

APPENDIX 1 – DETAILED SURVEY OF LITERATURE ON DESERT TOURISM

Participants in the workshop were provided with a briefing paper, the content of which mainly entailed a description of the scoping process and a literature survey which included multiple quotes from the small number of sources on the topic. The bulk of the pre-workshop briefing paper and detailed quotes are included in this appendix.

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App 1.1 BRIEFING PAPER RATIONALE and METHODOLOGY

The briefing paper constituted a first step in providing an overview of tourism-related issues relevant to the Desert Knowledge CRC, by highlighting research priorities for stakeholders of the Desert Knowledge CRC, examining research capacity in relevant areas as well as potential overlaps/synergies with other research bodies or CRCs. The focus was aligned with the Desert Knowledge CRC Theme 4, which looks at business systems and incorporates a number of business activity clusters deemed critical for the economic, social and cultural development of Australian desert communities - including tourism. The intended audience for the paper ranged from academics and researchers to industry and government stakeholders.

The briefing paper itself resulted from a series of discrete and fragmented short surveys based on typical academic tools. Among them, searches were undertaken – some global and some limited to Australia and desert regions within it:

- web-based surveys of commercial/government/research sites involving elements of ‘tourism’ and ‘desert’ or ‘arid’; then using specific locations of interest such as Kalahari, Sahara, Gobi, etc. as well as other terms relevant to Australia
- survey of academic references linked with the same types of terms, broadened to include ‘ecotourism’, ‘regional tourism’ and other relevant terminology – including a comprehensive look at tourism-related journals, but also using universal-modern databases with their own search engines

- inspection of websites and documents from international organisations involved in managing tourism/ecotourism and using it for development purposes (for instance World Tourism Organization and related sites)
- survey of resources/references provided by regional governments promoting/ developing/featuring deserts or arid zones in Australia and elsewhere – searching for the presence and conceptualisation of tourism within those sites
- survey of resources found on tourism agency websites, both Commonwealth and state-based in which tourism regions are described, researched, marketed, etc.

This appendix reports the findings of these fragmented searches and provides a summary of some of the richest and most relevant contributions – mainly from within Australia. While it may involve some attempts at definitions and suggestions (with respect to elements that need to be incorporated in any framework for ‘desert tourism’ research), the paper is essentially descriptive and entails multiple small surveys rather than an analysis of a well-defined field.

Issues of definition are not purely academic and often point at interesting opportunities to re-evaluate research frameworks and assumptions. What follows is arbitrary and might reflect the bias of the author. It is deemed that defining ‘desert tourism’ is naturally done by starting to agree on/provide definitions of the ‘desert’ (as a type of place, environment, society) as there is no such conceptualised or marketed commodity as ‘desert tourism’ in Australia, yet. One can then attempt to extract attributes of tourist markets, business characteristics, infrastructure, community impacts, opportunities and issues associated with the definition of desert environments (I will use the term ‘environment’ hereafter to incorporate natural, cultural, social and business, etc).

While much of this brief follows this methodology, it is noted that this can easily lead to oversimplifications of what constitutes both the ‘desert environment’ and ‘tourism’ (or ‘tourists’). It is worth stating at the outset that tourists are diverse and characterised by highly heterogeneous and rapidly changing motives, needs and outlooks. This is a critical reality even in narrowly defined environments or spaces such as deserts.

While it is tempting to reflect and discuss averages – for instance noting that ‘the average tourist in the desert is like this or that’ or ‘the average tourism business in desert regions is smaller, more vulnerable’ etc, it is fundamentally important to emphasise that diversity of structures and behaviours characterise tourism systems, and that averages can hide high levels of complexity. It can be stated at the outset that much of the challenges in defining and formulating research agendas might have to do with the combination of fragile/remote desert environments with complex, diverse and unpredictable tourist dynamics, on scales that make research difficult to undertake and results difficult to generalise.

App 1.2 DESERT TOURISM DEFINITIONS

The Desert Knowledge CRC website provides the most relevant definition of what is ‘desert knowledge’ for the sake of this project:

Desert areas are characterised by a low and sparse population spread over large areas of lower productivity land. Desert knowledge is the formal and informal knowledge about how to make a sustainable livelihood in these areas, in the face of relatively expensive transport, limited conventional employment opportunities, and ways of doing things that are imported from other regions and may be inappropriate.

Desert Australia can boast a great deal of formal research knowledge (eg. we have a good international reputation for monitoring and managing arid lands) but also a huge store of informal knowledge (eg. how do you put a solar energy system into a remote location in such a way that it doesn’t fall over in the absence of the maintenance it might receive elsewhere?), including an extraordinary reservoir of Indigenous knowledge.

Australian deserts support a high proportion of Indigenous people, who are actively experimenting with new methods of governance, for example. Desert Knowledge Australia arose out a community-government alliance, and seeks a better future for inland Australia by developing desert knowledge economies. It actively promotes the use of diverse desert knowledge to improve desert wellbeing in at least 3 ways – by directly improving people's quality of life, by capitalising on opportunities to market our knowledge overseas, and by promoting the region as being worth visiting, whether for tourism or for educational purposes. Knowledge is cheap to transport, given the right communications networks, and there's a real niche for desert knowledge – over a third of the world's surface, inhabited by a billion people, shares relevant features with ours. So Desert Knowledge Australia also aims to contribute to desert well-being elsewhere in the world (often dealing with poor and most marginalised regions).

In the context of Theme 4, it also defines ‘business systems for desert economies’:

Desert economies are characterised by marginal lands for conventional agriculture, and a high proportion of economic activity in the mining, tourism and service industries. The population is relatively small and sparse, resulting in relatively high service delivery costs. Australian deserts are additionally characterised by a high proportion of Indigenous people. These factors raise great opportunities and challenges for service delivery in general and for the development of viable economic systems. They add additional complexities to a system that is anyway difficult to interpret and predict. Large proportions of this population live in small communities away from the servicing towns.

Desert businesses operate in small local markets, experiencing high transport costs, and, if based on products which ultimately link back to natural resources or the small number of people that provide the human capital, a high level of variability over time. Better-coordinated approaches to business development are required if the communities are to survive in a growing global economy. We must seek to enhance areas of natural comparative advantage. In other areas of economic activity, regional strategies are needed to develop comparative advantages based on human capital. These desert business strategies all require long- rather than short-term planning, with well-defined goals.

The above statements define the business context of desert economies and hold many of the critical issues relevant for ‘desert tourism’. But when referring to business systems, the focus is not uniquely on individual businesses. It is also concerned with clusters of firms and other organisations aimed at creating ‘value’ and contributing to local desert economies. This means that the interactions between tourism and other related socio/cultural/economic activities are particularly critical when one looks at livelihoods and the associated constraints described above. In particular, the connections between tourism and other identified clusters such as bush foods; Indigenous and other arts; environmental management; and Indigenous and other culture preservation, can all be relevant and inseparable. While the latter are not examined in detail in this appendix, the Desert Knowledge CRC is interested both in business-level clusters and regional systems and how they interact:

Regions function as complex systems, combining human decision-making and institutional structures with economic and social feedbacks, and founded on an environmental resource base. The research required to tackle these problems needs to take internationally innovative approaches to combining systems analysis with local understanding of system function. This analysis should be strongly and iteratively linked back to the natural resource and service provision research outcomes (Themes 1–3). The goal in any future scenario should be to understand and make explicit the trade-offs between environmental, social/cultural and economic outcomes.

App 1.3 INTERNATIONAL CONTEXT: DESERT TOURISM ISSUES GLOBALLY

The search undertaken to provide a framework for tourism research in desert environments has unveiled a number of sources, some linked to international organisations, attempting to establish regulatory frameworks for tourism, and many others concerned with local issues in specific corners of the world. While some universal issues arise when tourism activities (consumption and production) take place in desert environments, this section shows that many of the critical issues are not necessarily unique to desert environments. This section presents the author's own selection and organisation of issues as pertaining to the brief.

It must also be noted that there is a huge literature on desertification and policies to try to slow the process down. This literature usually encompasses discussions of strategies to enhance or sustain livelihoods for small and relatively poor communities (internationally) and often includes issues linked with tourism, its impacts and opportunities. Typically, tourism is presented as a promising but dangerous form of development, the impacts of which on desert communities are imperfectly understood. Yet, as is often noted in these discussions, this often takes place in contexts where the number of alternatives (to tourism) is limited and where tourism is likely to compete for resources with other more traditional forms of economic activity.

Within the academic tourism literature itself, very few references are made to 'deserts' or 'arid environments'. Examples can be found within collections which encompass elements of places classified (for the sake of case study) as either 'remote', 'peripheral' or 'fragile' environments and point at issues linked with the combined remoteness, fragility and highly distinct attributes of such places. At other times, they are classified by government and tourism management agencies within the heading of 'regional tourism' which can be defined in many ways depending on national context. Usually it amalgamates non-urban – statistically 'peripheral', rural, administratively disconnected – forms of tourism across all types of environments: coastal, island, mountain, tropical and desert, as in Australia.

The literature on ecotourism cannot be easily separated from that of general tourism studies as the term 'ecotourism', like that of 'sustainable tourism' has become the object of mainstream academic attention and debate and is used quite differently in various parts of the world. It happens that this literature is highly concerned with tourists' impacts at local levels. It has therefore paid more attention to types of development which fit specific types of environments worthy of special attention, with only a few references to the desert/regional/remote development nexus.

App 1.3.1 Desert Ecotourism in the Academic Literature

Weaver (2001) offers such an overview, which includes a discussion in which desert, grassland and savannah-type ecosystems are combined in one broad environmental aggregate, while other non-woodland environments such as tundra, alpine areas and polar deserts are considered separately. Recognising that these do not constitute discrete categories and that transitional elements are important for any sort of spatial mapping, Weaver argues that the most relevant criterion for delineation of these regions for ecotourism management is the 'resultant vegetation' (2000:251). The definition basis is interesting but simplistic because it assumes that a universal criterion can be used to connect such ecological environments and the opportunities and challenges which come with tourism-related human activities.

Weaver also notes that his delineation does not take into account ecotourism attractions that have no direct relationship to the biome in which they occur and gives the Australian example of the Undara lava tubes found in northern Queensland which are popular geological attractions. The lava tubes just happen to be located within a savannah-type ecosystem (Sofield and Getz, 1997) where the object of attraction is not closely linked with the ecological environment, nor hampered by it. In contrast, Weaver's representation of ecotourism focuses on geomorphological features and forms which are

closely connected with conditions of extreme aridity – which, he argues, are the ones which ought to be represented under the category of ‘desert’.

While this is a sensible strategy for the purposes of categorising and examining many core desert ecotourism issues (associated with certain types of businesses and activities), the suggested criterion is too restrictive for this brief. The management of desert tourism as understood by the Desert Knowledge CRC is broader and must include an interest in the relationships between a number of components in the broad context of desert ecosystems:

- remote/fragmented attractions
- self-drive tourists (who combine and have an interest in many outback environments)
- mass tourist attractions
- icons (which drive many major tourists flow)
- the built/services components of the region (which play little role in explaining interest in the region in the first place but constitute important services poles and explain actual pathways of tourists)
- the specific attributes and relationships between livelihoods, businesses and resources with Australian desert environments

Some of the key issues for tourism management in desert Australia have to do with the juxtaposition of many fuzzy elements – such as heritage and landscape values, modern tourism infrastructures and fragile natural and cultural environments – both from the marketing and planning viewpoints. This becomes obvious when reviewing the Australia-specific literature in which discussions of destination images (e.g. the ‘desert’, ‘arid zones’, the ‘outback’) are intertwined with supply-side and planning concerns. Weaver (2001:251–2) defines deserts in the following way:

‘Deserts’ are often associated in the public image with a non-vegetated landscape dominated by sand dunes. However, this stereotype, properly referred to as an erg, is just one type of desert, occupying about 30% of the Sahara and Arabian deserts, but only about 1% of North America’s and lands (Huber et al, 1988). More characteristically, deserts consist of rocky, sandy or stony lands hosting a discontinuous cover of short grass, cactus and/or shrubs. Trees are found only in oases, along permanent rivers, or in other areas where a reliable water supply is locally available. A useful distinction can be made between ‘hot’ deserts such as the Sahara, Arabian, Mojave, Atacama, Great Indian, Kalahari, Namib and the deserts of Australia (Great Sandy, Gibson, Simpson), and ‘temperate’ deserts such as the Gobi, northern Patagonia, and much of the Great Basin of the western USA.

As a potential venue for ecotourism, deserts have the advantage of being largely unaltered by direct human intervention. This is not due to some litany of enlightened attitude toward and lands, but rather to the more mundane reality that deserts, by their nature, are largely unsuited for agriculture or permanent human settlement. Having said this, there are significant areas of desert, such as in the south-western USA, that have been altered by irrigation, mining, military uses and urbanization. This contraction, however, may be offset by the desertification-induced encroachment of and ecosystems on adjacent grasslands and savannahs. A second inherent advantage of deserts might be termed the ‘visibility factor’, wherein wildlife is more likely to be sighted in a sparsely vegetated landscape due to the availability of a broad viewing range and the lack of cover for larger animals.

On the negative side, deserts are commonly perceived, at least in the Western mind, as a lifeless and dangerous environment beset by extremely high temperatures and extremely low precipitation; it is useful to point out that the word ‘desert’ derives from the Latin ‘desertum’, or something that has been abandoned. Furthermore, while endowed with a generous visibility factor, the number of larger animals that can be seen in most deserts is restricted by low inherent carrying capacities. The fauna that are present tend again to be stereotyped, especially by images of unpleasant and dangerous reptiles and arachnids such as rattlesnakes, scorpions and tarantula spiders.

The wildlife-viewing issue can play a greater role than first assumed in explaining the attractiveness of desert locations to specific market segments. It must also be noted that the ‘unpleasant’ stereotypes held about many desert animal inhabitants does not necessarily have to remain a deterrent, as the ‘likeability’ of wildlife species is often not the most important attribute to influence attractiveness or even fascination with the presence of specific types of wildlife and their relationships with such environments (Tremblay 2002). Another issue, one not mentioned by Weaver, is that many wild animals in desert environments are nocturnal, and this, twinned with the low climatic resilience, patience and ability of tourist-viewers to ‘relate to them’ beyond the superficial, makes marketing the desert difficult.

The authors then discuss aspects of ‘desert ecotourism’ which hold a fair degree of universality, mainly focussing on the entity as a type of product. Their comments are general enough and worth reproducing in large parts (Weaver 2001:253–255):

The above evaluation may lead one to suspect that ecotourism is rare or absent altogether within arid ecosystems. This, however, is not the case, although desert ecotourism does admittedly suffer by comparison with more accessible and more vegetated ecosystems. In terms of attractions, a cursory examination of current desert ecotourism activity shows a distinct pattern of association with seven factors:

- 1. Exceptional **geological features** associated with and climatic conditions; these include the Grand Canyon (Arizona, USA), the ancient sand dunes of the Skeleton Coast (Namib desert, Namibia) and Uluru (Ayer’s Rock) in central Australia.*
- 2. **Wildflower and other episodic floral displays**; examples include the desert regions of Western Australia, Cape Province (South Africa) and other areas where heavy rainfalls induce an ephemeral blossoming of desert flora.*
- 3. Ancient, large or **unusual vegetation**; examples include the 2000-year-old Welwitschia plants of the Namib desert, and the giant saguaro cacti of the southwestern USA.*
- 4. **Caravans or other desert trekking**; eg the Tuareg camel trek offered during the early 1990s in Algeria’s Sahara desert by a private adventure travel company (Daniel, 1993).*
- 5. **Indigenous inhabitants**; given that traditional Indigenous cultures are often inextricably linked to their surroundings, they may constitute an ‘ecotourism’ attraction in their own right, or at least in terms of their interaction with their surroundings. This of course is a debatable point. Examples include the above-mentioned Tuareg trek, and activity affiliated with Australia’s and land Aborigines (as for example at Uluru), and the Bushmen of the Kalahari desert (Hitchcock, 1997).*
- 6. **Oases**; there are a growing number of ecotourism sites that are affiliated with luxury resorts situated in an oasis environment. One of the best instances is the AI-Maha resort in the United Arab Emirates, which includes a 16 km² nature reserve stocked with reintroduced Arabian oryx and sand gazelle.*
- 7. **Protected areas**; desert ecotourism is to a very large extent associated with formally protected areas (see below).*

The first three of these factors reveal a direct ecotourism focus, with the first being entirely predictable (i.e. the geological attraction is guaranteed to be there), and the second being largely unpredictable (the appearance and quality of the wildflower display depends upon the occurrence and type of precipitation). The next three factors are more indirect given that they incorporate ecotourism as a supplement to adventure, cultural and luxury resort tourism, respectively.

The final factor, association with protected areas, is probably the most important and encompassing of all. As in other ecosystems, most desert ecotourism occurs within accessible public or private protected areas. These provide suitably impressive natural attractions retained in a more or less natural state, appropriate services and facilities (e.g. interpretive centres, tracks, roads, infrastructure) and sometimes a high public profile associated with national park, world heritage, or similar status. In a desert context, this phenomenon is best illustrated in south-western USA, where federal protected areas such as Grand Canyon, Death Valley and Joshua Tree each attract more than 1 million visitors each year (see Table below). Not all visitors to these parks merit classification as ecotourists, but an analysis of available services and activities suggests that 'soft' ecotourists probably constitute a strong majority. A typical pattern of activity involves the use of private vehicles to participate in 'scenic drives' that include periodic stops and, optionally, short interpretive walks and talks, at points of interest including interpretive centres. Hence, the pattern of visitor concentration that is so apparent in the more popular protected areas worldwide is evident in desert parks.

A distinct variation of the desert protected area is the relatively small site in which selected desert flora are planted and displayed for educational and scientific purposes in a way that emulates their natural surrounds. This is illustrated by the Boyce Thompson Arboretum State Park east of Phoenix, Arizona, which covers only 120 ha, but hosted over 95,000 visitors during the 1997/98 fiscal year (personal communication, L. Soukup, Boyce Thompson Arboretum). A similar Australian example is Alice Springs Desert Park, which opened in 1997 and expected 100,000 visitors in 1999. (It should not be assumed, however, that all of these visitors are ecotourists.) At the core of the 13 km² site is a 50 ha core area that is meticulously designed to display and interpret a variety of Australian desert plant communities. The facility also engages in the captive breeding of the resident reptiles, birds and mammals (Brown, 1999).

Table 16.1. Visits to major federal protected areas in desert ecosystems of the USA, 1998 (National Park Service, 1999).

STATE	PROTECTED AREA	1998 VISITATION
Arizona	Grand Canyon National Park	4,239,682
Arizona	Organ Pipe Cactus National Monument	182,126
Arizona	Petrified Forest National Park	816,506
Arizona	Saguero National Monument	716,160
California	Death Valley National Monument	1,177,746
California	Joshua Tree National Monument	1,410,312
California	Mojave National Preserve	374,378
New Mexico	White Sands National Monument	592,957

The USA and Australia (where Uluru National Park hosts approximately 300,000 visitors per year) are the two countries where desert ecotourism is best represented and longest established. Hence, they may be described as the 'top tier' of desert eco tourism. This status is explained by the presence of high-profile desert protected areas (such as those mentioned above) that are accessible to affluent domestic populations with a high proclivity to engage in soft ecotourism activities. In addition, inbound tourists also compose a significant component of protected area visitors. By comparison, ecotourism in the deserts of most other countries is incipient. Among the best developed of these 'lower tier' desert ecotourism destinations is Namibia, which accommodates some 35,000-40,000 visitors each year in the Namib-Naukluft and Skeleton Coast Nature Reserves. Contributing to this relative maturity is proximity to the white South African market (which is similar in affluence and culture to the USA and Australia), a well-developed national road and air network, and an extensive and well-serviced protected area network in its desert areas. In addition, the deserts of Namibia are characterised by unique and interesting features such as the ancient and highly unusual dunes of the Namib desert, quivertree (*Aloe dichotoma*) 'forests', the aforementioned *Welwitschia mirabilis* plants, and robust populations of larger and easily observed desert mammals (Weaver and Elliott, 1996).

More typical of the lower tier is the status of ecotourism in the great belt of desert that extends almost continuously from Mauritania in western Africa through the Middle East and the former Soviet central Asian republics to north-central China and Mongolia. In the first instance, relatively few protected areas have been established within this desert belt. Countries dominated by desert tend to have among the lowest portion of land set aside for such purposes (eg as of 1997, United Arab Emirates and Iraq had 0%; Libya, 0.1%; Egypt, 0.8%; Kuwait, 1.4%; Mauritania, 1.7%; Uzbekistan, 2.1%; Jordan, 3.4%; World Resources Institute, 1998). Secondly, those protected areas that do exist contain few if any facilities to accommodate soft ecotourists. Thirdly, the transport network necessary to access these parks is rudimentary. Fourthly, the proclivity of domestic tourists in these countries to engage in ecotourism is minimal, as is the inflow of Western non-business tourists who would constitute the most likely market for such a product.

Not surprisingly, desert ecotourism in most of the lower tier destinations (exceptions such as Al-Maha notwithstanding) is an informal 'hard' variety that intersects with adventure tourism and involves such disparate elements as scientific expeditions, exclusive adventure packages, and individual 'exploration' by four-wheel drive or other means. As an organised activity, there does not appear to be any history of ecotourism at all in Uzbekistan or any of the other former Soviet Central Asian republics that contain significant amounts of desert (Sievers, 1998). A very small amount of ecotourism appears to be occurring in the Egyptian desert, where local oases are used as bases of operation for private companies offering daylong or multi-day desert excursions. As part of its tourism diversification campaign of the early 1980s, consideration was given to the development of the desert as an ecotourism destination. However, this was rejected in favour of the coastal -type tourism after it was determined that little market existed either domestically or internationally for such a product (Cockerell, 1996). In the Tunisian desert, an international non-governmental organisation is incorporating ecotourism into a project to develop the archaeological and historical resources of the Douiret town site into a major tourist attraction (Ouassar and Belhedi, 1998).

The general discussion of threats to desert ecotourism below provides some useful directions for setting a desert tourism research agenda (Weaver 2001:255-6):

*In the top tier destinations of the USA and Australia, the primary internal threat to desert ecotourism derives from the concentration of high visitor levels within certain portions of some public **protected areas**, which can lead to the deterioration of both the natural resource base and the visitor experience. A major external threat is the indiscriminate use of **all-terrain vehicles**, which contributes to the degeneration of non-protected desert habitat and is directly disruptive to the ecotourism experience. For lower tier destinations, the threats are entirely different. One significant internal threat within the few protected areas that have been established is the lack of proper management owing to **resource scarcities** and the low priority given to desert areas. Externally, unregulated 'consumptive' activities such as big game hunting are increasing in unprotected desert areas (and sometimes within the protected areas themselves) because of their income-generating potential. This is especially evident in the former Soviet central Asian*

republics. While not inherently unsustainable, problems can occur when hunting depletes local wildlife populations or interrupts those attempting to pursue ecotourism. An additional threat is warfare, the devastating environmental effects of which were demonstrated in the wake of the Gulf War in both Kuwait and Iraq.

The remaining parts of the chapter focus on grasslands and savannahs and incorporate overlapping and interesting observations. The main distinction made between these environments lies with the extent of human alterations to some of these ecosystems. Given the nature of Australia's inland, the 'desert' reference remains the most appropriate. The section on savannahs ecotourism mainly refers to the potential associated with large mammals (viewing-based tourism) in parts of Africa. The only example given from Australia in the latter category refers to Kakadu where there is minimal recognition that it is the interaction of wetlands with savannahs and escarpment which provides the main source of attraction. At the end of the chapter, admitting that generalisations are dangerous, Weaver identifies various patterns and management issues that should be assessed as being more likely to pertain to these three ecosystems (Weaver 2001:261–2):

It is worth reiterating that deserts, grasslands and savannahs all repeat the global pattern whereby ecotourism, in its 'soft' manifestation, tends to concentrate in a limited space within just a few high profile and more accessible protected areas. All three ecosystems also possess a high visibility factor that increases the likelihood of successful wildlife viewing, yet can also negatively affect visitor satisfaction by increasing the probability of viewing other tourists as well. The opportunity for both soft and hard ecotourism beyond these protected spaces is influenced by the condition of each ecosystem. Deserts tend to be relatively unaltered, whereas grasslands (and tall grass in particular) have experienced the greatest amount of degradation and conversion; savannahs as a whole are in an intermediate position. Another influence is the extent to which a market exists for ecotourism in the protected areas and beyond. As the domestic market for ecotourism in less developed countries is generally incipient, it is apparent that domestic ecotourists are significant as a market only in North America (deserts, grasslands), Australia (deserts, grasslands, savannahs), the western grasslands of Europe (eg Hungary) and, to a more limited extent, in South Africa and Namibia.

Also, typical impact issues are mentioned (Weaver 2001:262):

With respect to management issues, the question of site-hardening and other strategies to deal with visitor concentrations within protected areas is as important to deserts, grasslands and savannahs as it is to all other ecosystems. A related issue is access to water, given that deserts and grasslands are areas of inherent moisture deficit, and savannahs are usually subject to seasonal deficiencies. Similarly, managers of ecotourism in grasslands and savannahs must cope with the reality of fire as a normal part of ecosystem dynamics. Pertinent questions include the extent to which these can and should be initiated and controlled by managers (as opposed to being left to the devices of nature), and to what extent these will interfere with or enhance the ecotourism experience in both the short and long term. The migratory behaviour of many desert, grassland and savannah larger mammals is also an important issue, since ranges often extend beyond protected area boundaries. This can lead to a re-assessment of wildlife as pests in those unprotected areas, or as objects for consumptive tourism (i.e. hunting). A sort of informal stratification appears to be emerging in the safari belt where ecotourism is promoted in the higher-order protected areas, while hunting is given priority in lower-order and private protected areas, as well as in communal lands. Zimbabwe's well-known and controversial CAMPFIRE programme illustrates the continuing importance that is attached to big game trophy tourism in the region (Butler, 1995). The issue is not whether hunting is sustainable or not (this depending on how it is regulated), but instead whether a peaceful coexistence between the two sectors can be achieved, or whether ecotourism interests will 'concede the field' to consumptive tourism outside just a few of the crown jewels.

Outside the entries quoted above, little else can be found in the tourism literature which is specific to 'deserts' as environments. Many academic collections relating to the political economy of tourism focus on a country or region and discuss planning challenges in relevant contexts. Reichel and Uriely (2002) for instance provide a discussion of tourism development in 'a desert frontier town' in a

collection on tourism in frontier areas. They propose a conceptual strategic approach to tourism development in remote, isolated areas in the desert in South Israel. They discuss a case study for which they support a 'two-tier development process be implemented, where central planning provides the basis for entrepreneurial profit-making activities' (p.195). Overall, the discussion supports a mixed 'post-modern approach to remote desert locations that combines the authentic with the man-made, stimulated, or contrived, as well as the central planning approach with the individual entrepreneur' (p.196). Their main argument is that the best way to sell arid environments as tourism places to support desert livelihoods is to carefully plan for forms of nature-oriented tourism trends which stay away from the 'green' version and focus instead on 'desert sustainability'.

The authors take the example of Las Vegas as a successful desert location which has invested entirely in mass tourism based on contrived attractions. They suggest that the periphery of the Israeli Negev desert would instead benefit from a post-modern alternative focussing on small-scale entrepreneurial 'rural desert tourism', often supported financially by the State. They argue that both extreme forms of development (totally contrived/artificial and purely ecotourism) failed to support livelihoods in that specific desert environment, and that both must be included (but tightly managed and planned) so as to complement each other in the tourist experience.

While the issues raised by Reichel and Uriely are not specific to desert environments, they are typical to the extent that such environments are often characterised by a systemic tension between the need to occupy mainstream markets (and develop simulated attractions and man-made artefacts for tourists) and the need to cater for high-yield (but also often high-cost) segments through specialised entrepreneurs with differing views of infrastructure development, marketing and planning adequate for such areas.

App 1.3.2 World Tourism Organization (WTO) Reports

While very few published academic references could be found on the subject of 'desert tourism', a number of government and NGO websites were found which held regional or international outlooks on the topic. Many predate the academic references already discussed above. The WTO and various United Nations (UN) entities such as the UN Environment Programme (UNEP) are involved in various collaborative projects (including their contributions to the World Ecotourism Summit of 2002). These are of particular interest because they highlight specific planning and management difficulties linked with tourism in the desert. Some are related to broader programs focusing on combating desertification in which tourism is sometime presented as a potential (but rarely the main) culprit, or potential saviour (again, rarely the main).

As some of these websites are highly complex and sometimes repetitive, components were selected by the author on the basis of usefulness and have been reproduced from these websites for the sake of producing the Desert Tourism Scoping and brief. Much of the material linked with North Africa is also translated from French by the author. It must be noted that much of the focus in this material is connected with North Africa or the Middle East and the fragments reported below reflect two facts important in the context of those regions:

- desertification is an ongoing process which large organisations and government bodies are struggling with, for which extensive bureaucracies have been set up.
- the areas of interest for these bodies involve much poverty and lesser-than-average economic development (especially dramatic in North Africa but true in Australia as well).

These facts impact on the nature of issues and strategies suggested in the literature reported below. Numerous and lengthy statements about the potential of tourism to alleviate poverty in North Africa can be found. Their tone often indicates that places which may be ill-equipped to truly benefit from tourism build such hopes because they desperately need 'hope' rather than because opportunities abound. As the Desert Knowledge CRC aims to create knowledge that might be exportable in the long run, such local contexts must be considered cautiously.

A number of papers were presented at an Algiers Preparatory Seminar for the International Year of Ecotourism in 2002 (January 2002) which was one of a series of Regional Preparatory Events leading up to the World Summit. Reports from the various Preparatory Meetings were also presented at the World Summit but are not available on the web. The large number of preparatory work provides an extensive source of materials.

In particular, the final report of that seminar (*Sustainable Development of Ecotourism in Desert Areas – Preparatory Seminar for the International Year of Ecotourism in 2002 – Algiers (Algeria), 21–23 January 2002*) has been extensively used and is reported below.

The seminar was organised along the following three themes:

Theme 1: Planning and regulation of ecotourism in desert areas. The challenge of sustainability.

Theme 2: Product development, marketing and promotion of ecotourism; fostering sustainable products and consumers.

Theme 3: Monitoring the costs and benefits of ecotourism to ensure they are equitably distributed amongst all players.

The final report stresses that a number of reports and case studies had been presented and identified the following aspects as critical:

- a) The importance of all types of participation by **local communities** in the development of ecotourism*
- b) The role of national and **local governments** in ecotourism management*
- c) The need for **joint** action by the different players in the **development of products** and of ecotourism destinations*
- d) The impact of ecotourism activities on society, the economy and the environment as a key factor for **sustainability**.*

The following elements discussed under the three themes categorisation are of universal interest but apply in different degrees to the context of Australian deserts. They are summarised below:

Theme 1: Planning and regulation of ecotourism in desert areas: the challenge of sustainability

- In view of their natural and cultural diversity, desert areas have enormous potential for ecotourism. Understanding this potential is essential for countries such as Algeria, in which the immense majority of the territory is desert. But this potential must be developed according to criteria of sustainability.*
- Desert areas are predominantly located in developing countries with limited resources. Thus it is of high importance to obtain and provide support for all forms of local or regional ecotourism development in these areas.*
- The development of ecotourism must be economically feasible, ecologically viable and ethically and socially equitable for local populations.*
- The tourism development policies recently adopted by some countries represented at the seminar (Algeria, Botswana and the Sultanate of Oman) stress the development of ecotourism within the framework of sustainable development (there is much emphasis on the national/government organisation of tourism and the multiple agendas it might hold in this seminar).*
- Any project for ecotourism development in a natural park in general and a desert in particular requires a preliminary assessment of environmental impact, taking into account the economy of wood and water resources and the use of biodegradable products.*

- *Consultation with local communities must be at the forefront of the development of any ecotourism project. Alternative mechanisms for consulting local communities should be made clear and facilitated to all those undertaking the development of ecotourism projects. At the same time, it is essential to realise that local communities are not just one homogeneous group of people that happened to be in one place.*
- *It is essential to consult with all the players in nature parks and with the administrative bodies involved in the matter of regulating ecotourism flows, safeguarding threatened sites and training guides while also creating awareness.*
- *Cooperation amongst the nature parks within a single desert region will enable each of them to get to know the other's planning policies and to take inspiration from them when drawing up their own development plans. This will allow them to create a new tourism identity that will be less dependent on foreign aid and especially on tour operators from tourist generating countries. The example of the 'Africanisation' of the Saharan parks was mentioned.*
- *Common planning for protected desert areas that cross national borders should be considered with a view to achieving better protection of the natural and cultural resources of such areas (e.g. the Tassilli between Niger, Algeria, Mali and Libya, and also the desert areas between Algeria and Morocco, Algeria and Tunisia, and Jordan and Saudi Arabia). The issues noted in the various cases examined are remarkably similar to problems linked with coordination of desert across state jurisdictions in Australia.*
- *At country level, a stock take of the location of desert assets is one of the essential conditions for planning in these areas. This should be undertaken by setting up desert observatories. (Ideally, these should cross national borders.) In the Sahara, the Tamanrasset site has already been considered.*
- *For natural heritage, an environmental study on biodiversity has to be conducted, bringing to light the current state of vegetal and animal species conservation, particularly endemic species (like some ungulates) menaced by poaching or tourist hunting, and checking periodically the biological stocktaking after each tourist season.*
- *Briefly stated, the opening of these zones to ecotourism should follow the formulation of a management plan and a rational resource conservation strategy specific to each ecotourism area.*
- *Within each protected area, it is essential to carry out zoning and to draw up lists of all natural, cultural and human heritages to be protected.*
- *Any infrastructure created in these protected areas should be sustainable from the environmental point of view and aesthetically acceptable. In dune areas, light equipment that can be dismantled should be used.*
- *Certain laws and regulations within protected areas should be extended beyond their frontiers.*
- *The preparation and enforcement of regulations guaranteeing the survival of heritage should receive government priority because delay may lead to irreversible damage.*
- *Governments should learn to consider projects whatever their size, because even the smallest will encourage the inhabitants of isolated areas to remain within their communities. One of the advantages of ecotourism is precisely that the infrastructure required is small in size.*
- *Governments should be invited to define a national rural tourism policy for desert areas because the potential and variety of rural territories in some countries, such as Syria, allow for the development of sustainable tourism that will help rural populations.*
- *Trans-ministerial actions (culture, environment, tourism, agriculture, town planning, etc) should be encouraged.*
- *It would be especially useful for the tourism and cultural sectors to collaborate. Archaeological sites should not be mummified by completely preventing access by tourists for reasons of conservation.*
- *In general, all development should be seen from a trans-sectorial point of view. Coordination and collaboration amongst all those involved is essential in the development of ecotourism. A*

committee should be set up comprising representatives of the public and private sectors, NGOs and communities, and consultation fora should be created for the local populations at the early stages of any tourism policy. The case of Botswana is an example of coordination at the stage of drawing up a national ecotourism strategy.

- *Strict definition of tourism carrying capacities was indicated as being essential in the case of ecotourism, not only in natural parks and protected areas but also in rural areas. Territories that do not have a water supply (e.g. the extreme south of the Sahara) should develop extremely limited ecotourism under very careful control.*
- *Thorough training for guides is essential. Egypt, for example, has decided to include training in ecology in the historical training it gives its national guides.*
- *There is a need for international legislation on the protection of archaeological remains – fossils, petroglyphs, cave paintings, etc – which are assets in some desert areas.*
- *The importance of the Convention on the fight against desertification was stressed, as were coordination by WTO with the Convention on Biodiversity, the Commission on Sustainable Development and the World Heritage Sites Convention.*
- *It was suggested that the role of WTO as a catalyst for the sharing of experiences in ecotourism throughout the world and especially in desert areas should be developed.*
- *It is also necessary to encourage and support the publication of research on desert areas and especially on tourism in deserts. WTO was requested to set an example in this field*

Theme 2: Product development, ecotourism marketing and promotion: fostering sustainable products and consumers

The importance of information and awareness-raising in ecotourism should concern particularly the following stakeholders:

- *Local populations*
- *Guides*
- *Foreign tour operators and accompanying staff*
- *Tourists*

The following general attributes seem to apply quite universally:

- *Knowledge of the characteristics of ecotourism demand is essential to fully meet consumers' expectations. Studies carried out in ecotourism generating markets like those by WTO, for example, are especially useful to help suppliers in the destinations adapt to specific demands.*
- *The importance of 'word-of-mouth' as a means of information on ecotourism was mentioned. It is therefore important to meet consumers' expectations in terms of both infrastructure and activities if ecotourism enterprises and destinations are to achieve long-term success.*
- *The search for meaning in tourism experience should be included in the promotion of ecotourism. Quality rather than price should be the key element of choice for an ecotourism destination or product.*
- *The role of guides was considered essential for ecotourism to fulfil its educational function for tourists and to ensure that the latter do not have a negative impact on the natural environment and local culture. Guides must be from the desert environment but must have received training allowing them to transmit their knowledge to the tourists. The creation of a specialised 'desert guide' training institute should be considered.*
- *Foreign accompanying staff should also be aware of ecotourism and desert area specificity. It is necessary that they receive training in this area.*
- *Awareness campaigns should be carried out for tourists on the fragility of deserts. These are living areas and should be respected as such. The notion of beauty and the soul of the desert*

should be considered in promoting these destinations. Due to the exceptional archaeological heritage, a project of 'Humanity Road' has been mentioned for the Sahara.

- *All information and awareness campaigns for both tourists and local populations should, above all, target young people. This is an essential and basic measure.*
- *A proposal was made to organise desert study trips with local guides for public and private decision-makers to help them reach decisions on ecotourism products by providing them with information on possible alternatives and on the culture and traditions of the local populations.*
- *The press should be informed about ecotourism so that it can contribute to increasing awareness amongst local populations, tour operators and tourists. It was recommended that WTO play a key role in this.*
- *The relationship between local ecotourism service providers and foreign tour operators specialising in ecotourism should be based on contracting rather than sub-contracting as is often the case with conventional tourism. This would help to establish longer-lasting partnerships instead of a situation in which one partner dominates the other.*
- *Ecotourism should be considered a means of diversifying a country's or a region's tourism supply by increasing its appeal and allowing it to distribute tourism flows throughout its territory.*
- *Decision-makers and managers of ecotourism projects were asked to consider the role of new technologies in developing ecotourism.*
- *Consideration was given to the importance of the fight against the technological divide between developed and developing countries. The latter need to receive know-how and technical assistance from more advanced countries.*
- *Specific new Internet applications were presented during the seminar concerning pre-travel information and information to complement that given by the guide during travel.*

Theme 3: Monitoring of equitable distribution of the costs and benefits of ecotourism amongst all players

- *Special attention was paid to the importance of convincing the local population of the need to safeguard their environment (e.g. the inhabitants of Eloued in Algeria who were able to save their oasis). In Botswana, it is of interest to note that by creating jobs relating to animal preservation, greater awareness has been created among the locals, facilitating the fight against illegal hunting.*
- *Projects that integrate nature preservation, handicrafts and ecotourism seem to have a great chance of succeeding to the benefit of local populations. An example is the Dana Valley project in Jordan.*
- *Local communities should not be considered an attraction to be protected because of their tourism value but as partners and decision-makers in ecotourism projects.*
- *Precise site management procedures should be drawn up for managing visitor flows, resources (especially water) and impacts. In deserts, slow access means that ecotourism stays necessarily have a minimum duration, thus avoiding systematic treading of the same itineraries.*
- *The above-mentioned planning efforts should be extended by constant follow-up of their results.*
- *In order to do this, a tourism observatory should be created to establish indicators for desert areas in order to ensure that the impacts of ecotourism are monitored and regulations and management systems are adapted both within protected areas and outside.*
- *In fragile sites such as deserts that cannot receive heavy infrastructure, each group of tourists must take care of its own waste.*
- *Direct redistribution of resources must be promoted. An interesting example in Egypt (Sinai) was given in which the construction of a new hotel was avoided by taking advantage of the*

capacity of the local inhabitants to accommodate visitors. This also helped to protect the landscape.

- Uncontrolled activities in deserts lead to the destruction of habitats and of local natural resources. It is therefore necessary to draw up a charter of respect for deserts. A body for verifying enforcement of this charter should also be set up.*
- Presentation of the Programme for destination 21 showed that quality standards, charters and labels are useful for guaranteeing visitors a high-level ecotourism experience.*

It was noted that many of the suggestions as listed are explicit in the definition of ecotourism, which (theoretically – but this is debated by many) include the following sustainability principles:

1. Scientific aspects relating to the need for:

- a) conservation of the cultural and natural heritage of protected areas*
- b) preservation of sites visited*
- c) promotion of heritage by permanent awareness and communication campaigns*

2. Social aspects, especially:

- a) respect for the populations that inhabit the areas visited;*
- b) respect for the social structures and lifestyles of local populations, and participation in the decision process;*

3. Economic aspects, especially equitable distribution of income, by:

- a) sharing of benefits for all the players in the ecotourism chain;*
- b) re-injection (using a method to be devised in conjunction with the administrators of tourism areas) of a proportion of income for the administration and safeguarding of protected areas;*
- c) promotion of a new ‘image’ for the sites visited that will be more profitable for ecotourism operators and more positive for administrators.’*

The main conclusions of the seminar can be summarised as follows:

- Recognition of the fact that deserts have great potential for ecotourism development. This should be exploited based on strict sustainability criteria.*
- Ecotourism is recognised as an economic activity that can help to preserve natural and cultural resources while providing direct benefits for local communities.*
- Political will is decisive if a country is to develop quality tourism.*
- The necessity of adopting a national mechanism that ensures a good level of co-ordination between the governmental stakeholders.*
- A delicate balance needs to be achieved between conservation of the natural and cultural heritage and development of ecotourism.*
- A full definition of ecotourism should be drawn up including the specific features of territories such as deserts.*
- Local communities lie behind any decision and should therefore be automatically consulted. Mechanisms of such consultation should be made clear to local and foreign developers alike.*
- All those involved in the ecotourism chain (tour operators, local suppliers, national public authorities, local groups, civil society, NGOs, etc.) should act together.*
- It is extremely important that ecotourism products and destinations offered should meet consumers’ expectations.*

- *It is essential that consumers are made aware of the need for ecotourism infrastructure to respect the natural, cultural and social environment of destinations, sometimes at the expense of comfort.*
- *Techniques for managing visitors, resources and impacts have been drawn up and methods of applying them in practice should be disseminated.*
- *Sustained follow-up should ensure that ecotourism management policies and systems are constantly readjusted.*
- *The need to treat desert tourism as a distinct activity that is different from ecotourism, because of the unclassified and unprotected archaeological heritage to be found in deserts and the specific populations - many of them nomads - living there.*
- *The possibility of an international desert year was suggested. This would allow, among other things, co-ordination of tourism promotion for all desert destinations. The year of 2004 had been mentioned by participants.*
- *Finally, it was stressed that ecotourism should not be considered a panacea for all destinations. Development of ecotourism will only be sustainable if strictly adapted to local conditions.*

The above discussion provides a quite useful and comprehensive set of universal issues and questions reflecting the general 'state-of-the-art' thinking in the area of desert tourism from an international perspective. There are a number of angles missing, which would be considered as important strategic gaps in the context of Australian desert tourism (but also relevant anywhere for that matter) which have to do with the narrow emphasis on ecotourism in the conferences summarised above. Anticipating some of the issues relevant for desert tourism in Australia, the following comments can be readily made:

- There is a lack of attention given to the relationship between more urban environments (including semi-urban and services towns) which play a key role because tourists end up spending large proportions of time and money in those locations, depending on the type of trip they are involved in. There is a need to better understand:
 - How various types of tourists perceive the relevant regions ('outback', deserts, circuits, specific icons, etc.
 - What the relationship is between attractions, such as service centres and the corridors that link them.
 - What role various types of gateways play in tourism planning.
- There seems to be a lack of attention given to tourism marketing issues in general. Much of the difficulties in ensuring inter-country (or inter-regional) coordination have to do with conflicts linked with the management of brands, of destination perceptions and often the compatibility of images created to market places to tourists. It is important to consider whether it is possible to collaboratively manage impact controls, infrastructure developments, product development and cultural interpretation (all emphasised in the seminar) without coordinating to some extent destination marketing.

The above comments are critical to the extent that tourism knowledge involves essentially the combination of knowledge of place (natural, social, cultural environments and their management) with tourist marketing knowledge (which is more tacit and more difficult to acquire than commonly believed or represented). While the summary above reflects a typical WTO planning approach to tourism, few individual contributions provide insights into the nature of the demand for 'desert experiences' – quite similar to Weaver above. For instance, some seminar presentations argued that desert tourism is unavoidably going to grow, as it fits some of the requirements of new wave tourist needs which they argue is based on symbolic values such as novelty, risk, limited comfort, emptiness and space, silence, primitiveness and return to basics, etc.

Another unspecified source found in the report proposes a list of main ecotourism attractions associated with desert areas as follows:

- The excellent visibility of geological phenomena due to erosion and the bareness of the landscape (Ayers Rock, Australia)
- Impressive sightings of ephemeral flowering after rare bouts of rainfall (Atacama Desert, Chile, and southern Morocco)
- Exceptional endemic vegetation and flora (giant cactuses in the south-west USA and Mexico)
- Unique nomadic cultures (Tuaregs of the Sahara)
- Oases which are stopovers on all excursions in desert areas
- Archaeological sites that are extremely well conserved thanks to the dry climate (ancient rock paintings in the Tassilli National Park, Algeria)
- Protected areas, guaranteeing that ecotourists will find an intact natural environment.

Some comments about promotion of desert ecotourism could be found on the Desert Ecotourism website, and are summarised below:

- Ecotourists need detailed and specialised information, both before and during the trip. The provision of complete information is precisely one of the elements that differentiate the ecotourism experience from traditional tourism, and it can take various forms, such as brochures, guide-books, leaflets, maps, interpretation centres, ecomuseums, signposted nature trails, and, of course the guides themselves.
- Promotional material for ecotourism should contain substantial information on the experience to which potential tourists are invited, including details on flora, fauna, geology and in general on the ecosystem to be visited. It should also include truthful information about the accommodation and catering services, as well as recommendations on what may and may not be done at the destination. All this information before the purchase will help the potential clients to discriminate between genuine ecotourism operators and others that only seek to take advantage of a fashion.
- Both the marketing channels and the promotional means for ecotourism products should be consistent with the type of tourism the consumer is being offered and with the typology of ecotourists.

It is also worth mentioning that most presentations at the seminar referred to the contributions of tourism/ecotourism to desert communities and economies, but that there was in reality little which is specific to desert areas in what was mentioned (in contrast to the tourism literature on this topic which is huge). For instance:

- direct benefits in the form of alternative revenues and jobs, and indirect benefits such as the development of infrastructure and health and education services for the communities that live in the areas adjacent to ecotourism sites
- the diversification of tourism products in certain countries and relieving congestion in more conventional tourism areas, such as coastal regions
- giving tourists the opportunity to appreciate and enhance their knowledge of unique environments and cultures
- providing an economically feasible instrument for conserving protected desert areas.

It is also worth noting that after having read many such papers, the tone of most presentations from ecotourism industry participants is that of strong concern about site damage and environmental vulnerability. Presentations from European tour operators (operating in North Africa) in particular warned about serious issues of waste management that arose in the 1990s due to the unpredicted rise in interest and popularity of desert ecotourism in those regions of North Africa and the Middle East which are politically favourable to tourism. From the limited evidence provided in the presentations, much of these emanated from small pioneering operations who have seen mass-organised (and some amount of self-drive tourism) invade the locations they historically visited. The latter new markets display typical lack of information and care and increase the demand for material services which are costly and not suited for those environments – usually with insufficient skilled human resources at their disposal. Yet these concerned small operators are ambiguous about solutions because they are equally worried about the impacts on the environments as they are about the possibility that

governments will react by over-regulating access to the damaged locations and force them out altogether.

App 1.3.3 Desert Tourism Planning in Australia: The Lake Eyre Strategy

An important case study in planning for tourism in arid and desert environments has taken place in Australia in the recent past. It is useful to include an overview of the issues addressed in the main report released recently as it is most relevant for directing future research. It is deemed important to benefit from the broad stakeholders' consultation that has gone into the research which is relevant to a large proportion of Australian arid zones. The main report cited below can be ordered and is referred to through a number of websites (see references section of main report).

The 2004 report includes the results from a broad consultation, and emphasis in the section below is placed on the issues raised rather than the recommendations. Permission was given by Joc Schmiechen to refer to (and reproduce) a large number of important points from that strategy. What is reproduced below aims to provide a picture of the issues identified by the Lake Eyre Basin Coordination Group insofar as they relate to tourism in desert regions. Some of the general value of this report for 'desert tourism' in Australia includes the fact that the project itself took place across multiple jurisdictions and involves many of the current themes related to outback tourism development. The distinctiveness of the 'desert' aspect is emphasised in the report which argues that the Lake Eyre Basin is a unique 'desert' system. It is argued that 'the very different characteristics of this endoreic system mean that theories, models and management techniques cannot simply be transposed from coastal systems. There is a dearth of information and understanding about the Basin, and about cooperative natural resource management and planning processes. For it to be managed well this needs to be addressed. The following Future Directions need to be seen in this light.'

It is also worthwhile noting some observations made in the beginning part of the Executive Summary of the Lake Eyre Basin report related to:

1. the omnipresent references to tourism in almost everything that has to do with the Basin's management in the last few years
2. the realisation of the low implementation rate of key recommendations from previous plans, feasibility studies and strategies.

The two points obviously conflict and the latter is explained in the report by a number of factors including the lack of resources, the disunity of coordination and, to a certain extent, gaps in knowledge and information (which research aims at producing) which would have been needed for appropriate implementation.

Information about the boundaries of the basin and the logic behind them is detailed in the report, but it is useful to note that if one were to add the Northern NT deserts and the desert part of WA, much of what is of interest to the Desert Knowledge CRC would be covered. The Basin Group has made a considerable investment in consultation with stakeholders in a multi-use context and the strategy is based on that consultative process. Much of it can be used for the sake of providing a picture of research needs, although it is not possible to provide here much of the background information about specific geographical areas of interest, the reasons suggested behind the increased interest in the whole region by tourists, and the land-use conflicts which shape the environment of the large region.

The main tourism issues faced by the Lake Eyre Basin are discussed in detail further below but the selection reproduced in this section has been borrowed freely and without specific organisation or prioritisation to give a flavour of the breadth of problems and opportunities considered in the report (pp. 18–9):

[The Basin is ...] much more than the immediate surrounds of Lake Eyre as many imagine, with over 1.2 million square kilometres of largely semi-arid and arid landscape, including many of the quintessential aspects of Australia's 'Outback'. This diverse biogeographical region has the added complexity of encompassing four jurisdictions, incorporating large tracts of Queensland, South Australia, Northern Territory and a sliver of far western New South Wales.

The Basin has some of Australia's lowest and most dispersed human habitation ...

The Basin, for the most part, is characterised by:

- an inadequate communications infrastructure (mail, phone, Internet);*
- limited and poor road networks with long distances between towns;*
- poor and highly expensive regular passenger air access;*
- high fuel costs;*
- in parts no local government structure; and*
- a hot summer climate with extreme seasonal fluctuations like drought and flood.*

Most of the Lake Eyre Basin, and especially the inner core, is synonymous with the concept of 'Outback'. This term has many different meanings and is often applied rather loosely to all parts of Australia away from the populated coastal fringe. It is increasingly a marketing concept and tourists generally tend to identify outback with the more remote and arid landscapes that predominate in the Lake Eyre Basin alongside such established icons as the Top End of the Northern Territory, Cape York and the Kimberley. John Dunn in the inaugural Outback Magazine in October 1998 described outback as:

'Geographically it broadly embraces the core of the continent and branches in many directions, but it is more than that. It is in the view of many the heart of the country. The outback is desert but it is also arable. It is dry but it is also wet. This is far from the sea but also largely bordered by it. It can be cruel, fatally so, but it can also be kind to those who can coax from it the great rewards it hides. It is central, in every respect, to Australia and Australians.'

Tourism, often – in general recognised as major economic driver & employment; but not in terms of land use management, little/insufficient research and investment in knowledge

Implementation – Central Australia alone has had at least three tourism development strategies going back over the last ten years. In the South Australian sector of the Basin there are currently over forty strategies, plans, discussion papers and feasibility studies looking at different planning, management and development issues, all of which have a bearing on tourism. The Tourism Task Force 2002 Hallmark Report – Keeping the bush in the game highlights this trend,

'... millions of dollars have been spent on development plans and feasibility studies. The difficulty is the implementation of actions in regions that are geographically large, lack concentration of tourism product, consist of many small operators and do not have the organisational structure for tourism to be developed as a competitive destination.'

Insufficient data – Obtaining accurate and relevant data on tourist numbers, types, activities, accommodation use and spending is conducted by a number of Australian Government agencies, as well as the respective research sections of the state and territory tourism agencies. Most of this effort is directed to the high profile tourism destinations in Australia. The rural and remote areas tend to have very sparse and sporadic data available.

Yet the report provides a relatively rich amount of stylised facts about tourism markets growth in the Basin (pp. 39–40):

- *Evidence of tourism visitation and growth in the broad region.*
- *The majority of visitation (80%) is from the domestic market.*
- *Central Australia has the highest percentage of international visitation and is one of the major destinations for this market sector in Australia.*
- *Vehicle-based tourism is predominant with independent self-drive travellers dominating in all sectors (80%) except Central Australia. A very high percentage is from a growing array of four-wheel drive vehicles.*
- *Most trips are 7 days or longer with many extending to 20 days or more.*
- *A considerable portion of traffic is transiting through the Basin between different sectors and is mostly taking in multiple destinations.*
- *The prime age group is in the 40+ range with a growing contingent at the upper levels 60+ in the retiree sector. This is a major growth area.*
- *Sought-after activities include: primarily natural environment; National Parks; touring and camping; heritage sites and history; and Aboriginal art, craft, sites and experiences.*
- *The backpackers sector is a growing group of visitors especially good for rural and remote regions that are on a major tourism flow path.*
- *The south/north route from Adelaide to Alice Springs is especially strong with eight major tour operators working this section.*
- *Coach, rail, specialist safari tour operators and air charters, though much less used modes for visitor access to parts of the Lake Eyre Basin, are important in certain places.*
- *There is a small but important self-fly market that accesses many of the more remote heritage tourism icons in the Basin.*
- *Brochures, guide books, motoring organisations and word of mouth are the prime information sources for travellers.*
- *Despite the predominance of four-wheel drive vehicles, the majority tend to keep to the major roads and tracks throughout the Basin.*

The report also states that the following key factors have a significant effect on the tourism visitation pattern (p. 40–1):

- *Seasonality is a major factor throughout the Basin. Most travel is between July and September. There is an increasing spread into shoulder periods and most summer traffic in November to February is by international self-drive travellers.*
- *Climatic events such as flood and drought have a major effect on the visitation patterns. This was well demonstrated by the filling of Lake Eyre in 2000. The filling of the major water-holes and wetlands following good rainfalls attracts extra visitation.*
- *Economic factors such as fuel prices have a determining effect of either boosting or restricting visitor numbers.*
- *External events such as the effects of the September 11, 2001 terrorist strike in the US, the Iraq war and the SARS epidemic all affect tourism numbers and travel.*
- *Infrastructure and access – the quality of the roads and tracks is a vital factor in visitation to key sectors of the Basin. In general any road improvements tend to increase visitation*

whereas reports of poor road conditions have a negative effect. Air access is also vital to a number of key locations and major centres, such as Alice Springs and Longreach. These were significantly affected by the reduction of air services due to the collapse of Ansett and associated regional airlines.

- *Publicity and marketing is a major driving force in ensuring increased visitor flow. The power of the media was amply demonstrated with the traffic generated after a number of prime television reports of the Lake Eyre filling.*
- *Market research shows that over 90% of Australians want to visit the outback. Moreover, in the minds of international travellers, the outback is synonymous with Australia. The 1999 research figures indicate that Australians spent \$24 billion in regional Australia and this figure is increasing. In some quarters the outback is seen as the bright future of the Australian tourism industry. This promise of economic opportunity, however, is not universal as not all the remote parts of Australia are attractive or accessible to the growing flow of tourism traffic. Over 85% of domestic travel is by private vehicle and it is this drive market that dictates much of the dollar spend in regional Australia.*
- *Last year, a record of more than 180,000 4WD vehicles were sold in Australia. This year, sales are tracking to be even higher and if we follow the US market, Australian's love affair with the 4WD won't stop until sales surpass 50% of all vehicles sold' (Outback Issue 32, Dec 2003). This newly found outward urge of the Australian suburban dwellers is driven by a booming 4WD, campervan and camping accessory industry stimulated by an endless stream of magazine articles, guide books and specialist maps. Communities such as Marree, William Creek, Oodnadatta, Innamincka, Birdsville, Boulia and Windorah all gain the benefits from this tourism flow into the heart of the Lake Eyre Basin. The national parks such as Witjira, Simpson Desert, Innamincka Regional Reserve, Lake Eyre and Diamantina National Park are bearing the brunt of the visitor pressures. In many cases the increasing visitor demand on these areas is outstripping both planning and resourcing to adequately manage the advancing tourism wave. General infrastructure, especially maintenance and development of the roads and tracks, rubbish disposal, water supply and sewerage are all becoming critical issues in some of the hot spot areas along these flow routes.*

The main issues raised by the groups of stakeholders were also analysed and reported:

The four highest ranked issues by all groups were:

- access on pastoral lands
- environmental impacts
- pressure on and under-resourcing of protected areas (National Parks)
- public perceptions about the outback (the last great frontier, unoccupied space)

Access to places of interest on pastoral lands received the greatest weighting, ranking as a high priority across all groups. Environmental impacts of tourism and the resourcing of national parks were not far behind.

The remaining issues were generally evenly spread amongst the groups with the following priority order:

- user impacts on core business, infrastructure and lifestyle
- lack of synergy between outback promotion and available facilities
- lack of cohesive signage and appropriate interpretation
- operator standards and qualities
- legislative differences and cross-jurisdictional issues (lack of consistent approach to rules, fees, infrastructure, services)

- deterioration of the built historic heritage
- preserving the sense of place and ensuring authenticity
- lack of knowledge and education about tourism by local stakeholders, and an ignorance of how to use the outback by the travellers
- lack of information about the Aboriginal story and lack of uptake by Aboriginal interests in cultural tourism opportunities
- user pay principles and high costs of some fees (camping, Desert Pass)
- poor viability of small tourism enterprises
- product and infrastructure deficiencies.

As a specific category of stakeholder, local governments provide an important framework for service delivery, economic development, infrastructure development and maintenance. As they increasingly realise the value of tourism and play a role in its development and funding, the report raised the issue of unequal presence across the region (p. 45):

The Lake Eyre Basin has a mixed local government presence. This ranges from the strongest concentration in Queensland to vast tracts of sparsely populated rangelands and isolated communities, such as outback South Australia where there is no local government administrative structure. For instance:

- *The Queensland sector of the Basin has 19 shire councils.*
- *In the South Australian outback sector there is only one local government authority at Coober Pedy. The remaining communities have volunteer Progress Associations under the auspices of the Outback Areas Community Development Trust, which represents all the unincorporated outback areas. In the Flinders Ranges, there are three local government councils based around the major population centres at Quorn, Orroroo and Peterborough. Aboriginal lands are covered by the Anangu Pitjantjatjara Council for the Anangu Pitjantjatjara lands in the west and the remainder is under the South Australian Aboriginal Lands Trust.*
- *In Central Australia the Alice Springs Town Council administers the main population centre with a large number of Aboriginal communities in the region having their own local government structure. The Northern Territory government is in the process of trying to amalgamate and rationalise this into a more efficient system. The Central Lands Council acts for and undertakes responsibilities for most of the Aboriginal lands in the Centre.*
- *In the NSW sector of the Basin the historic town of Silverton is the only population centre. It is only 24 kilometres from Broken Hill, which is the major destination in the NSW outback. Outside of Broken Hill the region has no formal local government and is part of the Unincorporated Area, mainly administered through the Western Lands Commissioner.*

As part of the project, a survey of the Queensland shires in the Basin was conducted. The aim was to determine their involvement, views and aspirations for tourism. The survey identified the main tourism issues as (p. 46):

- roads (need to improve the quality and cost of maintenance)
- marketing (not enough information getting to the public about the attractions of their area)
- fuel (the high cost of fuel as a deterrent to increased visitation)
- remoteness (the distance away from major population areas, perception of being a long way from anywhere)
- insurance (the increasing burdens of liability insurance affecting local events)
- lack of quality tour operators (see the need to offer more for visitors to regions and difficulty of developing tourism product)

- infrastructure (resource to provide better facilities for visitors and to cope with the pressures like waste disposal, sewerage and accommodation)
- other issues included better signage and interpretation, seasonality, a more cohesive approach to promotion, and the lack of tourism knowledge.

The most critical component of this report for the sake of briefing research on desert tourism is based on the field evaluation, stakeholder consultation, the various surveys conducted, and from an analysis of existing strategies and reports which have led to the identification of eight key areas:

- o access
- o environmental impacts
- o protected areas and tourism
- o developing the product
- o planning and coordination
- o historic heritage and tourism
- o Indigenous heritage and tourism
- o supporting people and products.

Further parts of the report are reproduced below because they are particularly relevant to issues of tourism in the desert (pp. 46–68):

ISSUE 1: ACCESS ON PASTORAL LANDS

Pastoral leaseholder reactions

This surge of visitation over the past five years has been received with mixed feelings by some of the Basin residents and stakeholders, with the pastoralists especially concerned. In some areas, they have been particularly vocal as to their perceived lack of control over tourism activity and the potential detrimental effects on the land, their business and lifestyle. Their view is reflected in a 2001 report prepared for the Marree branch of the South Australian Farmers Association, which stated, ‘all outback properties face special issues in dealing with the demands coming from the increased visitation and potential that modern day tourists have to access remote areas, to inflict damage to property – and to expose themselves to personal risk.’ Despite this negative view, the report did acknowledge that, ‘carefully managed tourism has the potential to be environmentally sustainable and to benefit the local economy and individual property owners as well as tourist operators’ (Day, 2001). This highlights the threat and opportunities presented by the tourism intrusion.

Heritage as an economic commodity

Heritage has now become a commodity and is seen as having commercial value. In many cases this has led to some existing leaseholders diversifying into tourism activities. Thereby leaseholders gain economic returns from the natural and historical assets on their properties as well as better utilisation of their infrastructure, such as buildings and tracks. It has also led to the general public having raised expectations of access to prime points of interest as well as engaging in a range of recreational activities on the pastoral lands.

Commercial users on pastoral lands

The most difficult access dilemmas are faced by the small band of commercial tourism operators who are conducting vehicle-based safari trips, camel treks, canoeing and boating expeditions. Most are looking to use the heritage assets in the remote pastoral lands. In essence, this is no different to exploiting the grazing potential of the rangelands or extracting the mineral resources. Tourism operators have little certainty of operation and generally are at the whims of the leaseholders who can vary their permission at any time. Even with a right of appeal against any refusal of access, as is enshrined in the SA Pastoral Act, the often slow process to resolve such disputes makes it commercially difficult to operate in such an environment. Although this is by far the most difficult area to resolve, it is integral to any future development of such tourism enterprises in a sustainable manner.

Legislative deficiencies

The existing pastoral leasehold legislation is not ideally suited to managing the changing tourism land use demands. It remains particularly difficult for commercial tourism operators to gain a degree of secure access to heritage assets on pastoral land. The present ad hoc approach in some quarters generates a high degree of uncertainty as well as antagonism. This hinders a more orderly approach to deal with this situation. In a way, tourism has been a creeping tide rather than a tidal wave, but if not carefully managed and considered the implications will be significant.

There is an immediate challenge for all jurisdictions to establish a clear legislative framework. This should recognise and establish appropriate parameters recognising tourism as an emerging major land use in the Basin.

ISSUE 2: ENVIRONMENTAL IMPACTS – MANAGING TOURISM AND NATURAL AND CULTURAL HERITAGE PLACES

The advent of increasing tourism has seen additional impacts that are of concern to the Basin stakeholders. In many cases, the full effects of tourism are not clearly understood or recognised. Tourism impacts affect the heritage assets as well as the social fabric and lifestyle of those living in the Basin.

The most significant change in the visitation pattern over the last few years has been the explosive growth of vehicle-based activity. This has led to increased demand for access to premium natural locations and historical sites. In some cases this activity has had adverse impacts on the environment, usually through poor camping and environmental practices such as:

- *excessive demands on firewood*
- *improper rubbish disposal*
- *unhygienic bush toilet practices*
- *vandalism*
- *water pollution*
- *disruption to pastoral activities*
- *soil erosion*
- *track damage.*

A large part of this is more the result of ignorance than deliberate intent.

Getting the correct information on impacts is a major problem. There is also a high degree of misconception about what is going on. The perceived tourism impacts are often exaggerated, as they are based on a small number of standout incidents that leave a lasting mark. Similar concerns are reflected by the anecdotal stories from locals detailing bad visitor experiences: gates left open, stock disturbed, privacy ignored, environmental degradation at popular sites and a general disregard for common sense behaviour. Seen in this light, it is a poor scorecard for tourism as an appropriate and desirable activity throughout the Basin. It needs to be noted, however, that this view represents the attitudes and actions of only a small percentage of the large numbers who now travel through many parts of the Basin. In some cases, the adverse impacts ascribed to tourists are generated from elements of the local user communities engaged in their own recreational pursuits. The vast majority of travellers do behave responsibly.

Most of those seeking the allure of the outback have little knowledge and understanding of old-fashioned bush skills and manners. To many it is a completely new experience. Their actions and attitudes are often misled by the presentation of the outback as a vast empty space where there are no rules. Consequently, there is little realisation that it is someone else's backyard. Equally damaging is the stereotyped image of the tourists as troublesome pests, held by some outback locals. There is a strong need for better information and education on both sides of the fence.

ISSUE 3: NATURAL HERITAGE, PROTECTED AREAS AND TOURISM

Major issues are important but not detailed here, and some not unique to desert environments:

- *Under-resourcing of protected areas (national parks)*
- *Evaluating the protected areas against other land managers*
- *User pays*
- *Commercial operators in Protected Areas*

Recommendations:

- *Commercial operators in Protected Areas - Develop a more coordinated approach for commercial operator licensing for those operating in multiple jurisdictions.*
- *Look at using accredited commercial tour operators' skills and expertise as an extension to the management regime of Protected Areas and provide concessions and/or incentives to do this.*
- *A more cooperative and partnership approach to be taken in engaging with long-term and regular commercial operators using Protected Areas.*

ISSUE 4: DEVELOPING THE PRODUCT

A vast number of issues are listed here – I've skipped many of the actual places, audits and recommended developments to focus on the more general issues related to tourism product development in desert regions.

In evaluating the wide range of tourism product in the Lake Eyre Basin, a number of factors emerged that were the key to successful enterprises. These included:

- *being in the right location (along the tourism flow-lines)*

- *providing top quality service*
- *authenticity and capturing the sense of place*
- *understanding your customers and targeting your marketing*
- *knowing what is going on by keeping good client data.*

Desert tourism faces the challenge of having to provide large number of diverse, special interest tourism experiences usually on a relatively small scale (examples include scenic flights, mine tours, camel trekking, tag-along 4X4 tours, safaris, boat tours, heritage rails, aboriginal culture experiences, other guided experiences.

Guided and interpretive experiences for small groups is the hardest area to develop and maintain as a tourism product. This is due to a number of factors including:

- *high percentage of independent self-drive travellers*
- *high cost of promoting product to the source markets*
- *high cost of liability insurance*
- *seasonality*
- *high operational costs and market resistance to paying the price*
- *price cutting from competitors*
- *large number of economic imposts*
- *National Parks Operator license fees (if working cross border, fees are applicable in each jurisdiction)*
- *accreditation fees*
- *operator licensing fees*
- *lack of any concessions.*

The ever increasing on-costs for such operations make it harder for small freestanding businesses to evolve delivering such services. There is a recent trend for large-scale operators, such as AAT King's, Voyagers Resorts and Australian Pacific Tours, to absorb special niche operators. This is a product area that is mostly identified as lacking and needed in parts of the Basin. Yet the realities of market forces and economic climate make this a highly unlikely area for success.

The report also comments on the heritage centre syndrome:

The Lake Eyre Basin, particularly in the mid-west Queensland tourism sector, has a high concentration of cultural heritage centres. Since the development of the Stockman's Hall of Fame in 1989, there has been a move to develop similar attractions in most of the major towns. Research has found that few purpose-built cultural theme attractions match the expectations of their advocates. Contrary to the usually over-optimistic predictions, such attractions rarely cover their operating costs, and their capacity to attract new visitors to the region is overstated (Bramley, 2000).

This has been reflected along the Matilda Highway where the proliferation of heritage centres has made it difficult for operators to attract enough market share to be operationally viable. Most of

these heritage centres were established through one-off government grants. Little allowance was made for recurring running costs, maintenance and marketing budgets.

Diversification

On a broad front the best opportunity for economic gain for the residents in the Basin is through diversification from their traditional core businesses. This is most applicable to those engaged in pastoral enterprise. In the right locations they have the opportunity to capitalise on the growing interest in the heritage assets and experiences they can offer on their properties. This has been a growing trend in a number of the main tourism precincts.

Infrastructure

Getting the infrastructure mix right is one of the critical factors that determine how well a particular region is able to manage and capitalise on tourism. Infrastructure that tourists increasingly seek and use include:

- *good roads and accessible tracks*
- *other transport links such as air, rail and bus*
- *adequate accommodation, hotel, motel, campgrounds, bush camping*
- *sustainable waste and sanitation disposal*
- *reliable energy supply*
- *water supply*
- *attractions*
- *a range of interpretive information and good signage.*

Private enterprise investment

Where there is strong tourism activity, private enterprise will often step in to provide some of the tourist needs. This is especially so in the case of accommodation. The desirable model for this is to have accommodation that incorporates the best principles of energy efficiency and waste disposal, and captures a sense of place that is in keeping with the heritage values of the surroundings. Unfortunately such examples are rare to find because of the much higher cost factors in meeting such standards.

ISSUE 5: PLANNING AND COORDINATION

This section presents the coordination of tourism-relevant issues as a tourism planning maze.

The current maze of plans and strategies being applied to regional Australia increasingly acknowledge tourism as a factor that needs to be considered. The lack of synergy between these often results in a lack of effective delivery of government programs, including planning, promotion and industry development. This highlights the need for application of an effective framework that helps build regional capacity in a systematic way that engenders regional and local commitment and provides governments with local plans and priorities consistent with community aspirations.

Particular emphasis is placed on the necessity in desert and outback tourism to have consistent approaches across borders and for developing soon whole-of-government approaches.

ISSUE 6: HISTORIC HERITAGE AND TOURISM

The reports notes that the preservation, maintenance and interpretation of historic heritage remain a contentious issue and is particularly under-funded in Australia. A range of suggested approaches/issues include:

- *better integration of conservation planning with tourism development;*
- *implementing visitor impact and monitoring programs;*
- *prioritising, inventorying, stabilising and interpreting sites of major tourism interest;*
- *encouraging re-adaptive use of historic heritage places for tourism purposes and adapting appropriate planning mechanisms; and*
- *developing stakeholder partnerships to adopt and manage key sites, as well as implementing a better cost sharing process.*

ISSUE 7: ABORIGINAL HERITAGE AND TOURISM

The report also provides a good discussion of the recent history of ideas, strategies and wishful thinking associated with the development of Aboriginal heritage and tourism products in general, which have been discussed elsewhere but surely constitute a critical component of desert economies and society.

Attention is paid particularly to challenges associated with presenting Aboriginal heritage assets, with protecting Aboriginal sites where tourists are causing deterioration and other negative impacts, with understanding Aboriginal tourism demand to the extent that most studies to date have involved excessively naïve methodologies, about topics respondents were ill-equipped to answer and, even when relatively well constructed and analysed, have had little impact in informing Indigenous tourism development. Barriers to product and tourism business development are also considered:

Despite the opportunities there has been only limited take-up by Aboriginal people wishing to engage in tourism enterprises. Of those who have ventured in this direction, only a small number have managed to sustain the effort and remain viable. This is largely due to the hard economic and business environment that tourism generally finds itself in. Most Aboriginal tourism enterprises have failed through lack of capital resource, poor business skills, poor advice and poor support from key agencies, who themselves have little understanding of what tourism entails. In other cases, despite considerable support, failure has been due to unrealistic expectations and a lack of interest and commitment by the young to become involved. The pressing problems of health, social dislocation, economic disadvantage, substance abuse and lack of basic infrastructure in many of the remote communities place tourism interests very low on the agenda. Moreover, these problems are compounded by internal schisms between rival groups.

ISSUE 8: SUPPORTING PEOPLE AND PRODUCTS

This section raises very important questions related to the lack of investment in human resources capable of sustaining the needs of such economies increasingly reliant on tourism, and discusses issues of tourism governance and human capacity in regional Australia – linked with specific labour market difficulties in the most remote regions, access to information as well as the breadth and complexity of skills required to support a tourism industry.

OVERVIEW

The issues listed in the report (and their organisation) provide a good example of the dilemma stated earlier that desert environments encompass high levels of tourism market and supply diversity/complexity twinned with small-scale difficulties (lack of scale economies). This principle underpins many of the issues listed above. While it is not the objective of the Desert Knowledge CRC report to evaluate or report the suggestions for future development for the Lake Eyre Basin project, a basic overview of their recommendations is useful in organising generic tourism research issues for desert environments (p. 108):

Principles	Application
Effective environmental management	Potential environmental impacts will be minimised by the adoption of appropriate management practices.
Commitment to an integrated land use strategy	There will be a comprehensive and integrated land use planning framework to guide future use and development of the heritage precinct.
Well-designed built environment	The built environment will reflect and respond to the natural and cultural values of the area. It will be well designed and use materials that are sympathetic to the area's character. It will be in scale with the landscape and not compromise its aesthetic values.
Best practice infrastructure	There is an integrated approach to the development of infrastructure that is provided and planned to meet expected capacity requirements. It will aim to meet world's best practice in its operation with rigorous monitoring in place.
Informative, engaging interpretation	Interpretation will be one of the prime means for enhancing the visitor experience in the heritage precinct. It will inform the visitors of the natural, Indigenous and historic heritage values of the area and inspire them to further discover, conserve and enjoy these values.
Collaborative and cohesive management	Management will be directed towards integrating the activities of various stakeholders and ensuring that actions reflect the need to sustainably manage the natural and cultural heritage values. Management will cover the regulation of development and use, priorities for expenditure on development and maintenance of capital works, and ongoing oversight of activities.
Respect for Aboriginal culture	Respect for Aboriginal culture requires that Aboriginal people have a decision-making role in all matters regarding the development and implementation of this plan. This includes any development, or interpretive material, regarding Aboriginal heritage.

App 1.3.4 Tourism in Australian Desert/Outback Regions: An overview based on the Desert Knowledge Australia Regional Network

Through the DKA regional network, at least five desert Australian regional centres (Mount Isa, Broken Hill, Port Augusta-Coober Pedy, Kalgoorlie and Alice Springs) have been discussing cooperation for the sake of developing capacity and enhance business opportunities in a number of areas, including tourism. Activities have up to now included a number of regional video meetings and some topic-based workshops. In the early phase of the network, each region has provided a situation analysis and overview of the tourism-related issues relevant to them, with some suggestions for action. The present section simply extracts general observations and issues identified by the regional authorities which have put these papers together without going into sub-regional specifics – although examples are useful given the fact that these constitute part of desert Australia. This component of the report ought to be looked at as a preliminary scoping exercise reflecting the views of multiple players involved in the most relevant tourism regions for Desert Knowledge CRC. The lists below are extracted directly from documents circulated and diffused through the network, and they have been aggregated by topics.

Major Products existing and opportunities identified by the regions

- opportunities to experience the unique outback offering nature -based, soft adventure and 4WD drive experiences
- Aboriginal art and emerging tourism ventures and an insight to the pastoral and gold mining industries and heritage
- Small-town based lifestyle (ex Kalgoorlie-Boulder as the business centre of a prosperous region which is presented as a busy, bustling city offering an exciting mix of modern services and facilities and a proud heritage)
- Many tourism events and exhibitions (ex Goldfields Mining Expo, Diggers & Dealers Mining Forum)
- upgrading of the 'Outback Highway'; development of heritage trails (ex Golden Quest Discovery Trail;)
- Development of Heritage Trail tourist attraction, follows the path of CY O'Connor's famous water pipeline and involved the construction of a multi-use trail between Mundaring Weir and Northam, conservation works at the pump stations and a series of walking trails along the 600km route.
- Hall of Fame (ex Australian Prospectors and Miners Hall of Fame, opened in October 2001)
- natural, Aboriginal and European heritage
- wildlife – abundant and diverse flora
- the primary assets of natural heritage – geology and spectacular landscapes such as Lake Eyre Basin, Great Artesian Basin, the deserts, National Parks, shimmering salt lakes and brilliant red sand dunes
- the authentic experiences coupled with the vast unstructured space
- the Sense of the Outback – this is what makes the Outback experience different and appealing. Successful Outback tourism depends on retaining this intangible asset and not losing it in the course of developing tourism
- the wilderness and sense of freedom encapsulated in the 'Sense of the Outback'.
- Escapism – many head to the Outback to 'get away from it all'
- The desire for adventure
- Several Outback towns with special associations offer opportunities for themed product development.

Infrastructure issues

- All regional centres are very well endowed with basic services
- The vastness of the region means that the development of infrastructure, which underpins the development of sustainable tourism forms, is critical.
- All towns have accommodation facilities but in some cases the accommodation offered is substandard and in urgent need of upgrade.
- The lack of marketable product is a major issue for the South Australian Tourism Commission International Marketing Team. The infrastructure limitations such as the lack of experiential accommodation are impeding the development of quality marketable products to the soft adventure market.
- A better standard of minimum impact accommodation, in the style of Wilderness Lodges, retreats and permanent safari tents complementing the Outback experience would appeal to the growing medium in premium markets.

Tourism Marketing

- potential to produce jointly 'Holiday Planner' types of publication
- opportunities for connected tourism websites
- no unified approach exists in terms of marketing regional centres and their regions resulting in widespread fragmentation
- there has been little private sector investment in terms of developing new product whether from existing or new business. Investors will only invest if a profit forecast appears likely to be achieved.
- Typical Market Segments are:
 - 4WD
 - Caravan
 - Coach (coach tours and 4WD group tours)- travelling with others provides a greater sense of security for the less adventurous
 - Conventional cars - usually independent travellers
 - Soft adventure/independent 4WD drivers
- Destination awareness issues; There is little statistical evidence that regions found within Outback Australia are perceived as destinations in their own right (with a few exceptions, such as icons).
- A contributing factor to the low profile of the Outback is that most Outback towns and many small operators do not promote themselves. They do not attend Consumer Shows nor produce promotional literature. Often the reason relates to cost, lack of awareness, and poor recognition of the benefits to be gained by prudent promotional activities.
- Another contributing factor to the low profile of the Outback is that those selling the Outback may not have the knowledge required to properly advise intending travellers.
- Feedback from Inbound operators and South Australian Tourism Commission representatives indicate that the shortage of marketable products in the Outback remains a major contributing factor to poor destination awareness.

Barriers to tourism - major issues listed below are constraints to tourism development:

- lack of destination awareness
- lack of or inadequacy of infrastructure
- lack of a coordinated approach to development
- insufficient access to heritage sites and areas of natural beauty
- lack of marketable product

- the shortage of quality, local, specialist tour operators
- the high cost of operating in the Outback
- poor/lack of industry standards
- lack of tourism awareness across the community
- conservative values and lack of common purpose within communities
- liability insurance costs

The approach taken by this network is to apply the industrial clusters approach to examine potential connections between the sub-regions (belonging to different states) and explore synergies of different types. It stems from the discussions between participants that quite different drivers with the potential to support collaboration can be examined. These will be discussed in more detail in Section 5 below.

App 1.3.5 Regional Tourism and specific regional tourism planning in Australian Desert/Outback regions

A number of sources discussing regional tourism in Australia, such as the Centre for Regional Tourism Research (CRTR) publications and others originating from the Bureau of Tourism Research (now Tourism Research Australia – [TRA]) were consulted. They included little in terms of distinct issues relating to the desert. In contrast to typical desert areas, the regions examined in the regional Australia reports are relatively ‘mainstream’ insofar as they often include mixed environments, most often with substantial coastal components or sizeable urban centres. The above sources pay little specific attention to arid zones and inland Australia as a concept or an identity, most often for practical reasons.

Useful summaries of issues closely connected to the desert environment can be found as by-products from various localised research efforts. The Tourism Futures program (CSIRO) has encompassed a valuable stakeholders-based identification of issues for the Alice Springs (and sometime more broadly for the NT Centre tourism region) with an emphasis on the connections between the issues, thereby providing a platform for a unified planning approach. Preliminary results have been synthesised in a number of reports summarising various phases of this application to the Alice Springs region. The purpose of this project has been to:

... identify key investment intervention points in a desert regional tourism industry. Regional tourism is a key but dispersed industry in desert Australia, with many players of mostly modest size. There are many ideas but few formal analyses of the critical intervention points at which public (and private) investment can pay dividends in enhancing the size and resilience of the industry and its flow effects to a regional economy. This question is also a core issue for promoting desert knowledge to the world as an export earner for the region. This sub-project will extend existing tourism futures in central Australia work into new regions, thereby generalising the necessary understanding for other regions.

Of great relevance for this particular brief is the summary of issues for the Alice Springs region that was produced in the first phase. It is reproduced in full in the table below:

Table 1. Summary of Issues

Identified Issue	Background	Identified Pathway
Lack of Indigenous involvement in tourism industry	Visitor surveys and anecdotal evidence show a strong desire for tourists to interact with, meet, and learn from, Indigenous Australians.	Capacity building, mentoring, increase of business skills base, successful Indigenous business models, educational program.
Competition between Uluru and Alice	The completion of an airport at Uluru and continued strong iconic marketing of Uluru has the potential to decrease the number of tourists visiting other parts of the Central Australian Region.	Alliances, better networks, marketing partnerships. Making the competitive environment beneficial to both Uluru and the rest of the Central Australian region.
Industry concerns regarding visitor perception of Alice	Operators in the tourism industry and local residents are concerned that litter, anti-social behaviour in town, liquor restrictions and other issues are contributing to a negative visitor perception of Alice Springs.	Deployment of Alice in Ten strategies and public education campaigns.
Changes in market mix	Changes to the market mix recently have placed different types of demands upon tourist product, particularly tourists seeking 'unique outback experiences'.	Encourage longer stay or higher turnover depending on market strategy and business conditions. Development of 'soft adventure' tourism and 'unique outback experience' products.
Focussed branding	A marketing image for other parts of Central Australia to compete with the strong imagery of Uluru, whilst retaining a concept of product diversity.	More inclusive marketing strategies for the whole Central Australian region, focussing beyond the imagery of Uluru to the Western MacDonnell Ranges and Larapinta Trail etc.
Permanent town-residency levels	Retention of existing local residents and attraction of new permanent residents to change employment patterns in region (high attrition rates in most sectors, particularly hospitality and retail).	Cheaper housing, greater land availability for construction projects. More defined career paths for individuals working in hospitality or tourism.
Training availability and levels	Lack of trained staff to meet industry and client expectations.	Greater funding for training programs. Promotion of hospitality and retail as a career path in the secondary school system.
Land zoning, release and native title	Encumbrance of land marked for development by native title and limited availability of land zoned for residential development.	Commitment from all concerned parties to expedite resolution of native title claims. Increase availability of land zoned for residential development.
Emergence and loss of smaller operators	Competition, limited marketing capacity and recent increases in operating costs (such as insurance) are restricting growth opportunities for, or destroying, smaller operators.	Increased assistance within marketing, or education about business plans and associated marketing strategies. Addressing public liability crisis.
Limited awareness within community of tourism economics	A perception that the residents and general community within Alice Springs are not aware of the critical economic role tourism provides in the region.	Public awareness campaigns about the systemic nature of tourism, and the flow on implications from its decline/absence.
Transport constraints	The collapse of Ansett has had a major effect on air capacity into Alice Springs, and decreased the availability of cheap seats on flights. Lack of sealed roads and other infrastructure (bridges etc) influences accessibility during the wet season.	Increase competition on the air routes into Alice springs. Increase capacity. Planning of road infrastructure to accommodate increased traffic and effects of seasonality.

There are many discrete studies of desert places looking at resources use, and how tourism interacts or impacts with specific locations – sometimes having an impact directly on other uses (say pastoral properties), sometimes on communities (the impact on Indigenous cultures is often mentioned too but difficult to document and research), sometimes on the core resources that are of value for tourism. The website of the Centre for Arid Zones Research features, for instance, research on the impacts of tourists on the natural environment around Uluru, and documents (among other things) the impact of track erosion on other tourists as well as the more subtle but potentially devastating impact of introduced species by ongoing tourist flows in fragile ecosystems. Many of these issues are typical of tourism development in fragile environments where the notions of remoteness, ecological vulnerability and limits to exposure and irreversible changes are inter-mingled. These are by no means simple, but they are not necessarily distinct for desert environments.