

I have been given information about the research project regarding white-bellied sea Eagles in the Jervis Bay region and have discussed the research project with Amanda Baldwin, who is conducting this research as part of a Master of Science degree. I understand that this project is supervised by Professor Lesley Head in the School of Earth and Environmental Sciences, Dr. Michael Adams from the Woolyungah Indigenous Centre at the University of Wollongong.

I have been advised of the potential risks and burdens associated with this research, and have had an opportunity to ask Amanda any questions I may have about the research and my participation. Any questions about the research or my participation in the project have been answered to my satisfaction.

I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at any time. My refusal to participate or withdraw my consent will not affect my relationship with the other Aboriginal community members, park staff, or my relationship with the University of Wollongong.

If I have any enquiries about the research, I can contact Amanda Baldwin on 0401906622, Professor Lesley Head on (02) 4221 3124 or Dr. Michael Adams on (02) 4221 5392 or if I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong on 4221 4457.

By signing below I am indicating my consent to:

• Participate in an interview and discussion with the researcher (with the option of having any discussion recorded or not) about cultural significance of, some traditional ecological knowledge of, and conservation theories of white-bellied sea Eagles.

• Giving the researcher access to non-confidential documentation related to white-bellied sea Eagles in the region.
• Remain anonymous in the final report (please tick) 

OR

• Be identified in the final report (please tick)

I understand that the data collected from my participation will be used for the completion of a Master’s thesis and I consent for it to be used in that manner.

I have discussed with the researcher how the information I provide will be stored after the project is completed in March 2010 by either having the University of Wollongong securely storing the information for five years for administrative purposes only, or it being returned to me. Any information I give will not be supplied to any other person or organisation for any other purpose.

Signed

................................................................. ....../...../.....

Name (please print)

.................................................................

(Of)

Address

.................................................................

.................................................................
Appendix G: Participant Information Sheet for non-Indigenous Staff

PARTICIPATION INFORMATION SHEET FOR BOODEREEL NATIONAL PARK, JERVIS BAY MARINE PARK, NSW JERVIS BAY NATIONAL PARK & DEPARTMENT OF DEFENCE STAFF MEMBERS

Title: White-bellied Sea Eagles in the Jervis Bay region: An exploration of the cultural, ecological, and conservation significance for Aboriginal community spaces and surrounding boundaries

Purpose of the research: This is an invitation to participate in a study conducted by researchers at the University of Wollongong.

This project aims to investigate and document the cultural significance of white-bellied sea-Eagles to various Aboriginal communities in the Jervis Bay region. This project will explore both ‘traditional’ ecological knowledge and ‘scientific’ ecological knowledge of the white-bellied sea Eagles. Conservation theories surrounding the status of the sea Eagles ranging from a global to local scale will also be investigated. While the conservation and ecology analysis will be completed by desk-top research, this study will primarily explore the cultural significance of the white-bellied sea Eagles by fieldwork within the Jervis Bay region. To explore the cultural significance further and to investigate different conceptual frameworks of space, participatory mapping of significant cultural sites related to sea Eagles may also be carried out, which may include nesting sites.

The focus of the project: The focus of this project will be on semi-structured interviews with:
   a) Aboriginal people from the Wreck Bay Aboriginal Community, Jerrinja Aboriginal community and surrounding Aboriginal communities

   b) Staff members from Booderee National Park, the Jervis Bay Marine Park, NSW Jervis Bay National Park, Department of Defence (Beecroft), other DECCW staff, and other knowledgeable persons on the topic.

These interviews will be conducted to explore the cultural significance and various perspectives of the biological/ecological knowledge related to the white-bellied sea Eagles within the Jervis Bay region.

Researcher:

Amanda Baldwin (Master of Science student)
School of Earth and Environmental Sciences
University of Wollongong
Phone: 0401906622
Email: amb354@uow.edu.au
Why is this project significant?

By exploring the cultural significance of white-bellied sea Eagles in the Jervis Bay region, the understanding of this species and its’ ties to the Aboriginal communities can be enhanced. The mapping of particular cultural sites may enhance the protection of these birds of prey from future development plans in the region and safeguard the cultural connection that is shared with this species. Overall, a more developed understanding can promote a respectful outlook on these cultural ties and perhaps help conservation methods for a declining species population nationwide and globally.

What would you be asked to do?

This project will require 60 minutes of your time to complete an interview with Amanda. As a participant you will have the right to withdraw from the project at any time, and withdraw any or all information you have given. Refusal to participate will not affect your relationship with the University of Wollongong. As a participant your answers to interview questions will be at all times confidential and only with your permission will the interview be recorded on audiotape and included in the final report. For the purpose of the final report, all participants will remain anonymous unless otherwise requested by the participant. Please note however, that it is a possibility that other participants may be able to identify you based on your role within the Park.

Information that you provide in interviews may be used in the final document which will be published by the University of Wollongong as a Master’s thesis in March 2010. However, the researcher will not use any information without the consent of the participant, and follow up meetings will be required to discuss the use of any information in the final report. During this discussion you will be able to inform the researcher of how you will want the audiotapes and/or notes from the interviews stored. This data/information can be returned to you at completion of the project, or stored securely by the University of Wollongong.

Ethics review and complaints:

This study has been reviewed by the Human Research Ethics Committee of the University of Wollongong. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the university’s Ethics Officer on (02) 4221 4457.

If you have any further questions regarding this project please do not hesitate to contact me or the supervisors of this project on the number or email address provided above. Thank you for your time in considering this request and participating if you are able.

Sincerely,

Amanda Baldwin
Appendix H: Participant Consent Form for non-Indigenous Staff

CONSENT FORM FOR STAFF

RESEARCH TITLE:

White-bellied Sea Eagles in the Jervis Bay region: An exploration of the Cultural, Ecological, and Conservation Significance for Aboriginal community boundaries and surrounding spaces

RESEARCHER'S NAME:

Amanda Baldwin

November 2009

I have been given information about the research project regarding white-bellied sea Eagles in the Jervis Bay region and have discussed the research project with Amanda Baldwin, who is conducting this research as part of a Master of Science degree. I understand that this project is supervised by Professor Lesley Head in the School of Earth and Environmental Sciences, Dr. Michael Adams from the Woolyungah Indigenous Centre at the University of Wollongong.

I have been advised of the potential risks and burdens associated with this research, and have had an opportunity to ask Amanda any questions I may have about the research and my participation.

I understand that my participation in this research is voluntary. I am free to refuse to participate and I am free to withdraw from the research at any time. My refusal to participate or withdraw my consent will not affect my relationship with the other staff members or my relationship with the University of Wollongong.

If I have any enquiries about the research, I can contact Amanda Baldwin on 0401906622, Professor Lesley Head on (02) 4221 3124 or Dr. Michael Adams on (02) 4221 5392 or if I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong on 4221 4457.

By signing below I am indicating my consent to:

- Participate in an interview and discussion with the researcher (with the option of having any discussion recorded or not) about cultural observations of, scientific knowledge of, and park conservation status of white-bellied sea Eagles.
- Giving the researcher access to non-confidential documentation related to white-bellied sea Eagles in the region
- Remain anonymous in the final report (please tick) [ ]
OR

- Be identified in the final report (please tick)

I understand that the data collected from my participation will be used for the completion of a Master’s thesis and I consent for it to be used in that manner. I understand that I may be identified by my role within the park by other participants in the research or anyone that reads the final report, even if I choose to remain anonymous throughout the project.

I have discussed with the researcher how the information I provide will be stored after the project is completed in March 2010 by either having the University of Wollongong securely storing the information for five years for administrative purposes only, or it being returned to me. Any information I give will not be supplied to any other person or organisation for any other purpose.

Signed

.................................................................
Date

.................................................................

Name (please print)

.................................................................

(Of)

Address

.................................................................

.................................................................
Appendix I: Sample Interview Questions/Topic Guide

Interview questions:

Have you signed the consent form to participate in this project?

Introduction questions:
1. For my records, could you please state your name?
2. What is your current occupation/position?
3. What are your current roles and responsibilities?
4. What other experience/qualifications have you obtained in this field?

Sea-Eagles in the Jervis Bay region:
1. What does your biological/ecological knowledge of the White-bellied Sea-Eagle consist of? Are you familiar with the species’ biology and ecology (e.g. behaviour, distribution, local nesting/perching sites, etc.)? Can you describe the species’ associations with other animals?
2. In your experience within Jervis Bay protected areas, how do Parks attempt to monitor the species and its habitat? Is there a database kept with sightings/nesting sites? If so, how current/accurate are these monitoring tools? Are there known incidents of harm to the species and/or its habitat?
3. In your opinion, how does state and/or commonwealth legislation pertaining to the White-Bellied Sea-Eagle affect conservation priorities within protected areas? Are local circumstances considered?
4. Do you think that various state and commonwealth protected areas’ conservation policies pertaining to sea eagles are inconsistent? (e.g. lack of communication between NSW Scientific Advisory Committee and Commonwealth Advisory Committee?) If so, do you think these inconsistencies between various tenures have an impact on Sea-Eagle populations?
5. In what ways do you think the conservation and management of the White-bellied Sea-Eagle could be improved?

Threats to the Species:
1. What do you view as threats or potential threats to the white-bellied sea eagles and the culturally significant sites that may be related to them? [Potential Prompt: What impacts have development and recreational activities had on this?]

Protected Areas in the Jervis Bay region:
1. In your experience, how are Aboriginal Communities involved in land and species management? If so, to what extent are they involved? Can you please tell me a little about your experiences?
2. Have Aboriginal peoples’ theories regarding land management been represented in the Park? Pertaining to the Sea-Eagle? More specifically, how are Aboriginal Communities consulted?
3. In your opinion, do you think the establishment of the modern tenure system in Australia dispossess Aboriginal people from the Land? Including protected areas? Do you think it affects Aboriginal peoples’ ability to connect with country...physically, spiritually, holistically?
4. In what ways do you think the park could improve its incorporation of Aboriginal peoples’ views with regards to overall park management? Specifically with threatened and protected species?

5. In what ways do you think the park could improve its understanding of Aboriginal culture and heritage? Relating to sea-eagles?

**Cultural Significance:**

1. Are you aware of any Aboriginal cultural connections between the white-bellied sea eagle and any Aboriginal communities? If so, to what extent are you knowledgeable? [Potential Prompt: What are your observations?]

2. Are you aware of any significant Aboriginal cultural/heritage sites related to the sea-eagle?

3. What do you view as threats or potential threats to significant cultural or heritage sites? In what ways could the park improve is management or protection of these sites?

4. How does the multiplicity of land use objectives effect the protection and/or access to these various sites? What are the parks’ policies with regards to public access? Is this different for Aboriginal community access?

5. Are you aware of any non-indigenous connections to the White-bellied Sea-Eagle? What do they mean to you? How are they significant in your life?

**Concluding Remarks:**

1. Do you have any further comments you would like to add?
Appendix J: Email Correspondence, Initiating Research Project

From: Fortescue, Martin [mailto:Martin.Fortescue@environment.gov.au]
Sent: Tuesday, 1 September 2009 2:26 PM
To: Michael Adams
Cc: Hudson, Matthew
Subject: RE: potential Sea Eagle research project [SEC=UNCLASSIFIED]

Hi Michael

I think the proposal seems fine and is of interest as far as the Park is concerned. We would need to take the proposal through formal EPBC approval stages, including agreement by the Community (this may be granted through the Wreck Bay Board/Community Liaison Office or they may refer to the Park Board). Our permits officer (Matt Hudson) is on leave, so I’ve attached the blank application form to kick the process off (I don’t recall having supplied you this to date, so I’m guessing we don’t have an application form yet?). Once completed could you return to Matt and I. All being well, the process should take 3-4 weeks. If the Community have concerns and or refer the decision to the Joint Baord, their next meeting is scheduled 9 October.

All the best

Martin

Dr Martin Fortescue
Park Manager
Booderee National Park
JERVIS BAY 2540

ph: 02 44422207
mobile 0427 252118

From: Michael Adams [mailto:madams@uow.edu.au]
Sent: Tuesday, 25 August 2009 2:47 PM
To: Fortescue, Martin  
Subject: FW: potential Sea Eagle research project  

Dear Martin,

Just wondering whether you have managed to discuss this with your staff? We are keen to get started if possible!

Thanks,

Michael

-----Original Message-----
From: Michael Adams  
Sent: Wednesday, 12 August 2009 11:58 AM  
To: Fortescue, Martin  
Cc: Lesley Head; amb354@uow.edu.au  
Subject: potential Sea Eagle research project

Dear Martin,

Further to our conversation yesterday, here are some more details.

Amanda Baldwin is a MSc student at UOW. We are exploring options for a research project which connects her into protected area management issues and Indigenous cultural values. Amanda would be co-supervised by Professor Lesley Head and myself.

While Sea Eagle populations are declining globally, in the Jervis Bay region there are relatively high densities. It is the logo of Booderee National Park. This project would attempt to document some aspects of the cultural significance of Sea Eagles to Jervis Bay Aboriginal people, and potentially compare this to the cultural significance of Sea Eagles in other parts of Australia, as well as the Indigenous cultural significance of other large raptors. Booderee National Park, as a Commonwealth protected area, is a small area surrounded by a matrix of other land and marine tenures and uses. Sea Eagles range widely across these tenure types, probably somewhat influenced by human settlement densities. Amanda's project could include interviews with Park staff and local Aboriginal people, and may include mapping of areas of cultural significance associated with Sea Eagles.
If you think this project is viable, and you see it as useful to the Park, we are keen. I note that while Sea Eagles are not high priority as a conservation research subject, the PoM identifies 'cultural heritage research' as high priority. The project would not require any financial input from Booderee, although possible assistance with field logistics would be appreciated.

I look forward to discussing this further, and thanks for your time on this.

Regards,

Michael

Dr Michael Adams
Senior Lecturer
Woolyungah Indigenous Centre
University of Wollongong

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If you have received this transmission in error please notify us immediately by return e-mail and delete all copies. If this e-mail or any attachments have been sent to you in error, that error does not constitute waiver of any confidentiality, privilege or copyright in respect of information in the e-mail or attachments.

Please consider the environment before printing this email.

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Attachment: EPBC-PERMITAPPLIC.doc (1677k bytes) Open
Hi Michael

That seems to be an accurate account as I recall it. The proposed research was by the JB Marine Park, and proposed banding which neither the Park nor the Community liked. I for one would not like to try and band a sea Eagle!

By the way, there has previously been some research done on sea Eagles by a UNE researcher prior to Joint Management, Steve Debus I think (density, location of next sites etc of raptors and owls), which WB supported.

All the best

Martin

Hi Martin,

We had a good meeting with Chris Moon this week (unfortunately Reuben Ardler was unwell, and could not make it). We are finalising our draft text over the next couple of days, and I just wanted to check one thing at this point. I'm not sure if you mentioned the sea Eagle research to us, but several people have told me that story at different times. I think it is an interesting example of cultural influence so we wanted to include it. Could you please check the wording below and let me know if I have it correct? And if you know when this proposal was made, that would be great! Anything further on this would be appreciated.
We are planning to send you our draft text, or at least parts which we are unsure of, in the next few days, I hope, to check for accuracy.

In xxxx, the Board was approached with a proposal to carry out research on the Park’s resident White-bellied Sea-Eagles (*Haliaeetus leucogaster*). Sea Eagle populations are regarded as declining worldwide and in many areas of Australia Shephard, Hughes, Catteral, Olsen 2005, Conservation status of the White-Bellied Sea-Eagle *Haliaeetus leucogaster* in Australia determined using mtDNA control region sequence data. Conservation Genetics (2005) 6:413–429, but the Park has a healthy population which the researchers wished to examine. The White-bellied Sea-Eagle is acknowledged by the Wreck Bay community as their guardian animal, and it appears on the logo of the Park. Aboriginal community members were concerned that potentially invasive research techniques could harm individual Eagles, for whom they considered themselves culturally responsible. Accordingly the Board refused to give permission for the research. It is possible that alternative approaches to the research, that included community participants, may have been more readily accepted, but this was not explored by the researchers.


Thanks for your help,

Michael

Dr Michael Adams
Senior Lecturer, Woolyungah Indigenous Centre
UoW NSW 2522
Ph +61 2 4221 5392
Fax +61 2 4221 4244

Please consider the environment before printing this e-mail
Hi Michael

I don’t know much about the sea eagle, other than it is a totem for some people at Wreck Bay and of course is part of the logo for Booderee NP. Amanda should probably talk to someone at Wreck but I am happy to have a chat with her and give her some pointers. There’s certain to be the aboriginal word for sea eagle somewhere as well.

I did receive an email from Marketa, and invited her to come have a look at the reports we have in this office. There’s a lot of information about Aboriginal connections with Coolangatta mountain in the ethnobiographic literature, but it has not been brought together into a report. I am currently doing this as part of a cultural assessment project, as the mountain has been purchased by DECCW, however it is still in a draft form and not ready to be looked at externally.

Also, I would need the approval of all the people on the Cultural heritage working group before I could release it. As Marketa copies from WS and relations between them and the Jerrinjah are not very positive at present, it cannot be assumed that they will give their approval. I have suggested she read Michael Organ’s book on the Aborigines of the Kawara, which contains many references to Mount Coolangatta, also Michael Beazlett’s papers on the Aboriginal force on the berry estate. I am happy to provide the cultural values report once it is finalised and endorsed for release, but it may be too late for Marketa’s project.

Cheers
Sue

---

Michael Adams
From: Sue Feary [Sue.Feary@environment.nsw.gov.au]
Sent: Monday, 21 September 2009 9:17 AM
To: Michael Adams
Subject: RE: MSc sea eagles

Hi Sue,

I just wanted to let you know that I have a MSc student, Amanda Baldwin, who may get in touch with you. She is researching the Aboriginal cultural significance of sea eagles around Jervis Bay, and some of the JBMP people mentioned you as a good contact. And I think maybe also Markeeta Freeman is talking to you about Coolangatta, for her Directed Studies subject?

Hope it’s all going well.

Cheers,
Michael

---

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www.uow.edu.au/wic
**Appendix K: List of Participants**

*For confidentiality purposes all participants have been given pseudonyms*

<table>
<thead>
<tr>
<th>Participant Pseudonyms</th>
<th>Description of Roles</th>
<th>Date</th>
</tr>
</thead>
</table>
| Jack                   | Non-Indigenous Conservation Biologist | 04/03/2010: Initial Meeting  
10/03/2010: Interview 1  
17/03/2010: Interview 2 |
| Ben                    | Non-Indigenous NPWS employee, Nowra Regional Office | 10/12/2009: Interview |
| Jon                    | Non-Indigenous NPWS employee, Ulladulla Office | 15/12/2009: Interview |
| Toby                   | Non-Indigenous previous BNP Board Member | 08/12/2009: Interview |
| Nick                   | Non-Indigenous NPWS employee, previous BNP employee | 14/12/2009: Phone Contact  
16/12/2009: Interview  
18/12/2009: Email Contact  
19/12/2009: Email Contact  
15/03/2010: Email Contact |
| Edward                 | Non-Indigenous BNP employee | 13/06/2009: Email contact  
25/08/2009: Email Contact  
01/09/2009: Phone Contact  
02/12/2009-03/12/2009: Spent days in office going through library and determining pot. Participants  
03/03/2010: Interview |
| Emily                  | Non-Indigenous NPWS employee, JBNP | 17/09/2009: Email Contact  
21/09/2009: Email Contact  
07/10/2009: Phone Contact |
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Dates/Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan</td>
<td>Non-Indigenous DECCW employee, previous JBMP employee</td>
<td>19/10/2009-23/10/2009: Spent week in Office going through library and determining potential participants 10/12/2009: Interview</td>
</tr>
<tr>
<td>Sarah</td>
<td>Jerrinja Aboriginal Community member</td>
<td>12/01/2010: Interview</td>
</tr>
<tr>
<td>Matt</td>
<td>Wreck Bay Aboriginal Community member, BNP employee</td>
<td>19/02/2010: Interview</td>
</tr>
<tr>
<td>Greg</td>
<td>Jerrinja Aboriginal Community member, NPWS employee, JBNP</td>
<td>15/01/2010: Initial meeting and interview</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19/10/2009: Initial meeting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15/01/2009: Interview 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19/02/2010: Interview 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Numerous phone contact</td>
</tr>
<tr>
<td>Richard</td>
<td>Non-Indigenous Shoalhaven City Council employee</td>
<td>23/10/2009: Interview</td>
</tr>
<tr>
<td>Ken</td>
<td>Non-Indigenous Shoalhaven City Council employee</td>
<td>23/10/2009: Interview</td>
</tr>
</tbody>
</table>
Appendix L: Contact Record of Participants Not Interviewed

*Only a basic description of the participant is provided for confidentiality purposes*

<table>
<thead>
<tr>
<th>Participant Description:</th>
<th>Contact Method:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meeting in Marine Park Office</td>
<td>16/09/2009</td>
</tr>
<tr>
<td></td>
<td>Multiple email communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Going through library and negotiating potential</td>
<td>28/10/2009</td>
</tr>
<tr>
<td></td>
<td>participants</td>
<td>17/11/2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19/11/2009</td>
</tr>
<tr>
<td>3. Non-Indigenous Jervis Bay Marine Park Employee</td>
<td>Phone contact</td>
<td>31/08/2009</td>
</tr>
<tr>
<td>4. Non-Indigenous Jervis Bay flora and fauna expert</td>
<td>Phone and email contact</td>
<td>14/12/2009</td>
</tr>
<tr>
<td>5. Jerrinja Aboriginal Community member</td>
<td>Email communication</td>
<td>17/09/2009</td>
</tr>
<tr>
<td></td>
<td>Phone and email contact</td>
<td>12/10/2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>01/12/2009</td>
</tr>
<tr>
<td></td>
<td>Attempted phone contact</td>
<td>07/12/2009</td>
</tr>
<tr>
<td></td>
<td>Attempted phone contact</td>
<td>14/12/2009</td>
</tr>
<tr>
<td></td>
<td>Phone Contact</td>
<td>08/01/2009</td>
</tr>
<tr>
<td></td>
<td>Initial meeting</td>
<td>11/01/2009</td>
</tr>
<tr>
<td></td>
<td>Email contact</td>
<td>12/02/2009</td>
</tr>
<tr>
<td></td>
<td>Non-Indigenous Booderee National Park Employee</td>
<td>Initial meeting</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>6.</td>
<td>Non-Indigenous Booderee National Park Employee</td>
<td>Initial meeting</td>
</tr>
<tr>
<td>7.</td>
<td>Wreck Bay Aboriginal Community member, Jervis Bay National Park Employee</td>
<td>Meetings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meeting</td>
</tr>
</tbody>
</table>
Appendix M: Potential Participants and Contact Record

*These potential participants had agreed early on to participate in the study through mutual contacts; however, participation for whatever reason was not confirmed. Only a basic description of the potential participant is provided for confidentiality purposes.

<table>
<thead>
<tr>
<th>Potential Participant Description:</th>
<th>Contact Method:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wreck Bay Aboriginal Community member</td>
<td>Two mutual contacts confirmed it was okay to meet with me. Attempted phone communications. Phone Communication.</td>
<td>21/10/2010 30/10/2010</td>
</tr>
<tr>
<td>Wreck Bay Aboriginal Community member</td>
<td>No Contact established</td>
<td>21/10/2009 30/10/2009</td>
</tr>
<tr>
<td>Jerrinja Aboriginal Community member</td>
<td>No Contact established</td>
<td>19/12/2009 10/01/2010</td>
</tr>
<tr>
<td>Jerrinja Aboriginal Community member</td>
<td>No Contact established</td>
<td>19/12/2009 10/01/2010</td>
</tr>
<tr>
<td>Aboriginal NPWS employee, Ulladulla</td>
<td>Meeting. Attempted phone comm.</td>
<td>15/12/2009 10/01/2010</td>
</tr>
<tr>
<td>Walbanga Aboriginal Community elder</td>
<td>Attempted meeting established with supervisor</td>
<td>Did not transpire</td>
</tr>
</tbody>
</table>