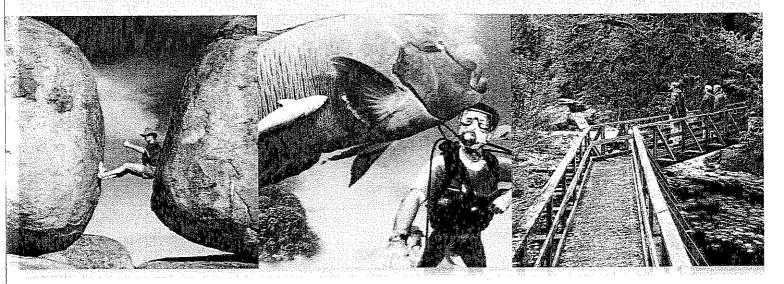




A Natural Partnership: MAKING NATIONAL PARKS A TOURISM PRIORITY

PROJECT PAPER 2 | By Professor Ralf Buckley, from Griffith University INNOVATIVE FUNDING MECHANISMS FOR VISITOR INFRASTRUCTURE



Platinum Partners



Australian Government

Department of Industry, Tourism and Resources



Gold Partners



Department of the Environment and Heritage



department for environment of South Australia and helitage













Supporters.

















Introduction & Background

This report is part of a major project conducted for TTF Australia on Making National Parks a National Tourism Priority. The project was conducted by the Sustainable Tourism Co-operative Research Centre during 2003-04.

This report is the second of three substantial Project Papers:

Project Paper 1: The Visitor Experience (by Tony Griffin & Megan Vacaflores from University of Technology, Sydney)

Investigating the quality of the visitor experience (presentation, interpretation and education) for tourists within National Parks and other protected areas.

Project Paper 2: Innovative Funding Mechanisms for Visitor Infrastructure (by Professor Ralf Buckley, from Griffith University)

Investigating innovative funding mechanisms for national parks and other protected areas to allow for the provision of soft and hard tourist infrastructure while sustainably managing the natural and cultural heritage assets of parks.

Project Paper 3: Marketing and Promotion (by Associate Professor Stephen Wearing & Heather Nelson from University of Technology, Sydney)

Investigating the involvement of the tourism industry in the promotion and marketing of National Parks and other protected areas.

There is also 24 page summary report "A Natural Partnership: Making National Parks a Tourism Priority" which ties the three project parts together and presents a vision for making national parks a national tourism priority.

All parts of the project are available for free download from TTF Australia's website www.ttf.org.au under 'research'.

June 2004.

© Copyright is shared between TTF Australia and Sustainable Tourism CRC. For permission to reproduce please contact these organisations.

TABLE OF CONTENTS

7	Executive summary	
2	Introduction & methods	
3	Context for parks funding & visitor infrastructure	
	Introduction	
	Attractions, Visitor Origins and Expenditure	
	Land Tenure, Exclusivity & Commercial Opportunities	
	Retail-level Revenue Streams	
	Visitor Expectations & Planning Controls	14
4	Major funding sources	15
	Major Categories	15
	Current and Future Funding Sources	16
	Applicability for Visitor Infrastructure	17
5	Australian case studies	18
	Summary of Australian Case Studies	18
	Earth Sanctuaries Ltd, SA & NSW - privte reserve, commercial tourism	18
	Crystal Creek Rainforest Retreat, NSW - ecolodge and conservation agreement	18
	Tahune Airwalk, Tasmania - State Forest visitor infrastructure	
	NPWS Heritage Lighthouses, NSW - commercial leases	19
	NPWS Caravan Parks & Camping Areas, NSW - commercial leases	
	Aurora Resort, NT- commercial lease	
	Werribee Park, Victoria - commercial lease	20
	Brambuk - A National Park and Cultural Centre, Victoria - community partnership	20
	North Head Quarantine Station, NSW - commercial lease	
	Cape Otway Lightstation, Victoria - commercial lease	
	Deep Creek Cottages, SA - commercial lease	
	Mt Buffalo Chalet, Victoria - commercial lease	
	Bent Wing Café, Naracoorte Caves, SA - lease and loan	22
	Minjungari Camp, NT - exclusive access arrangement	
	Cooinda Lodge, NT - excision from park	
	Heron Island Resort, Old - commercial activity agreement	
	Cradle Mountain Lodge, Tas - infrastructure funding partnership	
	Conservation Volunteers Australia – volunteer labour and corporate sponsorship	
	Mutitjulu Foundation, NT- community support scheme	
6	International case studies	
	Introduction	
	Londolozi, South Africa	
	Ngala, South Africa	
	Sabi Sabi, South Africa	
	Chumbe Island Coral Park, Tanzania	
	Tafua Canopy Walkway, Samoa	
	Whistler-Blackcomb Resort, Canada	
	Pacific Asia Travel Association (PATA) Foundation	
	The Africa Fund	
7	Findings	
	Parks and Regional Tourism	
	Innovative Funding Opportunities	
	State Forestry Agencies' involvement in commercial tourism	
	Private landowners' involvement in commercial tourism	
	Investment and Public-Private Partnerships (PPPs)	
	Opportunities for PPPs	

	Visitor Fees	.35
	Donations and Trusts	.35
	Foundations	. 36
	Image and Information Services	. 36
	Intellectual Property	.37
8	Recommendations	. 37
	nowledgements	
	iography	

1 Executive summary

There are a number of examples where private investment has contributed to visitor infrastructure in protected areas in Australia, as well as internationally. Some examples are summarised below.

Table 1

Case Study	Model (TO = tour operator,	E	mated annual value to conservation or land pagement agency, Au\$				
	PA = parks agency)	<1K	1 - 10K	10 – 100K	100K - 1M	>1M	
Foundation for National Parks & Wildlife	private foundation					*	
Earth Sanctuaries Ltd	private reserves with commercial tourism	in the second se			**		
Crystal Creek Rainforest Retreat	voluntary conservation agreements, ecolodge	not noverto		*	4		
Tahune Airwalk	state forest visitor infrastructure	**************************************	AND	*	e de la constante de la consta	NAVA	
NSW Heritage Lighthouses	TO lease on PA building	AVALUMBURANCE STORY	- Color de La Calabrata de Cala		**		
NSW Parks Campgrounds	commercial lease	- Con A A A A A A A A A A A A A A A A A A A			÷ **		
Aurora Resort	commercial lease in park				*		
Werribee Mansion	commercial lease				*		
Brambuk	community partnership				*		
North Head Quarantine Station	TO lease on PA site	- A MARIE MANAGEMENT AND A MARIE MANAGEMENT A		A COMPANY OF THE PROPERTY OF T	**	CLUCK POLICE POR N	
Cape Otway Lightstation	commercial lease			*			
Deep Creek	commercial lease		*		-		
Mt Buffalo Chalet	commercial lease		*				
Bent Wing Café	lease and loan	*				Control of the contro	
Minjungari Camp	exclusive access agreement	*		-	The state of the s	A CONTRACTOR OF THE CONTRACTOR	
Cooinda Lodge	excision from park	*				to the deal database representation	
Heron Island Resort	commercial activity agreement	and a second		*		Annana annana	
Cradle Mountain Lodge	infrastructure funding partnership			*			

Conservation Volunteers Australia	volunteer labour		*	
Mutitjulu Foundation	community support		*	

There are many different ways in which parks agencies could raise further funding, but: none are easy; only some are applicable to visitor infrastructure; and different approaches fit better for different parks. The following table presents a summary of the report's findings regarding the potential for various funding sources to contribute to visitor infrastructure.

Source of visitor infrastructure or funding	Relevance for visitor infra- structure	Potential financial scale	Potential breadth of application	Ease and immediacy of adoption
Sale of ecosystem services	*	***	*	*
Increased government appropriations	**	***	***	***
Private infrastructure in gateways	***	***	**	***
Tourism in State forests	***	***	**	Ne 34: 34:
Private reserves with tourism	***	***	**	*
Increased user fees	***	**	**	**
Image and information services	**	***	**	*
Foundations and conservancies	*	**	***	***
Commercial tourism leases in parks	***	**	*	*
Donations and volunteers	*	*	***	***

It is in the interest of the tourism industry to give parks agencies a helping hand. Possible approaches may be expressed in terms of partnerships:

- Portfolio partnerships where tourism interests lobby governments to increase parks agency budgets
- Agency partnerships where state forestry agencies construct tourism infrastructure
- Land partnerships where governments provide incentives for conservation and tourism infrastructure on private land near parks
- Planning partnerships where local governments combine with parks agencies to promote low-impact gateways

- Local partnerships where tourism interests assist directly with basic visitor infrastructure in parks
- **Investment partnerships** for *limited* commercial tourism infrastructure inside parks, where this helps reduce visitor impacts
- Community partnerships where local residents and businesses volunteer services, e.g for heritage trails
- Research partnerships where a proportion of visitor fees goes to provide management information

2 Introduction & methods

Broadly, the background, brief and approach for this project contained three components:

- review of context for parks funding, with specific reference to visitor infrastructure including: roads, parking areas, visitor centres, signs, maps, safety directions, fences, wildlife viewing platforms and hides, scenic lookouts and amenities;
- scan of several hundred case studies worldwide, and descriptive analysis of Australian and overseas examples using data from published sources and from members of the project steering committee and their associates;
- derivation of conclusions and recommendations for funding visitor infrastructure relevant to Australian regional tourism, and extended consideration by members of the project steering committee to establish a broad consensus on these.

The project did not provide for on-site audits of any of the case studies, so information has not been checked first-hand. Six of the international case studies have been audited previously (Buckley, 2003).

3 Context for parks funding & visitor infrastructure

Introduction

Operational costs for Australian protected areas continue to increase because of factors such as: additions to the protected area estate, especially of land requiring rehabilitation; increasingly stringent interpretation of measures needed to restrict legal liability; and in some areas, increasing visitor numbers and intensity of use.

Government funding for protected areas is nearly always low relative to other government appropriations, because the principal benefits of conserving biodiversity and ecosystem services are distributed broadly and indeed internationally, rather than in areas of key and immediate political significance.

Private-sector investment in protected areas in limited circumstances was endorsed by the World Parks Congress in 2003 (Quintela, 2003); but endorsement was subject to a number of conditions relating to the primary conservation function of protected areas, and appropriate returns to protected areas from commercial use.

Within Australia, the Wet Tropics Management Authority (2003) has proposed a draft set of principles for greater private sector involvement in the presentation and management of the Wet Tropics World Heritage Area (WHA). Under these principles:

- commercial interests are clearly specified as subordinate to the public interest in protecting the WHA, and private investment must be consistent with WHA management strategies;
- the commercial value of the WH name and reputation is clearly recognised and commercial interests are expected to pay to use them;
- commercial businesses accessing the WHA are expected to provide a return to the protected area management agencies; and,
- the role of gateways, and the importance of integrating them with infrastructure inside the WHA, are recognised.

Perhaps the most critical constraint on private-sector involvement in visitor infrastructure, however, is that it is perceived as pointless for protected area management agencies to seek private-sector funds if government appropriations are then reduced to offset this external revenue.

Some of the major contextual issues for funding visitor infrastructure in Australian parks are as follows:

- rural and regional tourism relies heavily on natural attractions;
- the majority of rural tourists are domestic;
- most economic activity associated with visiting parks occurs outside the parks;
- national parks are not the only source of natural attractions;
- parks have free infrastructure, whereas private land has exclusivity;
- maximum revenue opportunities are at retail level;
- visitor preferences are for environments to be kept as natural as possible;
- gateway areas to national parks need integrated planning across tenure boundaries.

Attractions, Visitor Origins and Expenditure

Tourism in rural and regional areas relies heavily, but not solely, on natural attractions such as scenery, landscapes, watercourses, vegetation and wildlife. Other significant attractions include rural landscapes, traditional lifestyles, agricultural activities, arts and crafts, and antiquities. Features of the tourism service product itself may also provide significant attractions. These include well-designed accommodation, and food and drinks ranging from traditional home cooking to fine dining and wine tasting. Many tourism experiences in rural and regional Australia, whether self-drive or commercially packaged, include a selection of natural, cultural and service-related attractions.

Although a high proportion of international visitors to Australia do visit a national park at some point during their stay, most visitors are Australian residents on self-drive holidays. Similarly, though many icon national parks in Australia are major destinations for backpackers and other international visitors, the majority of park visitors are Australians who reach the areas concerned with their own transport and equipment.

The major categories of expenditure by domestic tourists visiting national parks and other rural natural areas are the capital and operating costs of vehicles and other equipment. Vehicles are rarely purchased specifically for leisure use, but preferred leisure activities may influence the choice of vehicles, and extended self-drive holidays may involve significant vehicle costs. This applies, for example, where people buy Four Wheel Drive vehicles to reach remote areas or launch boats, or purchase more powerful conventional vehicles for towing caravans.

Likewise, equipment used for outdoor holidays may include a wide range of camping equipment, sporting equipment ranging from cross-country skis to fishing gear, and boats ranging from small canoes to luxury yachts.

In addition to vehicle and equipment costs, major expenditure on accommodation and food also occurs outside the parks themselves. Indeed, commonly the only direct visitor expenditure within a destination park consists of relatively small entrance, camping or activity fees, and retail purchases from souvenir shops and on-site food outlets, often operated by private concessionaires.

In considering how national parks contribute to tourism, therefore, the critical economic issue is how those parks attract domestic self-drive holiday makers to a particular region, and induce them to stay there. Direct expenditure on commercial tours and tourist activities contributes only a very small proportion of the total tourism revenue generated ultimately by the park which provides the primary attraction.

Land Tenure, Exclusivity & Commercial Opportunities

National parks provide the main available locations for people to visit relatively undisturbed scenic natural ecosystems. They also provide the principal, though by no means the only, remaining habitat for many rare and endangered plant and animal species. These may not be visible to visitors, however, except with expert guides and specialist equipment. Indeed, one major category of visitor infrastructure in protected areas is specialist infrastructure designed specifically for visitors to watch wildlife species in their natural habitats. Examples range from viewing platforms and hides, to remotely-operated infra-red cameras to watch bats inside caves, or underwater cameras to watch reef fish and marine mammals.

Many of Australia's most scenic areas and abundant wildlife, however, are outside the protected area estate, either in private land, in Aboriginal reserves, or in other public land tenures such as state forests or local government reserves.

Whilst Australia does not have the extensive system of recreational wilderness areas established by the Forest Service in the USA, public forests in Australia are used extensively

for outdoor sports, tourism and family recreation, generating associated expenditure in the same way as national parks (Ward, 2003).

Similarly, many of Australia's most successful country lodges are on private land, some contiguous with national parks but others quite independent. Arkaroola Station in the Flinders Ranges of South Australia, and El Questro Station in northwest Western Australia, provide well-known examples of entirely independent rural properties which have been highly successful in up-market tourism. A number of other large agricultural landholders in Australia are currently considering the adoption of these or similar models.

Currently, however, the most common model is for tourist accommodation and associated activities on private land contiguous with protected areas, where the area of private land is much smaller than the area of the park. There are well-known examples adjacent to the Queensland Wet Tropics, the Central Eastern Rainforest Reserves of Australia (CERRA) parks of southeast Queensland and northern New South Wales, the Blue Mountains, and in Tasmania.

One reason that parks are popular for visitors is simply that information about them is more easily available than for other land tenures. Even little-known parks can be shown on maps, listed in guidebooks, advertised in regional tourism brochures, described in parks service websites, and so on. World Heritage areas and other icon parks are international tourism destinations in their own right, listed in travel handbooks and included in tour packages. Hence tourism operations associated with a particular park benefit from this awareness.

Visitor infrastructure in protected areas has been funded largely by taxpayers in Australia. Even where visitors and tour clients pay park entrance fees, there are few parks where these fees currently cover the costs of providing and maintaining visitor facilities, let alone the costs of conserving the natural heritage for which the park was established. For visitors to public national parks, therefore, both the costs of maintaining the natural attraction and the costs of infrastructure such as roads, tracks, lookouts and toilets are provided largely as taxpayer-funded public goods. For commercial tourism in these areas, infrastructure costs are subsidised relative to private landholdings.

Nature tour operators on private lands must generally fund both infrastructure and conservation costs themselves. Once they have done so, however, they have exclusive control over access and use, and can determine prices and volume to maximise revenues, subject to market conditions such as overall demands and competing establishments.

Clearly, there are opportunities for commercial tourism operators wherever they can obtain exclusive or preferential access to protected areas whose natural heritage and/or visitor infrastructure are publicly subsidised. It is not surprising, therefore, that commercial tourism interests seek such preferential rights. However, parks services commonly have social equity obligations so that if an area is open for a particular activity at all, it must be open to the public at large, and any overall quotas or other constraints on numbers must be applied equitably, e.g. by lottery or on a first-come, first-served basis.

Since preferential rights for one operator or a group of operators necessarily reduce opportunities for other operators and sometimes the general public, such arrangements or

proposals commonly meet strong public opposition and in many cases are contrary to legislative provisions and parks policies.

Such equity issues are strongly felt in Australian communities, and there are many instances where strong community opposition has been voiced for infrastructure proposals which would effectively create differential access. This has occurred even where the relevant parks agency itself has supported such arrangements, and indeed even where such arrangements might reduce the cost for members of the public to visit other areas of the park concerned. Such arrangements are considered later in this report.

More broadly, it would appear that smaller-scale mobile tours with limited access to capital and intermittent requirements for infrastructure would commonly obtain greater opportunities for profit by reducing costs through subsidised infrastructure, rather than increasing prices through exclusivity. As a result, these smaller tours would gain financial advantage from operating within protected areas; and indeed, many do so.

Even for these tours which essentially act as groups of private individuals paying for a guide, however, there may still be advantages in obtaining preferential access agreements such as those granted in some states to tour products certified under Ecotourism Australia's Ecocertification Program (formerly known as the Nature and Ecotourism Accreditation Program).

For tourism operations that involve high capital investment and rely on exclusivity and high service quality to maintain high prices, the cost savings through subsidised infrastructure are small relative to total costs, and are far outweighed by the increased control, flexibility and exclusivity available on private land. This applies for tourism activities requiring specialised infrastructure, as well as for tourism accommodation. Indeed, the proportion of outdoor tour operators in Australia who rely on private lands is significantly greater for larger companies, with turnover greater than \$10 million p.a., than for smaller businesses (Buckley, 2004).

Retail-level Revenue Streams

To raise significant revenues from visitors, protected area managers need access to the revenue stream at the retail level. Where a commercial tour product includes a national park visit with an associated entrance fee, the demand for the product is determined by the overall package price, not by the entrance fees.

It is commonplace worldwide that protected area management agencies which provide the primary attraction for many commercial nature tours receive fees equal to only a few percent of the total tour cost. This applies equally, e.g., for hiking tours in Kakadu National Park, diving tours in the Great Barrier Reef Marine Park, gorilla-watching tours in the Bwindi-Mgahinga National Park in Uganda, or heliskiing tours in India's Himachal Pradesh.

Protected area management agencies which have generated significant revenues from visitors have done so either by charging significant fees directly to individual visitors, as in Parcs Quebec and indeed NSWNPWS, by constructing their own activity infrastructure and charging fees directly to visitors, as at the Tahune Airwalk in Tasmania or the Treetop Walk in

WA, by revenue-sharing agreements, or through lease rental payments such as those by ski resorts in NSW alpine parks or Cradle Mountain Lodge in Tasmania.

Protected areas were established to provide conservation and where appropriate, recreation as public goods. Attempts to raise significant proportions of their operating funds through commercial tourism enterprises face four highly significant risks.

- Firstly, if they act as retail tourism providers they come into immediate competition with other commercial tourism providers on private land, other land tenures, and indeed on their own lands. There have been a number of instances where tourism interests have complained that national parks visitor education programs compete for clients with commercial tours, and undercut them on price. If parks tried to rely too heavily on tourism to generate revenues, the reverse could well occur.
- Secondly, tourism as a business is subject to a wide range of external factors which may lead to dramatic reductions in revenues. These include: natural factors such as floods, storms, droughts and fires; economic factors such as fuel prices and currency exchange rates, and social factors such as wars, terrorism and diseases. Just as many commercial tour operators have suffered severe financial losses or indeed become bankrupt because of the combination of these factors over recent years in Australia, the same could easily happen for any public land management agencies which relied too heavily on tourism and recreation for funding.
- Thirdly, large-scale agreements between public agencies and private corporations carry commercial and contractual risks for the public agency as well as the private investor. Some public-private partnerships have proved to be major disasters for the public partners. The most costly case study of private investment in Australian public protected areas appears to be the Seal Rocks Sea Life Centre on Phillip Island, Victoria. A dispute between the developer and State government was ultimately settled in court at a cost to the taxpayer of around \$56 million (O'Connor, 2003). Large-scale partnerships are also very costly in administrative effort, as outlined above for the North Head Quarantine Station, Sydney.
- Fourthly, making money from visitors, whether directly or through independent commercial tour operators, can often come into conflict with the primary conservation goals of protected areas. This has occurred many times in Australia and internationally, and is one of the reasons why governments often do not allow individual parks or entire parks agencies to retain funds they receive through commercial activities.

In addition, whilst some protected area management agencies internationally have indeed become highly successful commercial tourism operators in their own right, it currently appears that most PAMA's in Australia may not have the political mandate, business skills and philosophy, or indeed the legislative backing to raise investment capital for commercial tourism operations.

The primary role of protected areas is to conserve biodiversity and ecosystem services, and it is this role which provides their greatest economic benefit to human societies. Visitation is an important secondary role, but the primary economic benefit of outdoor recreation to human societies is through improved human health (Senior 2004). Certainly, an increasing number of people in countries such as Australia are relying on commercial tour operators to provide their

recreational experiences, but this is still a relatively small component of the total. These issues are commonly recognised by protected areas management agencies themselves, and are indeed codified in a number of international guidelines (e.g. Eagles and McCool, 2002). They are critical considerations in selecting potential mechanisms for innovative financing.

Visitor Expectations & Planning Controls

One critical finding of many visitor satisfaction surveys worldwide, Australia included, is that the majority of visitors to national parks prefer minimal infrastructure (see Griffin and Vacaflores 2004, Project Paper 1). This is confirmed by steering committee members and stakeholders in this study. Visitors want somewhere to park, toilets that are clean and working, a limited number of walking tracks and look-outs, and maps and directional signs so they can find their own way around. They are there to enjoy nature and wilderness, not buildings and civilisation.

Indeed, this is one major reason why there has consistently been very strong and concerted public opposition, in Australia as overseas, to proposals for major infrastructure development in protected areas. This applies to proposals made by the parks agencies themselves, e.g. at Tidal River in Wilsons Promontory National Park in Victoria, as well as to proposals by private developers, e.g. in Springbrook National Park in Queensland. Only in a few large protected areas where overall wilderness quality and conservation values can be maintained, and often only where there are specific and unusual political circumstances, have large-scale infrastructure developments been approved within public protected areas in Australia; and even then, public support has been by no means unanimous. Examples include the Skyrail Cableway in the Wet Tropics of Queensland World Heritage Area, Aurora Lodge in Kakadu National Park, and permanent fixed pontoons for dive and snorkel tour operators in the Great Barrier Reef Marine Park.

From a tourism perspective there are many advantages in establishing accommodation and facilities on private land immediately outside parks entrances, in so-called gateway areas. However, there are many examples worldwide where development along access roads or park boundaries has created major environmental impacts within parks. This was of major concern to the Commonwealth Government, for example, in relation to the Hinchinbrook Harbour development between the Wet Tropics of Queensland WHA and the Great Barrier Reef Marine Park WHA.

Gateway development in the Galapagos Islands has led to severe pressure on the parks (Buckley, 2003). Similar concerns have arisen around the more popular parks of Canada and the USA, many of which also attract amenity migration (Johnson *et al.*, 2003). The same phenomenon is currently occurring for coastal, montane and some forest parks in Australia. Hence while gateway development of tourism facilities generally has advantages over infrastructure within the parks themselves, tight planning controls and integrated planning across land tenure boundaries are required to maintain the quality of the natural environment as well as the visitor experience.

4 Major funding sources

Major Categories

Sources of funding for visitor infrastructure in national parks and other natural heritage areas fall into three main categories: government appropriations, voluntary donations, and commercial transactions. Before considering specific case studies, it is useful to consider major features associated with each of these.

Government appropriations depend on the political system in the country concerned and in Australia, on the political parties in power at State and Commonwealth level. They are commonly made annually as part of overall government budget processes. A small proportion may be committed for longer periods, usually as part of specific named government funding programs.

Sometimes, government funds raised from particular mechanisms may be earmarked for a particular use, but since these earmarked funds can always be offset by reductions in funds raised by other mechanisms, this is largely of political rather than economic significance, and tends to be resisted strongly by both State and Commonwealth Treasuries. Where government agencies enter into contractual arrangements with private corporations, e.g. in relation to visitor infrastructure, there may be extended political and legal disputes if subsequent governments do not approve of the arrangements made.

Voluntary Donations can include cash, resources such as materials or expertise, and volunteer labour, e.g. for weed control or track maintenance. The value of any of these can be significant. The Foundation for National Parks & Wildlife (FNPW) of NSW, for example, has raised over \$30 million over the past 30 years for NSWNPWS, and has made a major contribution to the establishment of many national parks and visitor centres (FNPW, 2003). Not surprisingly, however, people who make donations either of time, resources or money will generally do so only (a) because of strong personal convictions, or (b) because they expect to benefit socially if not financially.

In practice this means that donations are a valuable source of funding for the establishment of new protected areas, conservation works such as endangered species recovery programs, and low-key local visitor infrastructure such as track construction and maintenance. Examples of the former include The Nature Conservancy in the USA and elsewhere, the FNPW, and The Australian Bush Heritage Fund. Examples of the latter include the Bibbulmun Track Foundation and a variety of local conservancies.

Commercial transactions involving national parks agencies may be considered in three categories: those carried out directly with individual visitors, such as entrance and activity fees; those carried out with commercial tourism organisations or other private investors relating to recreational services and infrastructure; and those carried out with external organisations relating to biodiversity and ecosystem services.

Distinctions between these three major funding categories may be blurred. For example, government user charges may be viewed either as commercial fees or as taxes, from different

perspectives. Corporate donations may yield tax and marketing advantages for donors. And various partnerships arrangements may combine public and private finance.

Different mechanisms involve different economic sectors, investors and financing mechanisms. User fees commonly involve individuals, at the retail level, and small tour operators. Donations involve large corporations, NGO's and philanthropic trusts. Sale of recreational services involves parks corporations and large tourism and property developers. Sale of ecosystem services may involve governments, municipalities, private utilities, national banks and financial institutions, and international financial institutions. Again, these distinctions are not clear cut. For example, some ecosystem services such as water supply can typically be provided through local-scale mechanisms, and only rarely involve cross-border transactions between nations; whereas others such as carbon offsets typically involve international trading.

Ecosystem services transactions can potentially generate the largest revenue for parks, but are specifically not related to visitation or visitor infrastructure. Indeed, where protected areas can generate funding through provision of high-quality water, there may be a specific requirement to exclude all visitors from the catchment area because of health considerations. Ecosystem services transactions, whilst of great future significance for protected areas worldwide, will therefore not be considered further in this report.

Current and Future Funding Sources

Protected area management agencies in Australia are funded predominantly from government appropriations. They do also raise funds from visitor fees, tour operator licences, photographic licences and so on, but these make up a relatively small proportion of their total budgets, commonly less than 5%. At the same time, visitor management consumes a very high proportion of staff time and hence of salary and related costs, which are the largest component of expenditure. Estimates provided by the various Australian protected area management agencies in 2001 (Buckley *et al.*, 2001b), indicated that the majority of staff time and resources in most parks is devoted to visitor management rather than conservation management issues.

The annual reports of Australian protected area management agencies generally do not differentiate visitor management and conservation management as separate subsidiary activities or business units. In any event, conservation management is as important to park visitation as visitor management *per se*, since this maintains the primary natural heritage attractions. In contrast, State forestry agencies which have commercial visitor infrastructure do distinguish this from timber production activities. NSW State Forests, for example, use an activity-based accounting system which tracks these costs separately (Hilary Smith pers. comm. 2004).

After government budget appropriations, the main secondary source of revenues for Australian protected area agencies at present is from entrance, camping and activity fees, though as noted above these are much smaller than primary funds. Maximum vehicle entrance fees for most national parks around Australia are around \$10-15 per day, with a range from zero to over \$30 (Buckley *et al.*, 2003). Annual fees, however, are proportionately much lower, mostly around \$50-80, with a range from zero to around \$200. Annual permits have financial

advantages for parks agencies as well as visitors, since they greatly reduce administrative costs.

Camping fees are structured differently in each jurisdiction. Some parks charge per site, some per vehicle, some per person and most by a combination of these factors. A single pedestrian could pay anything from zero to \$18 for an overnight campsite in different States. A family of two adults and two children in their own car would typically pay from \$15-\$25, though up to \$40 in some cases. From the parks agency perspective, collecting camping fees will generally only generate net revenue where visitor numbers are high enough to cover the costs of staff or a concessionaire to collect fees, or the costs of installing, maintaining, emptying and policing self-registration systems.

Commercial tour operators may pay a licence application fee, an annual fee, and a *per capita* fee for each client. Application fees are typically up to \$300 and annual fees are generally around \$150 to \$250 but significantly larger (over \$2,000) in some cases. *Per capita* fees are generally as for independent visitors, but up to \$2.50 higher in some cases and discounted in others (Buckley *et al.*, 2003, updated by pers. comm. from steering committee members).

Some particularly promising possibilities for future funding of Australian parks include: donations of funds from lotteries and merchandise franchises; extended conservation use of private land; royalties of various types; redistribution of earmarked tax fractions, e.g. from GST; sale or securitisation of various ecosystem services; and large-scale preferential access or activity agreements with private tourism investors which yield significant net cashflow for conservation. The brief for this report focuses specifically on those which have the greatest potential for funding visitor infrastructure, but the others also deserve further attention.

Applicability for Visitor Infrastructure

Major potential sources for increases in funding of parks agencies, and their financial scale, relevance for visitor infrastructure, breadth of application and ease of adoption are summarised below.

Source of visitor infrastructure or funding	Relevance for visitor infra- structure	Potential financial scale	Potential breadth of application	Ease and immediacy of adoption
Sale of ecosystem services	*	***	*	*
Increased government appropriations	**	***	***	***
Private infrastructure in gateways	***	***	**	***
Tourism in State forests	***	***	**	***
Private reserves with tourism	***	***	**	*
Increased user fees	***	**	**	**
Image and information services	**	***	**	*
Foundations and conservancies	*	**	***	***
Commercial tourism leases in parks	***	**	*	*
Donations and volunteers	*	*	***	***

5 Australian case studies

Summary of Australian Case Studies

The major features and approximate financial scale of the case studies outlined above may be summarised as per Table 1 in this Project Paper (see page 5).

Earth Sanctuaries Ltd, SA & NSW - privte reserve, commercial tourism

Earth Sanctuaries Limited (ESL) was established in 1969 by Dr John Walmsley at Warrawong, a 14-15 ha former agricultural property in the Adelaide hills. Over the next 20 years, Walmsley fenced the property, eradicated feral animals, rehabilitated native vegetation and reintroduced a range of endangered native wildlife species. Operating costs have been funded through: onsite tours and accommodation; a craft and souvenir shop; conference facilities and a café; sales of native plants, captive wildlife and building materials; and education, film and photographic revenue (Earth Sanctuaries Ltd, 2002; ADITR, 2003; Buckley, 2003). Following the success of Warrawong, Walmsley established two further sanctuaries in NSW and started development of three more, but these were sold in 2002 owing to financial difficulties (Earth Sanctuaries Ltd, 2002). The company was floated in May 2000, to raise funds for expansion (Hares, 2002). Shares were listed at \$2.50, and the initial float raised \$6.28 million (Hares, 2002). As of late 2001 there were around 4,500 shareholders. The value of shares rose 30% in the first year after listing, largely because of an increase in the book value of endangered wildlife under the Australian Accounting Standard for Self Generating and Re-generating Assets, AASB 1037. Under AASB1037, individual animals were valued at \$1,250 - \$5,000 each. In early 2002, however the share price fell to a \$0.17 (Hares, 2002) and in April-May 2003, ESL sold 4 of its sanctuaries to Australian Wildlife Conservancy (AWC) for \$5.4 million, and one to a company owned by the former Chairman of ESL for \$1.2 million (Earth Sanctuaries Ltd, 2002). ESL's losses amounted to \$11.7 million, \$4.8 million from losses on asset sales and \$4.2 million from writing down values of assets retained. AWC owns a further 6 properties with total area 4,500 km² (Australian Wildlife Conservancy, 2002). ESL retained three sanctuaries and \$5 million in cash reserves (Earth Sanctuaries Ltd, 2002). The purchasers of the properties sold intend to continue operating them as wildlife sanctuaries.

The overall conclusion from the ESL case study is that private conservation funded by tourism is feasible in Australia, but that public listing presents too great a risk and alternative finance is needed.

Crystal Creek Rainforest Retreat, NSW - ecolodge and conservation agreement

Crystal Creek Rainforest Retreat lies on 140 ha of subtropical rainforest adjoining Numinbah Nature Reserve in Northern New South Wales, part of the Central Eastern Rainforest Reserves Australia (CERRA) World Heritage Area. The area is a former agricultural property, of which 20 ha had been cleared as a banana plantation (Crystal Creek Rainforest Retreat, 2002). Accommodation and infrastructure were restricted to the previously cleared area, much of

which has now been replanted with over 10,000 indigenous rainforest trees, most of them raised in a nursery on the property. A Voluntary Conservation Agreement with the New South Wales National Parks and Wildlife Service in May 1997 protects 90 ha of the property from any future development (ADITR, 2003; Buckley, 2003). Under this agreement, the parks service assisted in the establishment of walking tracks and interpretive signs in the area concerned. Crystal Creek has advanced ecocertification from Ecotourism Australia and has received a range of environmental tourism awards, including a British Airways Tourism for Tomorrow Award. Interpretation programs include guided walks for guests, and use of the property by educational and community groups. Guests may also be involved in rehabilitation of injured native wildlife through the local Wildlife Carers Association, and in planting birdwing vines to provide breeding habitat for the endangered Richmond Birdwing Butterfly (Crystal Creek Rainforest Retreat, 2002). The Crystal Creek case study could serve as an excellent model for distributed tourism infrastructure and conservation on private land adjacent to national parks, with assistance from voluntary conservation agreements.

Tahune Airwalk, Tasmania - State Forest visitor infrastructure

The Tahune Airwalk is a 500m canopy walkway constructed, owned and operated by Forestry Tasmania in the Tahune Forest Reserve near the confluence of the Huon and Picton Rivers. It was opened in April 2001. Construction of the canopy walkway and associated visitor centre cost around \$2.5 million, and upgrading the access road cost a further \$2 million. The State Government provided a significant contribution, the Commonwealth awarded a grant towards costs, and Forestry Tasmania funded the remainder itself. Forestry Tasmania also leases the rights to operate abseiling and "eagle gliding" tours on-site to private operators. These operators pay a substantial base annual rent plus a significant proportion of gross revenue, well above typical figures for comparable leases by parks services. Forestry Tasmania also charges entry fees to the canopy walk and operates retail outlets on site. The net return on capital investment is in line with commercial business expectations. Based on the success of this project, Forestry Tasmania is currently developing a series of recreational visitor infrastructure projects throughout the State, each with a different theme.

NPWS Heritage Lighthouses, NSW - commercial leases

NSWNPWS has a policy of adaptive re-use of heritage buildings such as lighthouses. Cape Byron Lighthouse, the adjacent car park, and nearby boat launching facilities have been run commercially for many years and generate over Au\$100,000 in revenue annually. At Smoky Cape Lighthouse in Hat Head National Park, the former lighthouse keepers' cottages are now run successfully under commercial arrangements, after a capital upgrade supported by externally sourced heritage funds. Similar arrangements are also under negotiation for Green Cape Lighthouse in Ben Boyd National Park.

NPWS Caravan Parks & Camping Areas, NSW - commercial leases

NSWNPWS operates 10 of its caravan parks and camping areas under various commercial arrangements. Six are leased, one is operated under licence, and two are operated under contracts where NPWS pays a monthly retainer to a contractor to collect NPWS fees. One,

Woody Head Camping Grounds, is operated under more complex contractual arrangements. Five of the 10 caravan parks and camping areas are in Murramarang National Park on the NSW South Coast, and all are coastal except for Sawpit Creek in Kosciusko National Park. Lane Cove Tourist Park, within the Lane Cove National Park in northern Sydney, is currently operated directly by NPWS after a previous commercial lease led to significant run-down of the property with high consequent costs to NSWNPWS.

Aurora Resort, NT- commercial lease

Aurora Resort in Kakadu National Park has a 36-year lease with a significant annual rental (ADITR, 2003). It is in the interests of the parks service that visitors should have access to accommodation and facilities within the park, which is relatively remote and extensive. Not all visitors are fully prepared for harsh conditions or long distances, and private lodges such as Aurora can help to improve safety and potentially reduce impacts. Aurora Resort is now relatively old and subject to commercial competition from tourist accommodation in Jabiru. The parks service is considering development of further visitor attractions in the western section so as to maintain commercial viability of Aurora, since this also helps to disperse visitors. Development of further visitor attractions in the area to maintain commercial viability of Aurora may be considered. In addition, given that the lease and resort exist it is in the interests of the park agency that the lessee has sufficient funds to maintain the property.

Werribee Park, Victoria - commercial lease

Werribee Park is a large historic homestead west of Melbourne with extensive grounds. It has had various past owners, and the buildings had deteriorated considerably. The central section is operated as a museum. Parks Victoria entered into a commercial partnership with a consortium of private hotel companies, The Mansion Group (TMG), to redevelop one wing of the building (ADITR, 2003). With a private capital investment of over \$30 million, this wing is now operated as an exclusive 5-star hotel, The Mansion Hotel. This area also includes a café and shop operated by TMG and is open to the public. There are three other private leases on other parts of the site: a winery (owned by TMG), a caterer and a polo field. These, however, are much smaller. TMG is also one of the hosts for high-publicity events such as the annual Helen Lempriere sculpture award. TMG has a 50-year lease on the property from Parks Victoria. The term of the lease was recently extended. The Mansion Hotel has an annual turnover of around \$10 million, and the annual rental is several hundred thousand dollars. The rental to Parks Victoria, however, makes up only one third of the operational costs of the park as a whole (ADITR, 2003).

Brambuk - A National Park and Cultural Centre, Victoria - community partnership

Brambuk and Parks Victoria have jointly developed plans to create one visitor precinct in Halls Gap, Victoria that combines the former Grampians National Park Visitor Centre and the Brambuk Living Aboriginal Cultural Centre. Established in 1989, these had previously been managed independently. The combined precinct aims to provide visitors and the community with park information, education services, and an understanding and appreciation of the natural values and cultural heritage of the Grampians/Gariwerd region. Brambuk is managed by

Gariwerd Enterprises, a not-for-profit organisation made up from five Aboriginal communities from the Wimmera and Western district. Staff from the communities has provided a range of cultural experiences and services from the iconic Brambuk building. Over the last five years Parks Victoria and Brambuk worked towards the establishment of a partnership operation that would integrate many of the services provided on the site. The development has three stages: integration of existing facilities; expansion of visitor infrastructure and development of new visitor and cultural facilities; and design and construction of a new "meeting place" building, new entry forecourt and visitor car park. In July 2002, State Treasurer John Brumby announced funding for Stage One of the project, totalling \$2.024 million.

North Head Quarantine Station, NSW - commercial lease

NSWNPWS has almost concluded a head lease with Mawland Hotel Management for the conservation and adaptive reuse of the North Head Quarantine Station within Sydney Harbour National Park. Benefits to the parks agency include extensive private-sector investment in repairs, conservation works and maintenance of buildings and surroundings, and improved visitor access and interpretation. Negotiations for the redevelopment and lease, however, have taken 8 years, against strong local opposition (NSW Hansard, 2003; O'Brien, 2003), and the final development approval contains around 230 separate conditions (NSW Minister for the Environment *et. al.* 2003). This has consumed enormous time and resources on the part of both the developer and the parks agency.

A number of lessons may be learned for potential future projects involving adaptive re-use of heritage buildings and sites. First, the process should start with extensive public consultation at a broad conceptual level, to determine the preferred uses and models in the context of constraints on the parks agency, such as funding. There are then two major options. One is to have all of the major infrastructure designed and approved to the specifications of the parks service itself before entering any commercial agreements to construct or operate those facilities. Alternatively, if private investors are invited to submit development concepts so as to engage maximum creativity, then: (a) the process of establishing commercial conditions should be defined clearly at the outset; (b) the agreement should incorporate a degree of flexibility to adapt to new information, and; (c) ownership of intellectual property in the event that any bid does not proceed should be clearly defined.

Cape Otway Lightstation, Victoria - commercial lease

Ownership of Cape Otway Lightstation was transferred from the Commonwealth Government to Parks Victoria a number of years ago. The site includes the lightkeeper's and assistant lightkeeper's cottages, which are now used as tourist accommodation for a maximum of around 10 guests, and an old telegraph station renovated as an interpretive centre. It is leased to a small private operator, Tourism Great Ocean Road P/L, for 21 years from 1997. The annual rent is calculated at 8% of the previous year's audited gross turnover. The lease also contains requirements for capital improvements but it has proved difficult for Parks Victoria to ensure that these have occurred as scheduled. The alternative strategy, namely for the parks agency to charge a higher rent and carry out capital improvements itself, was not feasible because State Government policy requires that all revenues raised for such arrangements are returned to consolidated revenue. Hence the only way the parks agency can reinvest revenues

from infrastructure at a particular site is through lease conditions requiring the lessee to carry out improvements. The lessee charges a significant entrance fee to the site, which is visited by bus tours and self-drive tourists. The site is 15km from the main road and over 20km from the nearest facilities and no public toilets are provided. This is clearly unsatisfactory for visitors who choose not to pay the admission fee to the private site, and may reflect poorly on regional tourism along the Great Occean Road.

Deep Creek Cottages, SA - commercial lease

Deep Creek Conservation Park, south of Adelaide, contains an old station building and two outstations which were leased to a private operator for a 45 year term commencing in 1993. The lease included the right to construct three additional cabins at a designated site within the park, and this has now been done. Construction costs were funded by the lessee, but ownership of old and new buildings rests with the parks agency. Rental is assessed as a percentage of gross audited receipts, so the addition of new cabins has increased returns to the parks agency.

Mt Buffalo Chalet, Victoria - commercial lease

Mt Buffalo Chalet is a historic building owned by Parks Victoria at Mt Buffalo, 3 hours drive from Melbourne. It has had a series of lessees but was suffering from some disrepair. The current lessee, a small independent hotelier, has invested heavily in the building. The lease has a term of 21 years with 14 years to run. The rent is low but the lease contains requirements for capital investment.

Bent Wing Café, Naracoorte Caves, SA - lease and loan

Naracoorte Caves National Park is a popular but relatively isolated destination, so there is strong demand for an on-site café. This café was initially owned and operated by the parks agency but subsequently leased to a private operator (ADITR, 2003). The facilities needed upgrading, but the parks agency did not have the necessary capital and was not permitted to take out a commercial loan. So the operator took out a commercial loan and the parks agency reduced the operator's rental payments by an amount equal to the repayments on this loan, at the interest rate applying when the loan was taken out (10%). Effectively, therefore, the parks service provided the capital through an indirect mechanism. This rental reduction represented around 75% of the base rent which the operators would otherwise have paid. The improvements funded by this loan became the property of the private operator until the 10-year loan was fully paid off. After this period the improvements, by then considerably depreciated, would become the property of the parks service. The operator concerned has recently sold the business. From a commercial perspective the parks agency has clearly received very little return from these arrangements. The commercial operator was clearly effectively granted a lease on upgraded facilities with exclusive access to a captive market, for less than \$5,000 per year. In addition, the operator received the ability to deduct depreciation on the book value of the upgrade from income, for tax purposes, and the ability to sell these benefits as part of an ongoing business, as has indeed occurred. The parks service did, however, achieve goals which would not otherwise have proved possible. Through the commercial loan raised by the

private operator, it was able to upgrade its visitor facility immediately rather than waiting until funds became available internally. Likewise, the parks service could not benefit from depreciation costs, so there would have been little advantage in retaining ownership of the improvements. The parks service did not, however, retain any right to share in revenues, which are presumably not insignificant.

Minjungari Camp, NT - exclusive access arrangement

Minjungari Camp is a semi-permanent tented camp in Litchfield National Park, Northern Territory with exclusive access by Odyssey Safaris. It is in an area of the park not commonly accessed by other visitors, and is reached by a track closed to the public. Odyssey Safaris maintains tents and basic facilities on site during the dry season and dismantles them during the wet. The company pays a small fee to the parks agency for this privilege (ADITR, 2003).

Cooinda Lodge, NT - excision from park

Cooinda Lodge in Kakadu National Park is on a 50ha "garden lease" which was in existence before the park was declared (ADITR, 2003). There were many such prior mining and garden leases which were excised from the park area when it was created. Many of these have now lapsed and been incorporated into the park, but Cooinda is still current. The lease is held at a peppercorn rental by the Gagadju Association, which bought it from the previous owners when the park was declared. The Association operates the Lodge and Yellow Water Cruises, both highly profitable businesses (ADITR, 2003).

Heron Island Resort, Qld - commercial activity agreement

Heron Island Resort, owned by P&O Resorts, has a Commercial Activity Agreement with the Queensland Parks and Wildlife Service in order to gain access to Heron Island National Park. Instead of paying its *per capita* commercial visitor entrance fees in cash, however, P&O pays in-kind by providing the QPWS ranger station with water, power and sewage treatment facilities, and by providing transport for QPWS staff and freight on P&O vessels. There is also a research station on the island, which pays for these services in cash. The trade is made on commercial terms, with the cash value of the services calculated as the average cost to P&O of providing such services to all island users, namely the Resort, QPWS and the research station. That is, P&O Resorts does not charge a premium over production cost, but on the other hand it charges an average production cost rather than a marginal cost for providing services to QPWS over and above the facilities required for the Resort. Equally, however, QPWS receives these services at a much lower cost than if it had to construct its own facilities. Hence the arrangement seems to benefit both QPWS and P&O Resorts.

Cradle Mountain Lodge, Tas - infrastructure funding partnership

A partnership between P&O Resorts and Parks Tasmania at Cradle Mountain reduced aggregate sewage treatment costs. Sewage is generated from the Parks visitor centre and parks staff accommodation as well as from Cradle Mountain Lodge. The Cradle Valley

Masterplan includes a large-scale sewage treatment facility to be constructed by the State government in a few years' time, but meanwhile the existing sewage treatment systems at the Parks Tasmania facilities had become overloaded through growth in staff and visitor numbers. Instead of constructing a new stand-alone plant, the parks service paid P&O Resorts to upgrade the Lodge's facilities to handle the additional load. The cost of the upgrade was approximately \$100,000.

Conservation Volunteers Australia - volunteer labour and corporate sponsorship

The mission of Conservation Volunteers Australia (CVA) is "to attract and manage a force of volunteers in practical conservation projects for the betterment of the Australian environment". CVA works closely with land managers on public and private lands, and its projects include infrastructure works such as walking trails, fencing and heritage projects, as well as conservation works such as tree planting, seed collection, endangered species protection, weed control, flora and fauna surveys and environmental monitoring. In 2003, almost 1800 international volunteers visited Australia specifically to participate in CVA's Better Earth program. This recruitment is supported by a network of 25 travel agents around the world. In 2004, CVA will manage over 100,000 volunteer days on projects throughout Australia. CVA's work is also supported by corporate partners and sponsors, particularly in large-scale habitat restoration, wetland rehabilitation and coastal protection projects. CVA acknowledges the valuable support and active involvement of these partners

In one recent example, with sponsorship from Vodafone and Shell, CVA's Better Earth program supplied NSW National Parks and Wildlife Service with a volunteer team fully equipped with tools, transport, safety equipment and insurance to conduct weed control and bush regeneration on the Sydney Harbour National Park Islands, including Goat Island.

Mutitjulu Foundation, NT- community support scheme

The Mutitiulu Foundation was established by Voyages Hotels and Resorts, which manages Ayers Rock Resort near Uluru National Park. The Resort lies on a 104km² block of freehold land, bordered on three sides by an Aboriginal land trust and on the fourth by Uluru National Park. Guests at Ayers Rock Resort pay a voluntary levy of \$2 per stay, and collections are matched dollar-for-dollar by the Resort to a maximum of \$200,000 p.a. This model has been used previously by a number of hotels worldwide. Funds are used to support Mutitjulu community projects. The community also receives a significant share of park entrance fees. The Mutitjulu Foundation started operations in 2003 and raised \$30,000 in its first two months, so it is on track for a total of \$200,000 in its first year. The Resort has also made an initial contribution of \$200,000. Fund-raising for facilities through the Foundation is coupled with educational and motivational programs, such as sponsorship for Aboriginal sporting heroes to tour local Aboriginal communities. The aim of the Mutitjulu Foundation is to support local communities, not visitor infrastructure; but the well-being of local communities also contributes to the visitor experience.

6 International case studies

Introduction

The visitor infrastructure and funding issues faced by Australian protected area management agencies are not unique. Accordingly, international approaches, even if not currently in use in Australia, may provide useful models for consideration. A sample is therefore reviewed below. Many more are reviewed in Buckley (2003). Private conservation reserves funded by tourism, for example, have been highly successful in southern Africa. Often adjacent to large public protected areas, these private reserves extend wildlife habitat whilst generating funds through upmarket lodges and safaris. Indeed, this approach is now being emulated directly by at least one public protected area, Kruger National Park. In Australia, the same approach has been followed by Earth Sanctuaries and Australian Wildlife Conservancies, and also by large rural pastoral properties such as Arkaroola and El Questro. Private conservancies, sometimes also used for hunting, are also commonplace in the USA and Europe. Opportunities to expand conservation and tourism on private lands in Australia have been severely hampered in the past by a range of taxation barriers and disincentives, but this is now changing and there seem to be substantial prospects for this approach in future.

There are also opportunities for Australian public land management agencies to emulate their international counterparts in providing public recreation, conservation and tourism as well as production goods such as timber. The US Forest Service, for example, manages large public-access wilderness areas, and promotes recreational opportunities through dedicated trails and campsites, maps and educational programs. It also leases large areas to commercial tourism investors such as ski resorts. Indeed, its revenues from tourism-related activities far outweigh those from timber sales. Likewise, other public land management agencies such as the US Bureau of Land Management, responsible for very large areas of rangeland, are now also taking up tourism and conservation opportunities after a long historical context limited very strictly to cattle grazing.

Londolozi, South Africa

Londolozi is one of the oldest private reserves in southern Africa, first established in the 1920s. It is currently one of the flagship properties of Conservation Corporation Africa, (CCA). CCA is a private corporation which operates over 20 game lodges and reserves in 6 African countries, including 5 lodges in South Africa. CCA was established in its current form in 1990, but many of the reserves have been operating for much longer (Buckley, 2003).

Londolozi is 140 km² in area, and is part of the 560km² Sabi Sands Private Reserve, which is contiguous with the publicly owned Kruger National Park, 20,000 km² in area. Londolozi Lodge is a member of the exclusive international Relais et Chateaux group and has won numerous tourism awards. Dedication as private game reserves has conserved areas such as Londolozi from clearance for agriculture. Operation as upmarket private tourism destinations generates significantly more revenue than if they had simply been gazetted as additions to the Park. CCA also supports field wildlife research by its rangers and outside agencies. The overall result is a highly successful partnership between tourism and conservation, including a major addition to

the conservation estate (Buckley, 2003). This model is also in use in Australia, but to date at much smaller scales.

Ngala, South Africa

Ngala is a 140km² private game reserve operated by Conservation Corporation Africa (CCA) in the Sabi Sands region. Ngala is an unusual partnership between a government agency, a non-government organisation and a private corporation. The Ngala property was donated to the South Africa National Parks Trust (SANPT), via the Worldwide Fund for Nature, by landowner Hans Hoheisen. The Ngala land has been incorporated into Kruger National Park, but in April 1992 SANPT entered into an agreement with CCA under which CCA has exclusive tourism operating rights over the Ngala land, including the Ngala Game Lodge. The Lodge opened in October 1992 after renovation. It is a member of the Small Luxury Hotels of the World. A substantial lease fee and a proportion of profits from the tourism operations are returned to SANPT for use in expanding or adding to conservation areas (Buckley, 2003). This three-way model is not yet in use in Australia, but could easily be adopted, e.g. via FNPW or the Australian Bush Heritage Fund.

Sabi Sabi, South Africa

Sabi Sabi is an 80km² private game reserve in the Sabi Sands area adjacent to Kruger National Park. It was bought by its current owner, Mr Hilton Loon, in 1974. It had previously been used for grazing cattle. Lion and white rhino have been reintroduced. Sabi Sabi currently has three operating lodges, and it has won a range of tourism awards (Buckley, 2003). As with other private reserves in the Sabi Sands area, the most significant overall contribution which the Sabi Sabi tourism operation makes to conservation is to protect the area from clearance for settlement, agriculture, or grazing by cattle. It does so through a low-volume high-value tourism operation with low impacts. Wildlife on Sabi Sabi and other Sabi Sands private reserves are managed jointly with the adjacent and much larger Kruger National Park. The private reserves provide up-market tourist accommodation and guided game viewing opportunities, including open vehicles, night drives, and close approaches to habituated animals including potentially dangerous species. These particular opportunities are not available to general public visitors travelling through Kruger National Park in their own vehicles and staying in the Park's facilities. Recently, however, the Park has also let contracts to private operators to develop and operate exclusive-access upmarket lodges in remote areas not accessible to self-drive visitors. Similar models are in use in some of Australia's larger protected areas.

Chumbe Island Coral Park, Tanzania

Chumbe Island is the first private marine park in Tanzania. It surrounds an island 24ha in area, 13 km southwest of Zanzibar Town, with a protected coral reef and forest. Funding for the project was originally received via private investment and donations from non-government organisations. Profits from tourism operations are re-invested in conservation, land management and free island excursions for local school children. Additional professional support is also provided by more than 30 volunteers. Facilities funded to date include a visitor

centre, 7 bungalows, park ranger patrol boats, and nature trails. Old buildings have been rehabilitated and converted into a visitor centre and accommodation, and a historical lighthouse and mosque are maintained in good condition. The island is managed for low-impact recreational activities and is also used for education and research. Local fishermen are employed and trained as park rangers. Their role includes patrolling the island, monitoring the reef daily, preventing illegal fishing and anchoring, managing a rat eradication program, recording events such as coral bleaching and storm damage, assisting marine researchers, and guiding visitors over marine and terrestrial nature trails. Legislative constraints would currently limit the establishment of private marine parks in Australia.

Tafua Canopy Walkway, Samoa

Tafua Rainforest, a small conservation reserve in Western Samoa, contains a short canopy trail incorporating ladders, suspended walkways and lookout platforms. The reserve was apparently established as a result of efforts by a visiting ethnobotanist with funds from World Wildlife Fund Sweden (now the Worldwide Fund for Nature) and later from model Christie Brinkley. There is a local village house at the entrance track to the reserve, and visitors are charged 10 Samoan Tala (US\$3) per person entry fee. Supposedly, this money goes to ongoing management of the reserve, though it is difficult to check whether this does in fact occur (Buckley, 2003). The material for the canopy structures was apparently imported from Canada, and whilst the ladder and walkways are currently still new and in good condition, it is not clear that any arrangements have been made for ongoing maintenance. Forest canopy walkways, some with entrance fees, are also in operation in many other countries including Australia.

Whistler-Blackcomb Resort, Canada

Whistler-Blackcomb ski resort in British Columbia has established a joint initiative with local environmental and community groups, known as Habitat Improvement Teams (HITs). Under this scheme, the company loans heavy equipment where it can be of assistance in local environmental and community projects. The equipment is operated by company staff who volunteer their time. The brainchild of the company's Director of Environment, the HITs scheme appears to have been a considerable success. It is not designed specifically for visitor infrastructure, but could easily be adapted for that purpose.

Pacific Asia Travel Association (PATA) Foundation

The PATA Foundation raises funds for environmental and community projects from donors and sponsors, through its members and chapters. Its major fundraising activity is the Silent Auction where PATA members donate travel and accommodation services and delegates of PATA's annual conference can bid to buy them, with proceeds going to the Foundation. The PATA Foundation has been operating since 1985. It made three grants in 2003, one each in Fiji, Indonesia and New Zealand. Since 1985 it has made over 100 project grants. Seven of these

were in Australia (PATA Foundation, 2003). Infrastructure grants are not common, but they are not excluded.

The Africa Fund

The Africa Fund originated as a wholly-owned subsidiary of Conservation Corporation Africa, called the Rural Investment Fund, RIF. The aims of the RIF were "to ensure that ecotourism activities were discussed and endorsed by the local communities, to raise funds and support local economic benefits through community development projects, and to illustrate how the private sector can address sustainable development in rural economies through carefully conceived and implemented nature based tourism enterprises ...". During its initial operations, project funding for the Rural Investment Fund was obtained from donors, and operating costs of around US\$100,000 p.a. were contributed by Conservation Corporation Africa (Christ, 1998). These operating costs included salaries for a director, a development manager, a regional manager, a community liaison officer and 3 field workers. Between 1991 and 1997, the Rural Investment Fund raised over US\$1 million to fund development projects in communities adjacent to CCA lodges, principally in South Africa. The main focus of these projects has been on improving facilities for education and health care. Recently RIF has been broadened to incorporate support from the tourism industry throughout Africa, and to provide assistance to their local communities. The restructured foundation has been renamed The Africa Fund (Buckley, 2003). The Africa Fund is not intended for hard visitor infrastructure, but through its contributions to neighbouring communities it improves the visitor experience.

7 Findings

Parks and Regional Tourism

Parks in Australia are a major resource for regional tourism. In many areas, parks are the principal attraction. Except in a few World Heritage Areas and other icon parks where international visitors predominate, most visitors are Australian. By far the majority of both domestic and international visitors are self-drive tourists rather than commercial tour clients, except at a very small number of individual sites which are heavily visited by bus tours. They contribute to regional tourism economies principally through off-park spending on accommodation, meals, fuel, vehicle hire, and various local products. Entrance, camping and activity fees charged by protected area management agencies are currently low and make up only a very small proportion of total tourist expenditure.

Different visitors to different protected areas have different desires and expectations, but most visitors in most parks are seeking nature experiences rather than a built or highly developed landscape. Even so the pressure of increasing visitor numbers means that many parks agencies are forced to provide a certain degree of infrastructure simply to harden the natural environment against visitor impacts. At the very least, this commonly includes car parking areas, toilets, formed tracks and safety barriers in heavily-used areas close to roadheads, directional signs and designated camping areas. All of these can be costly; they can cause complaints if they do not match visitor expectations; they can lead to lawsuits if they are seen

as unsafe; and once improved, they can attract increasing numbers of visitors, increasing the demand for further infrastructure. Providing and maintaining this basic infrastructure consumes a very significant proportion of the resources available to protected area management agencies. In larger and more remote parks where vehicle access is permitted, maintaining internal roads and tracks adds further to these resource requirements. In addition, where overnight visits to particular sites in the park interior are commonplace, toilets and other camping facilities may also be needed as a means to manage visitor impacts. Such infrastructure, especially if coupled with appropriate regulations, can act to control impacts indirectly, by limiting visitor numbers, as well as directly by hardening the environment.

Scenery, wildlife and other natural features do not occur only in national parks, which are established and maintained principally to provide public goods such as biodiversity conservation and ecosystem services. Many of the most spectacular natural attractions occur in state forests and other public lands, or in private land, often adjacent to national parks. Increasingly, both the tourism industry and the landholders and land managers are coming to appreciate the economic potential of nature tourism in these areas, which benefit from the market recognition of icon parks, but where the constraints of social equity requirements, public liability concerns, and environmental planning regulations may be less restrictive. Likewise, both tourism and conservation interests and agencies are coming to appreciate the importance of regional planning across land tenure boundaries, the importance of neighbouring properties in protecting the core conservation values of national parks, and the opportunities for commercial tourism.

Most Australian parks agencies have insufficient funds to carry out both natural resource management and visitor infrastructure management simultaneously. Efforts to combat weeds and feral animals, control fires and maintain fences, let alone baseline biological inventory and monitoring, compete with efforts to maintain tracks and trails, toilets and campgrounds, visitor centres and lookouts. Parks agencies are therefore forced, by current Australian federal and state government policies, to seek additional funds beyond government budget appropriations.

There is little point in parks agencies seeking private-sector funds unless they can keep them. Questions as to whether parks agencies should be expected to raise external revenues in addition to government budget appropriations, and if so whether they should be entitled to retain all or part of the revenues raised either centrally or locally, have been contentious worldwide for many years. Clearly, the opportunity to retain such earnings locally is an incentive for park managers to seek funds. There are, however, a number of contrary arguments and issues. Parks may raise funds, but this is not their primary function, and to give undue prominence to this activity can conflict with their primary conservation functions. Not only is there the risk of inappropriate commercialisation, but there are large differences between individual parks, with some suited to revenue raising and others not. Parks agencies hence need the flexibility to transfer funds internally as required.

Innovative Funding Opportunities

Funding opportunities for protected areas may be considered in five major categories as follows:

- national-level measures through the allocation of tax funds, either from the existing tax base, from special biodiversity levies on all industry sectors, or from royalties on international use of Australian intellectual property such as images and names of endemic species;
- large-scale commercial transactions such as sale of ecosystem services or biodiversity information, lotteries and similar approaches, or royalties on brand names and images, whether by entire parks agencies or individual parks as opportunity may arise;
- increased government budget appropriations to parks agencies at state or national level,
 e.g. through concerted lobbying in conjunction with tourism agencies, industry associations and interests;
- direct private investment in commercial tourist infrastructure, which may also be available to general visitors, and which may be carried out either in partnership with public parks agencies or independently on private land, or comparable investments in tourism infrastructure by public forestry agencies and their counterparts;
- community contributions to installation and maintenance of visitor infrastructure, typically but not always on a relatively local scale, e.g. through trusts, foundations and non-government organisations.

The first two of these are aimed principally at the primary conservation function of protected areas, and are unlikely to be relevant to visitor infrastructure. Indeed, some of them, such as sale of drinking water, may only be feasible in areas where visitors are excluded. Similarly, there is substantial community goodwill for protected areas, but most volunteer groups are more concerned with conservation works than visitor infrastructure. Only where there is significant self-interest, e.g. for recreational facilities in urban parks or commercial opportunities in areas such as the Bibbulmun Track, are community groups likely to make a significant contribution to maintaining visitor infrastructure. In the short term, therefore, medium-scale initiatives such as the third and fourth of those listed above are likely to prove most fruitful.

Historically, tourism interests in Australia have apparently been reluctant to lobby directly for increased government appropriations to protected area management agencies, but this is changing. Indeed, in Australian governments as elsewhere, tourism and environment are often included in the same government portfolio. If regional tourism revenue is a priority for government, if parks are a primary attraction, and infrastructure a critical issue, then it is entirely logical for tourism interests and industry associations to lobby state and federal governments to increase direct government appropriations for parks agencies. This does already happen informally in some Australian states.

State Forestry Agencies' involvement in commercial tourism

As least two of Australia's state forestry agencies, in Tasmania and Western Australia, have already recognised the económic significance of forest tourism and recreation, and they have built their own commercial visitor infrastructure which relies on particular features of the forest.

Currently, these are walkways in the forest canopy, but clearly this is not the only option available. Internationally, some public forestry agencies such as the USFS are strongly involved in commercial recreation. In Australia as overseas, many state forests do already make a major economic contribution to regional tourism, which is typically an order of magnitude greater than their economic contribution through timber production (Ward, 2003). Since little of this expenditure is captured by the agency concerned, however, it has historically received very little political recognition. We may perhaps anticipate a far greater involvement of state forestry agencies in commercial tourism and recreation in future.

Private landowners' involvement in commercial tourism

Likewise, the involvement of private landholders in commercial outdoor tourism and recreation has increased greatly in Australia over recent years, and this increase seems likely to continue. Options include: small-scale ecotourism facilities on scenic land of high conservation value immediately adjacent to protected areas; large-scale tourist accommodation, catering and related facilities on private land in gateway areas or along access routes used by tourists visiting parks; agritourism and other outdoor tourism enterprises on pastoral landholdings, some of them quite remote; high-impact adventure tourism facilities, such as off-road vehicle facilities. Most of these are of considerable economic significance for rural and regional communities, particularly in areas where agricultural and pastoral revenues are decreasing. Agritourism has become an important adjunct to primary production in many parts of Australia, and many rural townships rely heavily on self-drive tourists passing through on their way to national parks.

Perhaps most significant, however, is a still small but rapidly growing trend for amenity migration, where relatively wealthy former city dwellers move to scenic acreage properties adjacent to protected areas in particular parts of the country, essentially as a lifestyle choice. Many of these amenity migrants have both substantial entrepreneurial and business skills, and a personal concern for conservation of the natural environment; as a result, it is not unusual for them to establish private reserves and small-scale tourism businesses. The conservation use of the land may be cemented through various forms of voluntary conservation agreement with relevant protected area management agencies. The tourism facilities, though relatively small on most individual properties, act cumulatively to provide distributed tourism infrastructure around particular parks and World Heritage Areas. There are some well-known case studies, such as Crystal Creek Rainforest Retreat, where such an approach has been highly successful for tourism and conservation alike, demonstrating excellent opportunities for partnerships between private landholders and adjacent public protected area management agencies. There are a number of barriers, however, to broader replication of the successful case studies: parks agencies have limited resources to assess and approve VCA's; private landholders face a range of tax disincentives to private conservation; and if the supply of new tourist accommodation outstrips the growth and demand, landholders could potentially suffer from price competition.

Currently, conservation on private land in Australia is very highly taxed. There are few opportunities to deduct maintenance expenses against taxable income, and properties are subject to both state land taxes and local government rates. These property taxes are particularly high in many areas of high conservation value, notably those adjacent to highly scenic icon parks, because of residential amenity migration and its effects on the price of rural

real estate. This high tax burden is particularly inequitable when compared with exemptions and subsidies provided for primary industries. Tourism coupled with voluntary conservation agreements can potentially provide one avenue to reduce these tax penalties. This may be one reason why small-scale rural tourism enterprises, not necessarily profitable, are so widespread. The combination of conservation and small-scale tourism on private land adjacent to public protected areas, however, can generate considerable economic, social and environmental benefits. It extends the effective scale of the public reserve, spreads visitors more widely, generates revenue for regional economies and provides social benefits for rural communities. This approach has been highly successful in southern Africa and elsewhere overseas. It does occur at a smaller scale in some regions of Australia, but is severely hampered by tax treatment of private reserves, delays in approval of VCA's, and perhaps also by restrictions on private ownership of native wildlife, though this last remains debatable.

As tourism infrastructure outside protected areas expands, it becomes increasingly important that planning processes should cross land tenure boundaries effectively. Just as the private landholders need the parks as an icon attraction for visitors, the parks need their neighbours to extend and buffer the core conservation areas. While not necessarily providing additional funding, well-planned and integrated tourism developments around park margins can generate potential benefits for protected area management agencies by relieving visitor pressure on facilities inside the park boundaries. Equally, however, poorly planned gateway developments can become significant sources of environmental impacts that creep across park boundaries. Tourists are more interested in geographic location than land tenure, so marketing programs need to combine facilities on public and private areas.

Investment and Public-Private Partnerships (PPPs)

Public-private partnerships (PPP) for tourism in and around protected areas are currently somewhat controversial in Australia. They deserve careful consideration, however, since in the right circumstances they may generate advantages for both tourism and conservation.

Perhaps the most critical advantages for conservation are firstly, the potential for tourism opportunities to mobilise private landholders adjoining public protected areas, and secondly, the opportunity for private sector investors to gain access to development capital in a way which is rarely practicable for public protected area management agencies.

From a private investor's perspective, the critical advantage is the opportunity to gain preferential access to highly scenic sites where conservation management and basic visitor facilities are already provided for, and commonly there is already a market in the form of existing stream of visitors. From a regional tourism industry perspective, private developments may broaden the range of visitors attracted to a particular destination. Clearly, identifying and managing partnerships which can provide such advantages simultaneously to the various stakeholders concerned is not always straightforward. There are some good examples where this has indeed occurred.

New construction of large-scale infrastructure in protected areas, however, commonly meets enormous public opposition and often carries severe financial and political risks for parks agencies. For private investors, estimating risks and returns may be particularly difficult, because public response may be unpredictable. From the private investor perspective,

financial viability is the key criterion for assessing any project, and as with all PPPs, the assessment and negotiation of risk factors need to be managed carefully.

In addition, commercial tourism providers, especially of accommodation and tours, often oppose parks agencies offering similar services because they see these as competition. Except in very large parks where infrastructure is needed as an impact management tool for overnight visitors, the best model for provision of infrastructure of any significant scale is generally to locate such infrastructure outside protected areas. In some cases it may be appropriate to establish gateway communities, but these need to be subject to environmental planning control so as to maintain the quality of the natural and cultural heritage assets and of the visitor and tourist experience.

The most effective mechanism for an increased contribution to regional economies through parks visitation is to improve visitor satisfaction in parks so as to increase length of stay in the region concerned. The most critical issues are the most basic: tracks and toilets. Tourism industry representatives can contribute to regional tourism growth based on park visitation simply by assisting in installation, upkeep and maintenance of toilets. Toilets are not cheap, especially in areas of high visitor use. Vandal-resistant buildings, water supplies, and composting systems or septic sewage treatment systems can cost well over \$100,000. Some individual tour operators in Tasmania and Queensland (e.g. Aries Tours), already contribute inkind by having tour guides help keep toilets clean. Some larger operators, such as P&O Australian Resorts on Heron Island and at Cradle Mountain, contribute by treating sewage from toilets in park visitor centres and park staff accommodation, either at commercial or discounted rates. These approaches could be extended through cash contributions from local chambers of commerce and tourism bureaux, regional tourism organisations, and state and federal tourism portfolios.

There are also opportunities for private investment in visitor infrastructure inside protected areas, but these seem to be successful for both public and private partners only under rather specific circumstances. In a number of cases there are existing private commercial tourism facilities within public protected areas, where the private infrastructure is actually located on an excision or enclave within the park. Developments on such enclaves commonly offer the same advantages and same disadvantages as developments on land around park boundaries, but intensified. It is relatively uncommon for parks agencies to excise areas for private development. Commonly, these areas, and associated development rights, are a historical legacy which parks agencies have no choice but to accept. Such operations may be highly successful but they can generate a degree of tension if a private enterprise creates environmental impacts, but contributes little or nothing to supporting the park. Such impacts may be either direct, e.g. through noise and sewage disposal, or indirect, by increasing visitor numbers. Such operators may indeed make a contribution to conservation, but such contributions are rarely commensurate with the benefits received from the protected areas concerned. Whilst relatively commonplace, therefore, developments of this type would generally not be considered a model for the future.

A number of privately funded tourist walkways, visitor centres and accommodation houses do already operate successfully within various protected areas in Australia, though not without controversy (O'Brien, 2003; NSW Hansard, 2003). Financial arrangements are rarely public. A number of examples are outlined in the Case Studies above and several more are mentioned below. Additional examples are also available in ADITR (2003) and Buckley (2003). This

approach, however, has limited application and significant constraints. There are a number of examples within Australia where proposed tourism infrastructure developments within public protected areas have been refused development approval, often amidst considerable controversy. Examples include a proposed hotel at Tidal River in Wilson's Promontory National Park, Victoria, the proposed "Naturelink" cableway across Springbrook National Park in Queensland, part of the CERRA World Heritage Area, and a proposed land swap for a resort and golf course at Woodwark Bay, Queensland.

Case-study partnerships which work generally seem to involve clear formal commercial arrangements, which are documented as a lease, permit or contract with defined conditions, and which are supervised closely and firmly by the parks agency to ensure compliance. For those which have proved unsuccessful or inequitable, common factors cited include (a) political interference with actions by the parks service, and (b) arrangements which are not properly transparent, codified or enforced. Even where the partnership is effectively an in-kind trade or at negotiated barter rates, the terms of the exchange need to be agreed clearly. This occurs, for example, at the successful case studies on Heron Island and Cradle Mountain.

There seem to be three principal circumstances under which parks agencies might promote private development and operation of visitor infrastructure, and private enterprises can simultaneously profit from such infrastructure. These are:

- a) adaptive re-use of heritage sites and buildings
- b) visitor facilities in remote areas of larger parks, which can also provide visitor management tools for the parks agency
- c) specialist infrastructure in areas which most visitors cannot access with their own transport, as long as it complies with park aims and management plans.

These are discussed in more detail below.

Opportunities for PPPs

Adaptive re-use of heritage buildings

Examples of heritage buildings redeveloped as private tourism facilities include, e.g. Werribee Mansion and various lighthouses. Certain difficulties have been noted in each of these cases, but the overall model appears sound and there seems to be significant potential for further application in future. Parks agencies have responsibilities for these buildings, and in any event need to control development because of potential impacts on surrounding areas. Rarely, however, do they have adequate funds for maintenance or redevelopment. Private investors can benefit from a high concentration of potential customers, and access to the basic heritage building structure.

Visitor facilities in remote areas of large parks

Examples of private tourist infrastructure in remote areas of large parks are somewhat more contentious. Many park visitors would argue that this decreases self-sufficiency and self-reliance, and increases risks for both the natural environment and individual safety. Irrespective of this, however, if large numbers of independent visitors tend to congregate at particular areas

within a park, whether or not the area is remote, and whether or not they use mechanised transport to reach it, then impacts such as trampling, litter, water pollution from faecal material, and introduction of weeds are likely unless the parks agency installs some form of hardening. Under such circumstances, the management agency may indeed prefer the option of commercial visitor facilities. One example is Aurora Lodge in Kakadu National Park.

Specialised infrastructure in areas which most visitors cannot access with their own transport

Examples of specialised infrastructure in areas that few tourists can reach on their own include the fixed diving pontoons on the outer Great Barrier Reef, accessed by high-speed catamarans from Cairns and Port Douglas, the Tree Top Walk and Tahune Airwalk in the forest canopies of South-West WA and Tasmania respectively, and infra-red viewing cameras in the bat caves of Naracoorte.

In addition to these opportunities, there are already many existing commercial tour operations in national parks, including (a) commercial concessionaires for low-key accommodation such as parks campgrounds and cabins; and (b) small-group tours using publicly funded visitor infrastructure. Various licence, permit and certification programs are used by PAMAs in an attempt to ensure that such tours are carried out with minimal impact.

Visitor Fees

It would also appear to be eminently feasible for most Australian park services to increase entrance, camping and activity fees quite substantially, so as to gain a greater proportion of total tourism expenditure associated with visiting national parks. Such an approach, however, has a wide range of implications. It may affect the ability of particular socio-economic groups to visit national parks. It may reduce the number of visitors to national parks, and hence their associated regional tourism expenditure. It may lead to competition between national parks and tourism destinations in other lands such as state forests or private land. It may increase administrative costs for protected area management agencies. Finally, there is no particular reason why funds raised from visitors, or indeed from commercial tour operators, would necessarily be allocated to improving visitor infrastructure. Currently, such revenues may not even be retained by the parks service itself, let alone at the specific park where they are raised. None of these issues should necessarily prevent parks agencies from considering increased fees, but their implications certainly need to be taken into account when designing fee systems and setting rates.

Donations and Trusts

There are many opportunities and successful examples where community goodwill has been harnessed to assist protected area management agencies. Such community effort, however, cannot generally be relied upon as a mechanism to establish or maintain visitor infrastructure, except under rather limited circumstances. Many parks do not have large populations resident nearby. Many have infrastructure that needs mechanised equipment to install and maintain. Using volunteer labour in any public land, especially in potentially risky areas such as construction of visitor infrastructure, also has liability and insurance connotations. Trusts and

foundations therefore seem likely to be most useful under two rather different circumstances. The first is in urban parks and recreation areas where local communities make heavy use of visitor infrastructure and may well be prepared to donate time, materials, equipment or expertise. The second is where large organisations such as the NSW Foundation for National Parks and Wildlife, or the Australian Bush Heritage Fund, are established to accept donations of money or land for conservation purposes, and may on occasion consider it appropriate to establish visitor infrastructure. Where a commercial tour operator will also benefit, for example, volunteers will expect a commensurate contribution from that operator. The new Booyong Walk in Lamington National Park, constructed by the Green Mountains Natural History Association with assistance from O'Reilly's Rainforest Resort, provides an example.

Foundations

A number of parks worldwide have established local "friends of the park" organisations and conservancies which may help to maintain facilities as well as carrying out conservation projects. Well-known examples in Australia include the Bibbulmun Track Foundation (ADITR, 2003) and the Daintree Foundation. Private reserves may also establish local trusts and foundations, such as the Mareeba Wetlands Foundation (ADITR, 2003). Some private tourism corporations have established their own foundations with local interests, such as the Mutitjulu Foundation in Australia or the Environment Foundation in Aspen, USA.

A number of tourism and conservation organisations have established large-scale foundations and trusts which raise funds from donors, sponsors, bequests and grants, and distribute them to projects nationally or internationally. Some also accept gifts of land or act as brokers for volunteer labour. International examples include the PATA Foundation and the Africa Fund. Australian examples include the Foundation for National Parks and Wildlife, the Australian Bush Heritage Fund, and Conservation Volunteers Australia. The Australian Bush Heritage Fund, for example, collects donations of money or land for conservation, notably through bequests. Its annual income includes around \$1.5 million in donations, and a variable amount from grants and other sources, amounting to a further \$0.5 – 1.5 million (ABHF, 2004).

Image and Information Services

Image and information services are more contentious. Parks agencies, especially at a national scale in sovereign nations, potentially own or control a vast quantity of valuable information: sights, sounds, natural-products chemicals, and genetic code for species of plants, animals and microbes. Internationally, some parks services sell live specimens of their more valuable animal species to other parks and reserves. Some have also sold so-called bioprospecting rights, under which pharmaceutical corporations purchase a right to collect particular species within the park concerned and test them for potentially valuable chemical constituents, with a royalty on any ultimate commercial product.

Intellectual Property

Parks agencies also own their own names, brands, logos, slogans and so on. All of these are potentially available to raise revenues. The USNPS, for example, effectively franchises the use of its logo for use by approved souvenir manufacturers. Parks agencies can restrict the use of photographic or video images taken within parks boundaries, and require commercial tour operators accessing their parks to use these particular images as a condition of their operating permits. Parks agencies also charge fees for commercial photographers or film production. Currently, most Australian parks agencies allow free video and photo access for amateur use, and charge relatively small fees for commercial photographers and film-makers (Buckley, et al., 2001a). In areas with strong links to traditional Aboriginal owners, or Aboriginal ownership of land, lengthy licensing or approvals processes for individual images may also apply. This has caused concerns for commercial tour operators wishing to promote their products through media coverage. Elsewhere, some protected area management agencies provide a prelicenced library of images for use in tour operator marketing materials or other commercial purposes. Fees for such services are currently small but could potentially raise considerable revenue, particularly where feature films or commercial news services are involved. One critical issue in the use of images and logos is the need for coordination between parks agencies and commercial tourism interests in regards to marketing. For example, contention can arise if a tour operator is promoting the park but at the same time the agency wishes to demarket a destination as a way to control visitor numbers. There may be advantages in considering this issue in any form of commercial infrastructure or tour operator agreement in protected areas.

8 Recommendations

Opportunities to improve visitor infrastructure funding for nature-based tourism may be expressed as various forms of partnerships as follows.

Portfolio partnerships to relieve financial pressures on parks. Tourism and conservation interests should jointly advocate for federal and state governments (a) to recognise the many economic values of protected areas and other natural environments; (b) to increase budget appropriations for PAMAs; and (c) to allow PAMAs to retain revenues raised in addition to appropriations.

Agency partnerships to relieve visitor pressures on parks. Tourism and conservation interests should jointly lobby governments to promote large-scale tourism infrastructure in state forests, and dedicate areas of highest tourism value to recreation.

Land partnerships where governments promote conservation and visitor infrastructure on private landholdings adjacent to protected areas, through mechanisms such as voluntary conservation agreements, conservation incentives, and removal of tax barriers and disincentives. Tourism interests should lobby governments to remove current tax and regulatory barriers to conservation and distributed tourism infrastructure on private lands, and replace these barriers with incentives. Critical issues include tax treatment of private reserves, funding for accelerated and expanded programs of voluntary conservation agreements, and funding for purchase of conservation services from private landholders. Tourism interests could

also provide an extension service and small-grants programs to assist rural landholders establish tourism operations.

Planning partnerships with neighbours, to promote low-impact visitor facilities outside protected areas. Tourism and conservation interests, and state and local government planning agencies, should integrate regional tourism and land planning across all public and private land tenures, so as to coordinate access, accommodation, activities and marketing. This will provide opportunities for private investments in tourism infrastructure outside park boundaries, but using parks as the primary attractions. Planning agencies should act to ensure that there are no individual or cumulative environmental impacts on protected areas from such tourism development.

Local partnerships for basic visitor infrastructure in parks. Tourism enterprises, industry associations and government agencies need to assist directly in funding or upgrading basic visitor infrastructure such as toilets and tracks, since these are a critical factor in visitor satisfaction, and park visitation brings regional tourism revenues.

Investment partnerships for limited commercial tourism infrastructure inside protected areas, but only where this fits current park management plans and makes a net contribution to managing visitors for minimal impact. In practice, potentially profitable opportunities which currently comply with this constraint are: (a) adaptive re-use of historic heritage buildings; (b) accommodation infrastructure at heavily visited sites in large remote parks; and (c) specialist infrastructure for visitors to reach or view otherwise inaccessible areas such as forest canopies, caves or underwater.

Community partnerships where local communities contribute volunteer labour, materials or services to protected areas. In practice this is relevant to visitor infrastructure only where there is both a measure of self-interest and a large local resident community, for example, recreation infrastructure in urban parks, and infrastructure along heritage trails incorporating commercial tourism ventures.

Research partnerships where a proportion of visitor fees, including tour operator fees, is earmarked to provide associated management information. This includes research on: the conservation values and baseline status of parks ecosystems; the ecological impacts of visitors and infrastructure; associated management indicators and management tools; and minimal-impact guidelines for behaviour by visitors and tour clients.

Acknowledgements

Members of the project reference panel provided information and ideas and kindly reviewed several drafts: Mark Campbell, Peter Cochrane, Pennelope Figgis AM, Jane Foley, Tony Griffin, Ralph Henderson, Grant Hunt, Olivia Jenkins, Kris Madden, Andrew Mitchell, Claire Savage, Dianne Smith, Hilary Smith, Meg Switzer, Ian Tranter, Meryl Triggs, Stephen Wearing, Jill Weighell

Additional information on case studies was kindly provided by: Craig Bambery, Grant Hunt, Brett Simes, Chris Haynes, Mary-Lou Dixon, Richard O'Byrne, Casie Leuenberger, Mike Butler, David Roman, Rachael Miller, Peta Dowell-Hentall, Simon McArthur, Hilary Smith, Rod Spinks, Mathew Parvagna.

The final text does not necessarily represent the views of any of these contributors or their organisations.

Bibliography

- Australian Bush Heritage Fund 2004. www.bushheritage.asn.au.
- Australia, Department of Industry Tourism & Resources 2003. *Pursuing Common Goals*. Commonwealth of Australia, Canberra.
- Australian Wildlife Conservancy (2002) Australian Wildlife Conservancy, www.australianwildlife.org.
- Buckley, R.C. 2003. Case Studies in Ecotourism. CABI, Wallingford, UK.
- Buckley, R.C. 2004. Ecotourism land tenure and enterprise ownership: Australian case study. *Journal of Ecotourism* (in press).
- Buckley, R.C., Witting, N. and Guest, M. 2001a. *Managing People in Australian Parks*. 2. Commercial Operations Management. CRC Tourism, Gold Coast.
- Buckley, R.C., Witting, N. and Guest, M. 2001b. *Managing People in Australian Parks.* 4. *Asset Management*. CRC Tourism, Gold Coast.
- Buckley, R.C., Witting, N. and Guest, M. 2003. Visitor fees, tour permits and asset and risk management by parks agencies: Australian case study. In: Buckley, R.C., Pickering, C.M. and Weaver, D. (eds) *Nature-based Tourism, Environment and Land Management*. CABI, Wallingford, UK.
- Christ, C. (1998) Taking ecotourism to the next level: a look at private sector involvement with local community. In: Lindberg, K., Epler-Wood, M. and Engeldrum, D. (eds.) *Ecotourism:* A Guide for Planners and Managers. The International Ecotourism Society, Vermont.
- Conservation Volunteers Australia 2003. Your conservation experience. www.conservationvolunteers.com.au
- Crystal Creek Rainforest Retreat (2002) www.crystalcreekrainforestretreat.com.au.
- Eagles, P.F.J. and McCool, S.F. 2002. *Tourism in National Parks and Protected Areas: Planning and Management*. CABI, Wallingford, UK.
- Earth Sanctuaries Ltd (2002) Welcome to Earth Sanctuaries Online. www.esl.com.au
- Foundation for National Parks & Wildlife 2003. Foundation for National Parks & Wildlife www.fnpw.com.au.
- Griffin, T and & Vacaflores, M., 2004. *Making National Parks a National Tourism Priority. 1.*The Visitor Experience. University of Technology and TTF Australia, Sydney.

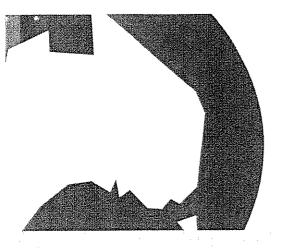
- Hares, S. (2002) Australian species in peril as saviour flounders. www.dailynews.yahoo.com/h/nm/20020117/sc/environment_Australia_dc_1.html.
- Johnson, J., Maxwell, B. and Aspinall, R. 2003. Moving nearer to heaven: growth and change in the Greater Yellowstone region, USA. In: Buckley, R.C., Pickering, C. and Weaver, D. (eds) Nature-based Tourism, Environment and Land Management. CABI Wallingford, UK.
- NSW Hansard, 2003. North Head Quarantine Station. NSW Hansard, 18 Sept 2003, p. 3614.
- NSW Minister for the Environment, NSW Heritage Council and NSW Waterways Authority, 2003, North Head Quarantine Station Conservation and adaptive reuse proposal Clause 243 Report under Part 5 of the Environmental Planning and Assessment Act 1979, Joint Determination Report
- O'Brien, G. 2003. Quarantine Station friends upset as hotel gets nod. *Sydney Morning Herald, 7 June 2003.* Fairfax, Sydney.
- O'Connor, A. 2003. Workers' lament at Seal Rocks. *The Age, 21 Nov 2003*. Fairfax, Melbourne.
- PATA Foundation 2003. Pacific Asia Travel Association. www.pata.org.
- Quintela, C (Stream Leader) 2003. Private sector funding of protected areas. *World Parks Congress Recommendation* 5.08. IUCN, Gland.
- Senior, J. 2004. Presentation to International Symposium on Society and Resource Management, Steamboat CO.
- Ward, J. 2003. The net economic benefits of recreation and timber production in selected New South Wales native forests. In: Buckley, R., Pickering, C. and Weaver, D. (eds). Nature-based Tourism, Environment and Land Management. CABI Wallingford, UK pp.61-76
- Wet Tropics Management Authority 2003. Principles to Guide Greater Private Sector Involvement in the Presentation and Management of the Wet Tropics World Heritage Areas. WTMA, Cairns.

Author

Ralf Buckley Director, International Centre for Ecotourism Research Griffith University, Parklands Drive PMB 50 Gold Coast, Qld 9726.

Phone: 07 55528677; Fax: 07 55528895

Email: R.Buckley@griffith.edu.au.



A Natural Partnership:

MAKING NATIONAL PARKS A TOURISM PRIORITY

This report explores how the full potential of Australian Protected Areas as tourism attractions can be realised, while prioritising the protection of their conservation values.

In particular, it looks at how the tourism industry and Protected Area agencies can work together more effectively to achieve mutually compatible goals: the provision of high quality visitor experiences, and increased public appreciation of, and support for, Protected Areas and conservation.

Key Findings

- Australian National Parks receive approximately 80 million visits per year. They are fundamental for regional tourism success.
- Over 90 per cent of visitors to Australian National Parks are Australian residents. Most (70 per cent) live in the cities and access Protected Areas using private motor vehicles.
- There is a funding crisis for National Parks that impacts negatively on the quality of visitor experiences.
- The long-term impact of this funding crisis is to undermine the sustainability of the natural, cultural and heritage assets themselves, and the tourism industry.

© Copyright is shared between TTF Australia and Sustainable Tourism CRC. For permission to reproduce please contact these organisations.

While every care has been taken in preparing this Report, TTF Australia Limited, the project Reference Panei (including its constituent organisations), and Sustainable Tourism CRC (including its related entities, partners, staff and agents) each disclaims all liability arising to the maximum extent permitted by law for any loss or damage (whether direct or indirect) incurred as a result of any person, company or other entity acting or relying on information in this Report. This report is general in nature and readers of this report should obtain independent advice specific to their own situation.



This report and the detailed Project Papers are available free of charge on the TTF Australia website: www.ttf.org.au under 'Research'

Sponsors

Federal Department of Industry Tourism & Resources | Sustainable Tourism CRC

Department of Environment & Heritage, South Australia | Northern Territory Tourist Commission Voyages Hotels & Resorts | Victorian Government | NSW National Parks & Wildlife Service Australian Government Department of the Environment & Heritage | State Forests of NSW

P&O Australian Resorts | South Australian Tourist Commission Queensland Parks & Wildlife Service

Western Australian Tourism Commission | Tourism Tasmania | Tourism NSW Australian Tourist Commission

TTF Australia is the peak industry group representing tourism and transport. It comprises the chief executives of the 200 most prestigious investors, operators, regulators and developers of infrastructure and services in Australia's tourism and transport industries.

TTF Australia Ltd PO Box R1804 | Royal Exchange NSW 1225
Tel 02 9368 1500 | Fax 02 9368 0933 | Email contact@ttf.org.au | www.ttf.org.au

		s v
	·	
*		