Governance Models for Protected Areas in Western Australia

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Executive Summary

This report presents the findings of an interview-based study undertaken to determine which protected area governance models are currently being used in Western Australia, where tourism is an important land use. The overall aim of the study was to identify and describe these governance models and provide one detailed example per model. Models were identified using three criteria: ownership of resources, the management body and the main funding for the protected area. Eight models were identified, with six investigated in detail. These were the *national park model, regional park model, Crown corporation model, not-for-profit organisation model, government and tourism industry partnership model, government and not-for-profit organisation model, indigenous and government model* and *traditional community model*. The last two in this list were not investigated in detail in this study.

Key findings for six of the models investigated in detail highlight that the majority of funding for protected area management within Western Australia is provided by the State; almost all models have decision-making input by government (local and/or State); and all of the models were dominated by Crown land, with only small 'parcels' of freehold land within the *regional park model*. These models highlight a heavy reliance on government funding for protected area management in Western Australia. Four key recommendations arising from the study are:

1. Investigation of more diverse and innovative approaches to funding Australian protected areas;
2. Evaluation and determination of 'best practice' governance in WA and Australia;
3. Broader application Australia-wide to identify the full range of governance models in use; and
4. Analysis of range of governance models where Indigenous people own or are involved in protected areas.

Contents

Tables and Figures

1. Introduction

This report presents the findings of a study undertaken to identify and describe the protected area governance models in use in Western Australia. The overall aim of the study was to identify and describe these governance models and provide one detailed example per model. This report includes a condensed account of the governance models from the full study (available as Shields 2013), and also describes a Western Australian example of each model.

1.1 Protected area governance

Protected areas are essential if nature conservation is to be achieved. Such areas can only contribute to conservation efforts if they are effectively managed. Governance – how decisions are made, what influences these decisions, and how management agencies are structured – has increasingly been recognised as central to protected area management and hence their conservation (Dearden et al. 2005). Gurung (2010) identified the need for an urgent review of protected area governance in Australia, and the necessity to identify and categorise governance models with the aim to benefit future conservation and tourism management in these areas. This study focused on a sample of protected areas where tourism is an important land use.

Over the last five years, efforts have been made to categorise and describe the full spectrum of approaches to protected area governance (Eagles 2008, 2009; Glover and Burton 1998; Graham et al. 2003; More 2005). Three criteria have been widely used to differentiate between these approaches or models: ownership of the resources; income sources; and the management body. Through applying these criteria Eagles (2008, 2009) identified a total of 60 combinations, of which 8 were identified as being the most used (Table 1). The mostly widely used and known is the *national park model* where ownership and management is by the government, and funding is from societal taxes. This study identified seven of these models within Western Australia, with an additional model identified that appears unique to the State (the *regional park model*).

Table 1: Eight most widely used models and their characteristics (adapted from Eagles 2008, 2009)

Model	Ownership	Management	Income
1. National park model	Government	Government agency	Societal taxes
2. Parastatal model	Government	Government-owned corporation	User fees and charges
3. Non-profit organisation model	Non-profit organisation	Non-profit organisation	Donations
4. Ecolodge model	For-profit organisation	For-profit organisation	User fees
5. Public and for-profit combination model	Government	Combination of public and private	Combination of public and private
6. Public and non-profit combination model	Government	Combination of public and non-profit organisations	Combination of public and non-profit organisations
7. Aboriginal and government model	Aboriginal groups	Government agency	Societal taxes and user fees and charges
8. Traditional-community model	Aboriginal groups/ community	Aboriginal groups/ community	User fees and charges

2. Methods

2.1 Aim of the study

The overall aim of the study was to identify and describe current governance models for protected areas in Western Australia.

2.2 Model identification and refinement

Firstly, a literature review was undertaken to determine what governance meant in the context of this study and to identify the governance models that are described in the literature (and therefore identify the "best" models to be used as the basis for the study). The eight models in Table 1 provided the basis for this study for two main reasons. First, Eagles' models incorporate a number of models from the literature and therefore synthesise a combination of ideas in one approach. Second, Eagles' three criteria facilitated clear differentiation amongst common governance models. Upon completion of the

literature review, a preliminary discussion was held with two senior Department of Parks and Wildlife (DPaW) staff to determine which would be the most relevant models and examples in WA. The three criteria (i.e. ownership, management and funding) were also discussed and modified during this discussion.

2.3 Interviews

Due to the exploratory nature of this study, purposive sampling was used to ensure experienced protected areas managers were engaged, with many interviewed respondents known and contacted through professional networks of which Murdoch University is part. A structured set of interview questions was developed to incorporate the three criteria (Appendix 1).

2.4 Data analysis

Upon completion of recorded interviews, they were transcribed and summarised into tables. These tables were further refined and were the basis for final tables presented in this report. These refined tables were sent back to all respondents to ensure all information was correct and to identify whether there were any significant errors or omissions that needed to be rectified. This method of content analysis provided ease of reference and enabled identification of similarities and differences among the different models (Neuman 2006).

3. Results and discussion

The following section presents and discusses the findings of the study (of which the full account can be found in Shields 2013), beginning with a description of the protected area managers interviewed. Following this is an overview of the key findings followed by a description of the protected area governance models identified in WA. Next, the findings relating to the ownership, management and funding of WA protected areas are discussed. Finally, stakeholder input in WA protected area governance models is presented.

3.1 Respondents

A total of 10 people were interviewed from 26 February to 1 July 2013. Respondents in this study had varying involvement with protected area management within WA and included individuals from the Western Australian State government, Araluen Botanic Park, Bush

Heritage Australia, and Kings Park and Botanic Garden. The average length of time respondents had been with their organisation was 12 years, with the range of total years at their organisation extending from 2 to 35 years. The average number of years respondents had been in their current position was 6 years, however this ranged from 0.5 to 15 years. Given these numbers, the corporate knowledge of respondents is substantial.

3.2 Key findings

There were a number of key findings resulting from the study. The first was that ownership and tenure of land across all models were very similar, with the majority of protected areas being based on designated Crown land vested in various authorities or under leasehold (with the exception of some freehold land). The second finding was the prominent influence by government in the management and decision-making of the protected areas, however there was also significant participation by other groups (such as volunteers). Third, there were similarities across almost all of the protected area governance models in having management plans as standard practice. The fourth finding was that the majority of protected area funding for almost all the models came from the government, with the *not-for-profit model* being the only exception. Finally, stakeholder participation and influence was evident across all models.

3.3 Governance models identified

Eagles' (2008, 2009) most widely used protected area governance models provided the basis for this investigation into which protected area governance models are found in WA (Appendix 2). Consultation with two senior policy staff from DPaW resulted in the selection of five of Eagles' (2008, 2009) models (Table 2, Models 1, 3, 4, 5 and 6) for examination, plus a new model specific to WA, the *regional park model* (Table 2, Model 2). The locations of the example of each model selected for detailed study are shown in Figure 1.

Table 2: Summary overview of ownership, management and funding in WA governance models

Model	Ownership				Management			Funding		
	Tenure				Decision-making		Plan	Major funding source (≥50%)		Funding information
	Crown	Free-hold	Lease	Other	Govt	Other	Mgt Plan	Govt	Donors	Readily accessible e.g. annual report[1]
1. **National park** – single government department e.g. Walyunga National Park	X	--	--	--	X	--	--	~80%	--	--
2. **Regional park** – multiple government agencies and other organisations e.g. Beeliar Regional Park	X	X	X	X	X	--	X	>80%	--	--
3. **Government and tourism partnership** e.g. Yanchep National Park	X	--	X	--	X	--	X	~50%	--	--
4. **Crown corporation** – government corporation/agency e.g. Kings Park and Botanic Garden	X	--	X	--	--	X	X	~60%	--	X
5. **Government and not-for-profit partnership** e.g. Araluen Botanic Park	X	--	X	--	X	--	X	~60%	--	X
6. **Not-for-profit** e.g. Charles Darwin Reserve	X	--	X	--	--	X	X	--	>90%[2]	--

[1] All areas listed in Table 2 are included in annual financial reports, however not all have financial information readily available to the public specific to the protected area examined.

[2] Bush Heritage Australia's income for Financial Year 2012-13 (BHA 2013).

The first model described is the *national park model* (Table 2). In the *national park model* the 'government' owns the resources, the majority of funding comes from the State, and a government agency is the manager. For example, for National Parks in Western Australia the land is owned by the Crown and vested in the Conservation Commission of WA, and managed by WA's Department of Parks and Wildlife, with the majority of funding being provided by the State government. In the example from this study, Walyunga National Park, approximately 80% was recurrent State funding, with the remainder being provided through grants and other income, such as entry fees.

Unlike most government-managed national parks, Walyunga is one of the few that does not have a management plan. As such, the management process was described as being a "very careful approach to managing, so by default everything has to go through an approval process because you can't refer to a management plan". Management decisions are made using an approval matrix for everything done within the Park, with increasing levels of approval needed depending on what the project is (e.g. fire break maintenance can be approved by the District Manager however if there is impact on local environment such as clearing or disturbance to soil, it would require higher approval and consultation). There are also two significant Indigenous sites within the Park and subsequently "things for Walyunga are very much about working with the Indigenous people … to manage Walyunga in a sensitive manner".
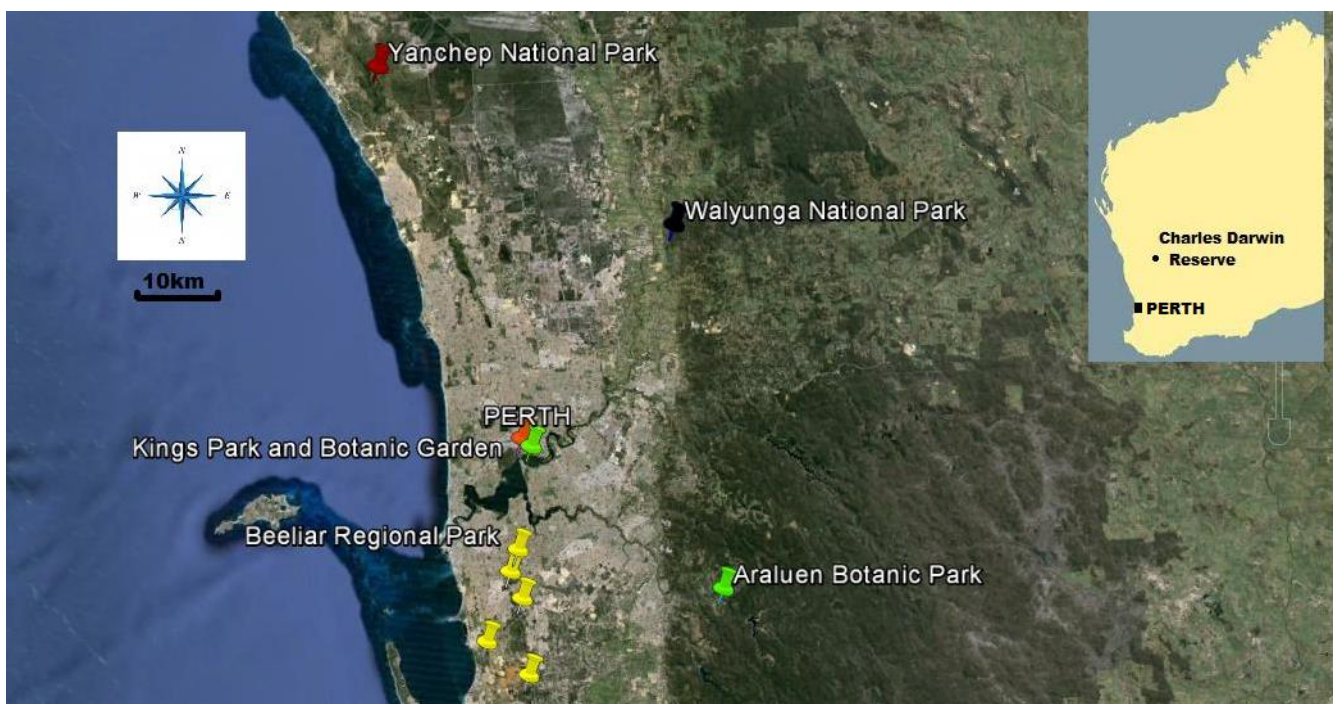

Figure 1: Location of WA models examined (source Google Earth)

The second model described, the *regional park model* (Table 2), is a model unique to WA in terms of its governance (not its name) and is additional to the eight common models described by Eagles (2009). Although there are other regional parks within Australia, their use of the term "regional" refers to their geographical location (i.e. the country versus the city) and not regional as it is used to describe this type of model. The *regional park model* incorporates a number of different land and resource owners, including multiple government departments, several different managers, and the majority of funding provided by the State.

The example examined in this study was Beeliar Regional Park. There are five different management zones within the Park, which include conservation and protection, natural environment uses, and recreation amongst others (Dooley et al. 2006). The land and resources are owned by a variety of groups, including the State (e.g. land vested in the Conservation Commission of WA and managed by DPaW), other government agencies (i.e. the local governments of Melville, Cockburn and Kwinana) and other organisations (e.g. Murdoch University). There are also a number of different managers (DPaW, Cities of Melville and Cockburn, Town of Kwinana and Murdoch University), with greater than 80% of funding from the State (with the respective local governments and DPaW financing and managing their own land areas within the Park). Most of the remaining funding came from leases and other land managers.

The *government and tourism partnership model* is the third model described (Table 2) and is based on Eagles' (2008) *public and for-profit combination model*. In this model, the State owns the land and resources, they are managed by a government department, and funding comes from a combination of government funding and user fees and charges. As explained earlier, the reason for acknowledging the tourism partnership in the title of this model is its major role in the funding of the protected area.

The WA example for this model was Yanchep National Park, which is Crown land vested in the Conservation Commission of WA, managed by DPaW, and receiving approximately half its funding from the State (with the Park expected to make the remaining half through leases, entry fees and other tourism activities such as cave tours and events). The Park has the largest volunteer group in the State, with the group acknowledged as being a key stakeholder in the Park. The Park has two advisory committees (the Yanchep National Park Advisory Committee and the Yanchep National Park Caves Advisory Committee), which were

established approximately 12 years ago when the first management plan was developed. Since then, they became key stakeholders in decision-making processes within the Park.

The *crown corporation model* (Table 2) is based on Eagles' (2008) *parastatal model*. Crown corporations are defined as:

> Distinct legal entities established by the government to pursue public policy and commercial objectives … where they may pursue multiple and sometimes conflicting operational goals such as financial self-sufficiency and fulfilling certain public policy objectives (Gray 2006, 1).

In this model, land and resources are owned by the government, a statutory authority is the management body, and funding comes predominantly from the government with other significant funding from corporate donations and/or sponsorship.

Kings Park and Botanic Garden was the WA example for this model. The land is owned by the Crown and vested with the WA Minister for Environment. It is managed by a management authority, that is, the Botanic Parks and Garden Authority (BPGA), which is a body corporate but also an agent of the Crown, and "enjoys the status, immunities and privileges of the Crown" (*BGPA Act 1998 WA*). However, there is still significant government influence as the WA Minister for Environment is responsible for a number of key authorisations within the Act (e.g. appointing members of the Board). One of the respondents interviewed noted that the *BGPA Act 1998 (WA)* is a very contemporary act "which means legally we can do a range of different things … we could technically start up a company if we wanted to, with the approval of the Minister [for the Environment] and the [State] Treasurer, which not many Acts in government allow government agencies to do".

The *government and not-for-profit partnership model* (Table 2) is based on Eagles' (2008) *public and non-profit model*. The resources in this model are owned by the government, it is jointly managed by a government agency and a not-for-profit organisation, and funding is provided mainly through government funding and user fees and charges. Araluen Botanic Park is the only known WA example of the *government and not-for-profit partnership model*. Araluen Botanic Park is situated on Crown land and vested with the WA Planning Commission, managed jointly by the State (DPaW) and the Araluen Botanic Park Foundation, and receives the majority of funding through the State government with other funding coming through user fees and charges. A respondent noted that corporate sponsorship plays a big role in the income of the park, and that "events have two purposes

here. One is revenue-raising … but secondly [it's about] awareness ... and hopefully that will … generate future visits".

In the *not-for-profit model* (Table 2), the land and resources are owned and managed by a not-for-profit organisation, and funding comes predominantly from donors or sponsors. The WA example for this model was Charles Darwin Reserve, a property managed by Bush Heritage Australia (BHA). Although it is managed as a not-for-profit protected area, its land tenure is slightly different from the other examples as it is under pastoral leasehold from the State government. Although BHA are required to comply to certain requirements of the lease agreement (such as maintaining external fencing and water points) the Pastoral Lands Board of WA, who is the designated authority for all pastoral leasehold in WA, understand that BHA do not run cattle and do not maintain internal fencing.

BHA maintains that their primary responsibility and accountability is to their donors (providing over 90% of BHA funding in the 2012-2013 financial year) (Table 2). Consistent with this, they acknowledge the importance for their management to be seen as transparent and appropriate to what their donors would expect, and communication with their donors is seen as extremely important.

3.4 Comparison of model characteristics

All protected area land was Crown land (with the exception of some freehold land within Beeliar Regional Park), with most of the protected area examples involved in some form of leasing arrangements (either directly with the government or with a third party) (Table 2). With the exception of Kings Park and Botanic Garden and Charles Darwin Reserve, all decision-making involved a government department with most being coordinated under a management plan of some sort (except Walyunga National Park). Funding for the areas was predominantly from government sources, which contributed between 50% to more than 80% of funding. The only area that did not primarily rely on government funding was Charles Darwin Reserve. Only two areas had readily accessible financial reports (on the internet); Kings Park and Botanic Garden and Araluen Botanic Garden (they are also the only parks examined that are managed in isolation from other protected areas, for example DPaW has 100 national parks to manage in total (Western Australia. DPaW 2013)). The other organisations had financial reports, but there was no breakdown of funding for each individual area.

3.4.1 Ownership

There were far more similarities than differences in ownership across the WA governance model examples (Table 3). One fundamental purpose of all the protected areas examined was conservation or preservation of the environment, with most (except Charles Darwin Reserve) also including recreation and/or tourism as another key stated purpose. The class and purpose of most models included land classified as Class A, with the exception of Charles Darwin Reserve, which was operating under pastoral leasehold. This leasehold arrangement requires BHA to provide annual reports to the WA Pastoral Lands Board (PLB) in accordance with legislation and conditions of the lease agreement (for example they are required to maintain all external fences and watering points on the land). There are some nuances with the leasehold as the PLB understand that BHA do not run stock on the land, therefore some requirements for pastoral leaseholders are overlooked (for example the need to maintain internal fences).

With one exception, all land was Crown land vested in the Conservation Commission of WA, the WA Planning Commission, or the Minister for Environment. The exception to this was that some land within Beeliar Regional Park was freehold land owned by the State government, Murdoch University and other individuals. In the case of Charles Darwin Reserve, the land was Crown land with the pastoral leasehold granted by the Minister for Lands in accordance with WA's *CALM Act 1984* and *Land Administration Act 1997*.

Other similarities related to the ownership of visitor facilities. Most of these facilities were owned by 'the State' (e.g. DPaW or the WA Planning Commission), with the exception being the Botanic Parks and Gardens Authority, some of the land holders and managers within Beeliar Regional Park, and Bush Heritage Australia, who owned some or all the visitor facilities on their lands.

3.4.2 Management

Within the models investigated in this study, management and decision-making could be described as a 'mixed approach', with many similarities in management arrangements (Table 4). Although a great deal of influence and input comes from various levels of government (State and/or local, with the exception of Charles Darwin Reserve), there is also a significant amount of community input into protected area decision-making in WA, through volunteer groups and advisory groups (Table 5).

Table 3: Ownership arrangements in WA governance models

Model	Ownership		
	Class and purpose	**Organisation**	**Ownership of visitor facilities**
1. **National park** – single government department e.g. Walyunga National Park	Class A Protection of natural environment and wildlife; recreation	Vested in Conservation Commission of WA (CCWA); managed by DPaW	DPaW
2. **Regional park** – multiple government agencies and other organisations e.g. Beeliar Regional Park	Class A Preserve conservation, landscape and recreation values at regional level	Vested in CCWA and various local governments, plus freehold land owned by WA Planning Commission (WAPC), other government agencies and other organisations; managed by DPaW	DPaW
3. **Government and tourism partnership** e.g. Yanchep National Park	Class A Conservation; nature-based recreation, cultural and tourism opportunities	Vested in CCWA; managed by DPaW	DPaW
4. **Crown corporation** – government corporation/agency e.g. Kings Park and Botanic Garden	Class A Recreation and tourism; conserve and enhance biodiversity, and Aboriginal and contemporary cultural heritage; undertake/promote research	Vested with WA Minister for Environment; managed by Botanic Gardens and Parks Authority (BGPA)	BGPA
5. **Government and not-for-profit partnership** e.g. Araluen Botanic Park	Class A Conservation; parks and recreation	Vested in WAPC; managed by DPaW and Araluen Botanic Park Foundation (ABPF) (under contract)	WAPC
6. **Not-for-profit** e.g. Charles Darwin Reserve	Pastoral leasehold Conservation	Managed by Bush Heritage Australia (BHA) as pastoral lands (as per requirements of Pastoral Lands Board and relevant legislation)	BHA

Table 4: Management arrangements in WA governance models

Model	Management		
	Leases and licenses for tourism activities	**Lead decision-maker**	**Planning**
1. **National park** – single government department e.g. Walyunga National Park	--	DPaW/ CCWA in accordance with relevant legislation	--
2. **Regional park** – multiple government agencies and other organisations e.g. Beeliar Regional Park	e.g. karts, motorcycles, radio modellers	DPaW/ CCWA in accordance with relevant legislation	Management plan for CCWA
3. **Government and tourism partnership** e.g. Yanchep National Park	e.g. tearooms, hotel, golf clubhouse	DPaW/ CCWA in accordance with relevant legislation	Management plan for CCWA
4. **Crown corporation** – government corporation/agency e.g. Kings Park and Botanic Garden	e.g. restaurants, cafes, events such as concerts	BGPA in accordance with *BGPA Act 1998 (WA)* and other relevant legislation	Management plan for WA Minister for Environment
5. **Government and not-for-profit partnership** e.g. Araluen Botanic Park	e.g. violin maker and lessons	DPaW/ ABPF in accordance with relevant legislation	Interim Management Plan 2004-2006 (new Plan to be drafted upon completion of new service agreement)
6. **Not-for-profit** e.g. Charles Darwin Reserve	--	BHA Board of Directors (with advice from Executive)	Conservation management process (in accordance with IUCN guidelines) for Board of Directors

Table 5: Stakeholder arrangements in WA governance models

Model type	Key Stakeholders					How consultation with stakeholders occurs	Volunteer engagement
	Government (Commonwealth, State, local)	Authority/ Foundation	Representative groups/ volunteers	Local Indigenous groups	Other		
1. **National park** – single government department e.g. Walyunga National Park.	S, L	CCWA	X	X	--	In accordance with *CALM Act 1984 (WA)* and other legislation	Sporadic
2. **Regional park** – multiple government agencies and other organisations e.g. Beeliar Regional Park	S, L	CCWA PCWA	X	X	Leasees	In accordance with *CALM Act 1984 (WA)* and other legislation, and Management Plan	Regular
3. **Government and tourism partnership** e.g. Yanchep National Park	S, L	CCWA	X	X	Leasees	In accordance with Management Plan	High; regular and loyal
4. **Crown corporation** – government corporation/agency e.g. Kings Park and Botanic Garden	S, L	Botanic Gardens and Parks Authority	X	X	Leasees	In accordance with Management Plan	High; regular, loyal and longstanding
5. **Government and not-for-profit partnership** e.g. Araluen Botanic Park	S, L	Araluen Botanic Park Foundation	X	-- No sites of significance within the Park	--	In accordance with *CALM Act 1984 (WA)*	Regular; loyal and longstanding
6. **Not-for-profit** e.g. Charles Darwin Reserve	C, S, L	BHA Board	--	X	Donors and sponsors; neighbours	Direct meetings, email, social media	Sporadic; loyal supporter base

The key differences observed amongst the WA examples related to tourism leases and licences. The number and type of leases and licences varied widely. For example some areas had none (Walyunga National Park and Charles Darwin Reserve) and others had significant numbers (Kings Park and Botanic Gardens and Yanchep National Park). The Park with the largest number of leases and licences was Kings Park and Botanic Garden, with one respondent noting they managed over 100.

In addition, most protected areas (with one exception) were managed under some type of management plan, which required final approval by their Board or Authority, or a relevant State representative. Not only do management plans provide the long- term vision and the ability to set measurable goals, they enable park managers to see where they are successful or where changes need to take place in future plans (Alexander and Rowell 1999; Hockings et al. 2006; Jones 2000). In addition, the findings of management plan evaluations can be fed back into and guide continued management to undertake progressively improved management performance, as well as providing a necessary link to public accountability (Jones 2000). In effect, management plans are almost certainly the crucial link between governance and management.

3.4.3 Funding

The main source of funding for the protected areas in question was recurrent State government funding (Table 6). In five of the six examples, government funding was the primary source, with the exception being Charles Darwin Reserve whose funding came primarily from donors and supporters. Yanchep National Park and Araluen Botanic Park both had the greatest variety of income sources with both generating income from entry fees, tours and events, merchandise collection boxes and bequests, amongst others (Table 6). The protected area with the least diverse funding sources was Beeliar Regional Park whose primary funding came from government in various forms, with some funding from private land owners and other organisations.

Table 6: Funding arrangements in WA governance models

Model	Main funding									Other funding	
	Recurrent state govt	Donors	Entry fees	Leasees	Camp-ing fees	Tours, events	Merch-andise	Collection boxes	Bequests	Other govt funding	Other
1. **National park** – single government department e.g. Walyunga National Park	X	--	X	--	X	--	--	--	--	--	--
2. **Regional park** – multiple government agencies and other organisations e.g. Beeliar Regional Park	X	--	--	--	--	--	--	--	--	Local govt	Other owners; WAPC
3. **Government and tourism partnership** e.g. Yanchep National Park	X	--	X	X	--	X	X	X	X	--	--
4. **Crown corporation** – government corporation/agency e.g. Kings Park and Botanic Garden	X	--	--	X	--	X	X	--	--	Common-wealth	Donors/ supporters; corporate sponsors
5. **Government and not-for-profit partnership** e.g. Araluen Botanic Park	X	--	X	--	--	X	X	X	X	--	Members; corporate sponsors
6. **Not-for-profit** e.g. Charles Darwin Reserve	--	X	--	--	X	--	--	--	X	Common-wealth	Mining offset agreements

It may be considered disadvantageous that so much funding for protected area management in WA comes from the government. Not only does this place significant pressure on government funds but it places environmental protection at the mercy of politics and politicians, and therefore makes funding vulnerable to cuts in grants (Eagles 2004). The other problem with this sort of reliance on government funding is that it is not necessarily guaranteed, which makes long-term financial and management planning difficult (Athanas et al. 2001; Emerton et al. 2006). Moos (2002, 19), in describing the Ontario Parks funding system, which used to be managed in a way very similar to our *national park model*, explains that:

> Before 1996 [park revenues] were deposited in the government's Consolidated Revenue Fund [which] made it difficult to undertake any provincial park initiatives that increased costs, because resulting revenues were not available to offset them. The emphasis was on controlling expenditure, not on increasing revenues.

With limited funding increasingly constraining the effective management of protected areas, significant issues can arise including inadequate training of staff, inability to implement long-term planning and inability to maintain up-to-date, and relevant technology to deal with increasing demand on park services (Athanas et al. 2001; Eagles 2004). Therefore a diversity of funding sources for protected areas should be a goal for protected area managers in order to minimise some of these issues. In addition to the sources already described in this study (e.g. government allocations, entry fees, merchandise, leases etc.) other examples of alternate funding sources could include campfire wood sales, equipment rental, accommodation (visitors and staff), carbon offsets and recreation activity fees (Eagles 2014) including fees from event organisers e.g. Ironman or Cape to Cape.

Most of the protected areas examined were involved in lease arrangements of some sort (except Walyunga National Park and Charles Darwin Reserve). These leases incorporated commercial operators for tourism, food and beverage, and also event management. Although there is financial benefit in having a variety of leases (such as Kings Park and Botanical Garden) one of the respondents stated that they could be quite difficult to manage particularly when there were large numbers of leases to manage (for example Kings Park and Botanic Garden managed over 100 leases).

Another issue identified with the government-funded parks was that the funding system is different depending on which park you are in. For certain parks, revenue raised through tourism and associated activities is kept in a specific account that then is spent on that park (e.g. Yanchep National Park), whereas others are almost totally reliant on government funds (e.g. Walyunga National Park and Beeliar Regional Park). One respondent explained it as follows:

> In some of our [government-managed] parks, revenue goes into a special-purpose account. That money can only be spent on that park but that's not consistent [with all parks]. What could be a little discouraging…is if [the park generated revenue] goes into general consolidated revenue and we have to apply for that back, [if it is deemed] another area is a higher priority, then it goes there.

The view of this respondent contradicts that of another DPaW protected area manager (whose park income is significantly less). The second manager believes that a general consolidated revenue fund is the best option, "I think there needs to be an all-of-park approach…where smaller…parks can take advantage of revenue being generated at larger…parks". Although this may seem fairer in some ways, it may not always work in the best interests of all the parks as it ultimately still comes down to who can make the strongest argument as to why they should have the funds (i.e. it will be a subjective decision as to which park gets the funding). It may also remove the motivation for the larger parks to generate income, as it may then be redistributed away from their park. There is also a mixed model possible, where there is balance between earned income being sent to the consolidated revenue fund and the income being retained by the park.

Funding is crucial to the successful longevity of protected areas, with the potential for significant negative impacts as a result of underfunding. Two WA examples had multiple sources of funding (Yanchep National Park and Araluen Botanic Garden) which enabled these parks greater opportunities to supplement their income (and have less reliance on potentially unpredictable government funding). Another benefit in shifting some of the protected area funding from government allocations and grants to tourism fees and charges, is a resultant greater focus on visitor management (Eagles 2004). Eagles (2002) explains that parks with sufficient finance and expertise are able to manage park tourism so that there are low levels of environmental impact and high levels of positive economic

impact. One problem however, is the tendency to under-price (or not price at all) many park goods and services which results in the loss of potential income that could be used to improve park outcomes, including visitor services (Emerton et al. 2006).

3.4.4 Stakeholders and WA governance models

Three significant stakeholders were common across all six protected area examples; the government (local, state and/or federal), the managing body or authority, and the volunteers, members, or donors and sponsors of the relevant areas (Table 5). Other key stakeholders mentioned were local Indigenous groups and leasees. In addition, although all the protected areas had neighbours, Bush Heritage Australia made a point of saying they try to include their neighbours in planning and decision-making, where practical. Another commonality was that most organisations conducted their stakeholder engagement and consultation in accordance with State legislation and or a management plan. Additionally, the respondents were also asked about their volunteer base, with most describing their volunteers as loyal and engaging their services on a regular basis (DPaW's 2012-2013 annual report recorded 4,717 volunteers providing 564,350 hours to DPaW projects across WA, which was a greater than 20 % increase in both the number of active volunteers and the hours contributed compared to the 2011–12 financial year).

Having a variety of stakeholder input is a positive outcome as cooperative relationships between relevant land management, industry and community stakeholders can be of benefit to all concerned (Wearing et al. 2008). This is particularly important in WA where extensive government involvement in decision-making processes for protected areas is offset to some degree by the range of stakeholders involved. Such involvement has a statutory base in management planning, with the opportunity for public comment being a mandated requirement. The range of involvement and this mandated requirement assist in the achievement of 'good' governance principles, such as transparency and accountability.

The other important finding regarding stakeholders in most WA examples, with the exception of Araluen Botanic Park, was that engagement with local indigenous groups is common practice. A respondent for Araluen Botanic Park explained there were no significant Aboriginal sites in the protected area thereby removing the need to liaise with local Indigenous groups (see Table 8). This type of liaison provides access to the unique and

often specialised knowledge of indigenous communities, which is essential for successful protected area management as well as maintaining the significance of Indigenous peoples' extensive history and culture for future generations (Berkes et al. 2000; Borrini-Feyerabend et al. 2004; Hockings et al. 2006).

4. Management implications and recommendations

There are a number of protected area governance issues that need further investigation, both in WA and across Australia. The four key recommendations arising from this study are as follows.

Recommendation 1: Investigation into more diverse and innovative approaches to funding Australian protected areas.

Within Western Australia (and most likely Australia) there is a very heavy reliance on government funding in protected area management. It is also important to note that all protected areas are not created equal, particularly in an area as large as WA where there are vast extremes between areas in conditions such as climate, rainfall, habitation, visitor numbers and human activities (past and present). This means that funding solutions for one area may not necessarily work in another. This is why the identification of a number of different funding sources for protected areas would be beneficial and provide protected area managers with a range of funding options.

Recommendation 2: Evaluation and determination of 'best practice' governance in WA and Australia.

Abrams et al. (2003) suggest a number of reasons why evaluating governance is necessary, including finding solutions to management issues and to ensure accountability and conserve financial and material resources. As such, the idea of 'good' governance is one that should be investigated further in WA and Australia as a whole. Although the idea of good governance of protected areas was not explicitly investigated in this study, several of the United Nations Development Program (UNDP) Governance Principles for Sustainable Human Development (UNDP 1997) were referred to in Section 3 (for example transparency and accountability). As a number of researchers have suggested, there needs to be a move from

the establishment of protected areas to an examination of the effectiveness of their management with governance being part of these considerations (Buteau-Duitschaever et al. 2010; Hannah 2006; Hockings and Phillips 1999).

Ultimately, effective and sustainable protected area management is reliant on successful governance. Similarities in protected areas in different locations means information, research, new technologies and other approaches found in one protected area can be applied in others, potentially saving time, money and even key environmental habitats. It also provides the opportunity for protected area managers to review and change any processes that are not working, and implement changes to others where needed.

Recommendation 3: Broader application Australia-wide to identify the full range of governance models in use.

An Australia-wide investigation is recommended to verify the relevance of these models in an Australian context and identify any other models unique to other parts of Australia (e.g. as the *regional park model* is unique to WA). Such research could provide protected area managers the opportunity to assess their current management practices and assist in identifying strengths and weaknesses across protected area management in Australia, thereby improving management and decision-making processes.

Recommendation 4: Analysis of range of governance models where Indigenous people own or are involved in protected areas.

One significant omission from this study were the Indigenous models of protected area governance within WA (and Australia); namely in this study, the a*boriginal and government model* and the *traditional-community model*. These models should be investigated to provide an inclusive record of the protected area governance models found in WA.

5. Acknowledgements

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7. Appendices

Appendix 1: Interview questions

Protected Area Governance in Western Australia – Research Project 2013

A. BACKGROUND QUESTIONS

Name: Protected area of interest:

Current role: Years in current role:

Organisation: Years in organisation:

Your involvement in the planning and management of this protected area:

B. OWNERSHIP QUESTIONS

Ownership/tenure of this protected area (e.g. class A reserve):

Reserved purpose of this protected area (e.g. national park):

What boards of management/vesting bodies/authorities are involved in this protected area? Please explain their structure and functions.

What other formal management arrangements such as leases, licences and special agreements apply in this area?

What does this tenure/ownership and reserved purpose enable you to do and not to do?

How are decisions made about visitor management and tourism use in this protected area?

In terms of policies (for EXAMPLE)

In terms of planning (for EXAMPLE)

In terms of management (for EXAMPLE)

Who owns the visitor facilities on this land? Who is responsible for maintaining them?

C. FUNDING QUESTIONS

What are the sources of funding for managing this protected area?

Who is ultimately accountable for spending/finance for this protected area? How does this accountability take place?

D. MANAGEMENT QUESTIONS

Who manages this protected area on a day-to-day basis?

Who are the key stakeholders of this area and what/how are they consulted about management?

Appendix 2: WA protected area governance models where tourism is one of the land uses

	Model type	Example	Ownership	Management body	Funding	Relationship to Eagles' models (2008, 2009)
1.	**National park** – single government department	Walyunga National Park	Government reserve	Government department	Government funding	National park
2.	**Regional park** – multiple government agencies and other organisations	Beeliar Regional Park	Government reserves plus private lands	Multiple government departments/agencies and private landholders	Government funding	New category
3.	**Government and tourism partnership**	Yanchep National Park	Government reserve	Government department	Government funding, user fees and charges	Public and for-profit combination
4.	**Crown corporation** – government corporation/agency	Kings Park and Botanic Garden	Government reserve	Statutory authority	Government funding, corporate sponsorship	Parastatal (state-owned corporation)
5.	**Government and not-for-profit partnership**	Araluen Botanic Park	Government reserve	Government department and not-for-profit organisation	Government funding, user fees and charges	Public and nonprofit combination
6.	**Not-for-profit**	Charles Darwin Reserve	Government leasehold	Not-for-profit organisation	Donations	Nonprofit
7.	**Aboriginal and government**	Purnululu National Park	Traditional owners, government reserve	Government department	Government funding	Aboriginal and government *(not considered in this study)*
8.	**Traditional community** *(not studied)*	Indigenous Protected Areas (various)	Traditional / community owned lands	Traditional owners/ community	Government funding, user fees and charges	Traditional community *(not considered in this study)*