MANAGING PEOPLE IN AUSTRALIAN PARKS

3. RISK MANAGEMENT AND PUBLIC LIABILITY

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RESEARCH REPORT SERIES

Disclaimer

Information presented in this report has been compiled with care, subject to constraints of time and resources. Detailed data, however, were provided largely by staff of protected area management agencies, and have been accepted at face value. It was not feasible to check their accuracy in the field. Language reflects that provided by the agencies.

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Nature tourism within national parks and other protected areas is growing rapidly throughout Australia. The sustainability of this growth relies upon maintaining the quality of the natural environment which visitors come to experience. Across the country, land managers are confronted with similar visitor management issues, and these issues are equally relevant for tourism operators.

At a national level, a new Ministerial Council (previously ANZECC) provides a coordinating mechanism between national parks agencies; and the Ecotourism Association of Australia (EAA) provides one within the nature tourism industry. To date there has been no formal national coordination between land managers and the tourism industry. The newly established Tourism and Protected Area Forum (TAPAF) has recently started to provide an informal forum for coordination.

To provide park agencies and tourism industry representatives with up to date information on the management of nature-based tourism in Australian national parks, the Cooperative Research Centre for Sustainable Tourism carried out a national review of the current management practices of national park agencies in relation to nature tourism, under the overall title 'Managing People in Australian Parks.' Results are described in a series of reports, covering aspects such as fees, permits, risk and asset management, and visitor services.

This review includes national parks managed by Parks Australia, but does not include the operations of other Commonwealth agencies such as the Wet Tropics Management Authority except in so far as these occur jointly with State and Territory agencies. It covers only terrestrial national parks, not marine parks such as the Great Barrier Reef Marine Park. In general it includes only lands designated as national park; ie IUCN Category 2 reserves. Other categories of protected areas are not included except where specified.

These reports do not aim to make best practice recommendations regarding park management practices. Each park agency has its own special circumstances and political frameworks. The purpose of this project is not to produce a single unified national approach. Rather, the aim is to provide accessible information and reduce duplication of effort between park agencies, and to improve the consistency in approach for tour operators.

State-by-state data are presented in geographical sequence from west to east and north to south. No order of priority or significance is implied.

Risk management and public liability is an emerging priority for many public authorities including Australia's national park agencies. The increased awareness of the need for risk management by park agencies is the product of several landmark public liability cases in Australia and New Zealand, which have resulted in significant costs for the park agencies involved. In recent years, there has also been a rise in the number of minor liability cases, signalling an increasingly litigious society, and the need for parks to develop a more strategic approach to risk management.

This report focuses on the following aspects of risk management in Australian national park agencies: risk management policies; risk identification procedures; incidents and claims; risk management training; risk inspections; legal advice; transfer of risk for commercial and non-commercial activities; and restriction of liability.

Additional information is available in the working paper on 'Visitor Risk Management and Public Liability' produced by the ANZECC Working Group on National Parks and Protected Area Management, Benchmarking and Best Practice Program (WACALM, 1998).

Parks agencies are occupiers of land. Parks agencies are responsible for the care, control and management of national parks and other protected areas, and are viewed in legal terms as the occupiers of those areas, even though they do not hold any estate or interest in real property. As occupiers, they may be liable for injuries suffered by users of protected areas if they breach their duty to take reasonable care for the safety of those who enter upon their land (PWCNT, 1995:12).

Parks agencies have a duty of care to visitors. It is the responsibility of parks agencies to ensure that visitors are not exposed to situations where there is a real risk of incurring injury; or where this is not possible, to ensure that visitors are appropriately warned regarding the potential risks associated with a situation or place (PWCNT, 1995:12). Parks agencies may have duties of care under contract, statute or common law (Davies, 1998).

If it is established that a duty of care exists, then to determine if that duty of care has been breached typically involves two issues: whether the risk was foreseeable; and ii) if it was, whether the agency took reasonable measures to minimise it. The principal sources of uncertainty arise from legal interpretations of forseeability and reasonableness.

All Australian parks agencies refer to written policies on risk management, but there are considerable differences between the types of policies and frameworks referred to by the various park agencies, and the level of detail they contain. Victoria refers directly to the AS/NZS 4360 Australian/New Zealand Standard on Risk Management (Joint Technical Committee OB/7 – Risk Management, 1999) in conjunction with their own policies. Northern Territory, Western Australia, South Australia, New South Wales have their own agency-specific risk management strategies. TPWS refer to several policies that deal with various aspects of risk management. QPWS refers to a policy which applies to the entire Queensland EPA and EACT refers to a manual which applies to the entire Australian Capital Territory government.

According to the 'Visitor Risk Management and Public Liability' report produced by the ANZECC Working Group on National Parks and Protected Area Management, Benchmarking and Best Practice Program (WACALM, 1998), a best practice approach to risk identification involves: the prioritisation of risk; the implementation of control measures to minimise the risk; the monitoring of control measures to evaluate their effectiveness; and the follow-up response of risk assessment to gauge the degree of risk experienced. All Australian parks agencies currently have formal risk identification procedures in place, incorporating all of the above.

Several significant liability cases has been brought against Australian parks agencies in recent years, most notably *Nagle v Rottnest Island Authority* (1993) 177 CLR 423 and *Romeo v Conservation Commission of the Northern Territory* (1998) 151 ALR 263. *Nagle v Rottnest Island Authority* involved an individual diving into the water of a natural swimming pool and striking his head on a submerged rock, resulting in him becoming a quadriplegic. *Romeo v Conservation Commission of the Northern Territory* involved a 16 year old girl falling 6.5 meters from the top of Dripstone Cliffs onto Casuarina Beach in suburban Darwin. She

sustained serious injuries which caused high level paraplegia. These cases set significant precedents for subsequent liability cases involving public authorities.

Park agencies have reported an increased number of minor claims, which are frequently settled out of court. Incidents resulting in minor claims include tripping or falling on walking tracks, falls from horses, tree and branch falls, etc. Consistent with the ANZECC best practice recommendations (WACALM, 1998), all Australian parks agencies currently have: a designated course of action in the event of an incident, or the advice of a potential incident against their organisation; a process by which these incidents are documented; and an internal group or section responsible for claims management.

All Australian parks agencies provide some type of formal risk management training. QPWS provides in-house training, while NPWSA, Parks Victoria and WACALM provide a combination of in-house and external specialist training. TPWS has held one two day workshop on risk management, and many of EACT's staff attend the Summer School of Park Management at the University of Canberra, which includes a risk management module.

Parks agencies in Northern Territory, Queensland, South Australia and Western Australia undertake regular risk inspections of their recreation sites and facilities to identify potential risks. NSWNPWS conducts risk inspections which, depending upon the facility, may be either regular or *ad hoc*. TPWS does not undertake regular risk inspections, but requires inspections of all built structure to be undertaken periodically by engineers. In the Australian Capital Territory, selected assets are subject to routine risk inspections and the remainder to informal inspections, depending on the level of use and/or potential for hazard.

Parks agencies in Western Australia, South Australia, Queensland, Tasmania, Australian Capital Territory and the Commonwealth refer to the Crown Solicitor as their principal source of legal advice on issues of visitor risk management and public liability. WACALM uses private legal advice in addition to the Crown Solicitor. Parks Victoria and PWCNT refer solely to private legal practice, at least in the majority of cases, and the NSW NPWS uses both in-house and external private legal advice.

All agencies currently hold insurance cover for public liability. Most agencies are self insured for claims, for example, by way of a self managed fund.

All agencies except EACT require indemnity clauses in contracts or agreements with tour commercial operators. These indemnity clauses specify that it is compulsory for commercial operators to hold public liability insurance cover of at least $5 - $50m (most commonly $10m), which indemnifies the parks agency against any claims by the tour operator or its clients. Precise wordings differ between agencies. EACT do not require indemnities as they do not yet have a licensing system for commercial operators. Some agencies, notably QPWS and WACALM, also require indemnities from other commercial entities such as works contractors, and from competition events, clubs and other incorporated bodies. These indemnities, however, do not extend to individual park users.

In some jurisdictions in Australia and overseas, the potential liability of public land management agencies, and in some areas also their commercial lessees and licencees, is limited by specific statutes. In Australia, such statutory restrictions apply only in Western Australia and South Australia. In South Australia, a recent amendment to the Crown Lands Act 1929 limits liability on unoccupied Crown Land to a consequence of an act or activity of the Crown. In Western Australia, the recently passed *Land Administration Act* 1997 sets out to remove liability associated with public access routes over Crown Land. It has not yet been tested in court, however (WACALM, 1998). In all the other States and Territories, common law applies with no statutory restrictions of this type, and no new legislation is currently planned.

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ACKNOWLEDGEMENTS

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ABS	Australian Bureau of Statistics
ANZECC	(former) Australian and New Zealand Environment and Conservation Council
CP	Conservation Park
CRC	Cooperative Research Centre
E & I	Education and Interpretation
EA	Environment Australia:
EACT	Environment ACT
GR	Game Reserve
I, I & E	Information, Interpretation and Education
NEAP	Nature and Ecotourism Accreditation Program
NP	National Park
NPWSA	National Parks and Wildlife South Australia
NR	Nature Reserve
NSWEPA	New South Wales Environment Protection Authority
NSWNPWS	New South Wales National Parks and Wildlife Service
PA	Parks Australia
PAN	Parks Australia North
PAS	Parks Australia South
PV	Parks Victoria
PWCNT	Parks and Wildlife Commission of the Northern Territory
QDEH	(former) Queensland Department of Environment and Heritage
QEPA	Queensland Environment Protection Agency
QPWS	Queensland National Parks and Wildlife Service
RA	Recreation Area
RIC	Ranger In Charge
RP	Recreation Park
RR	Recreation Reserve
SADEHAA	South Australia Department for Environment, Heritage and Aboriginal Affairs
SAEPA	South Australia Environment Protection Agency
TDPIWE	Tasmania Department of Primary Industries, Water and Environment
TPWS	Tasmania Parks and Wildlife Service
VDNRE	Victoria Department of Natural Resources and Environment:
WACALM	Western Australia Department of Conservation and Land Management

All national park agencies in Australia currently refer to a strategy, framework, policy or policies regarding issues of visitor risk management. This report examines these frameworks and policies, risk identification and inspection procedures, and some of the legal aspects of risk management as of early 2001.

Information in this report was compiled as follows:

1. Literature search, including unpublished materials and reports such as those of the ANZECC Working Group on National Park and Protected Area Management.

2. Contact with Commonwealth, State and Territory protected area management agencies via Directors and Chief Executives and directly with nominated staff as listed in the Acknowledgements.

3. Compilation of data from all relevant sources including reports, internal agency documents and personal communications.

4. Submission of draft report from each agency's materials to relevant staff of that agency only, to check that the information included was accurate, up to date and reasonably comprehensive, and that no confidential information had inadvertently been included.

5. Circulation of full draft report to all agencies to compare the level of detail provided and adjust if required. Contact with all agencies to check that materials in Appendices were cleared for public distribution. Update as required to incorporate changes in agency practices which occurred whilst the report was being produced.

6. Circulation of revised drafts as required. Presentation of results to protected area management agencies and tourism interests at Australian Academy of Science Fenner Conference on Nature Tourism and the Environment, September 2001. Final updates to include new data provided in response to presentations.

2.1   Western Australia

WACALM currently has both a generic risk management policy, which complies with the Australian Risk Management Standard (AS/NZS 4360) (Joint Technical Committee OB/7 – Risk Management, 1999); and a Visitor Risk Management Policy which specifically addresses the management of potential risks to visitors. These are consistent with the recommendations of best practice in visitor risk management made by the ANZECC Working Group on National Parks and Protected Area Management (WACALM, 1998).

WACALM's regional centres have also developed operational guidelines in accordance with the WACALM Visitor Risk Management Policy Statement (see Appendices). The guidelines detail the systematic risk management of all WACALM recreation facilities, including: the identification of hazards, assessment of the risks posed by those hazards, implementation of risk mitigation works, and ongoing monitoring (WACALM, 2000).

2.2   Northern Territory

PWCNT currently have a strategy on visitor risk management which specifies the objectives and strategies of the Commission regarding risk management. It also defines the duty of care required by the Commission, general principles of negligence, mitigating actions, liability avoidance and insurance (PWCNT, 1995). A full listing of the contents of the NTCC Risk Management Strategy is provided in the Appendices to this report.

2.3   South Australia

NPWSA has had a risk management policy in place since May 2000. The policy statement notes the importance of systematically identifying, analysing, assessing, treating and monitoring risks as part of an overall risk management strategy (Holmes, 2000). The policy objectives are also specified as follows (Holmes, 2000, p1):

- "safeguard the State's assets and environment through sound prudential management and control

- ensure continuity of quality service delivery to …. customers and stakeholders

- create an environment where all staff can develop and exercise the judgement needed to manage [the agency's] risks well

- ensure [the agency's] risks are managed and reviewed in a planned manner".

The Risk Management Audit Committee is responsible for the oversight of the policy, including the setting of performance standards and annual risk management programs. Divisional Heads and Managers are ultimately responsible for the implementation and maintenance of risk management within their areas of responsibility, including ensuring that all staff gain competence in managing the risks associated with their work and responsibilities (Holmes, 2000). A copy of the Risk Management Policy Statement is provided in the Appendices to this report.

2.4   Queensland

QPWS currently utilise a generic risk management policy that addresses all potential risks which threaten the divisions, regions and other work units of the Queensland Environmental Protection Agency. The policy details: the Agency's objectives with respect to risk management; instructions for staff, including the provision of training in risk management; insurance procedures and indemnities; and policy administration. Contents of the Risk Management Policy are listed in the Appendices to this report. The policy resulted from a May 1992 Cabinet decision authorising the Queensland Treasury to "co-ordinate the introduction of risk management throughout the public sector, and to introduce changes to Government policy on insurance" (QDEH, 1995, p.1).

2.5   New South Wales

The NSW NPWS has a visitor safety policy and a number of specific management and recreation policies relating to the use of parks by members of the public. Statutory plans of management for parks and reserves also include policies for use of visitor sited and facilities.

2.6   Australian Capital Territory

Environment ACT refers to the ACT Government Risk Management Manual which is a whole-of-Government document. A specific visitor risk management policy and manual is currently being prepared. This will cover policy, park assets and natural features that offer high visitor risk, strategies for risk reduction, inspection and sign postage requirements, and incident reporting. EACT believe that an agency specific strategy will help to formalise processes and provide additional protection against liability in the case of any damages claim.

2.7   Victoria

Parks Victoria's Risk Management framework is based on the Australian Risk Management Standard (AS/NZS 4360) (Joint Technical Committee OB/7 – Risk Management, 1999). Parks Victoria has developed a Draft Risk Management Process which aims to integrate the principles and business applications of risk management into existing management systems, policies, standards and procedures. The Draft Risk Management Process (Parks Victoria, 2000) is still in an early draft format and subject to change, but its development indicates future directions. The key steps outlined in Parks Victoria's risk management process are:

1. Establishing the context: sets the scope and boundaries for the application of the risk management process, and defines the area for application, and the goals and objectives;
2. Risk identification;
3. Risk analysis: determine likelihood, impact, importance, level of risk and controls;
4. Risk evaluation: is the risk acceptable/not acceptable;
5. Risk treatment: assess treatment options and develop an action plan; and
6. Monitor and review: performance indicators, cost effectiveness, effectiveness of treatment, compliance issues, review and continuous improvement.

2.8   Tasmania

TPWS does not currently have a single unified policy on visitor risk management. Instead, various policies address different aspects of risk management (WACALM, 1998). For example, Guidelines for Volunteers address the issue of risk from a workplace health and safety perspective. To date, risks are managed primarily through appropriate operations management. Consideration is currently being given to the development of a unified risk management policy.

RISK IDENTIFICATION PROCESSES

3.1 Western Australia

In order to fulfil the policy objective of minimising risks to public safety associated with visiting WACALM managed areas, periodic safety audits of all recreation sites, facilities and visitor services are undertaken (WACALM, 1997). The Visitor Risk Management Guidelines-CFR (WACALM, 2000) specify the risk identification procedures, including the actions to take when a potential hazard is identified. These may include removing or isolating the hazard, and reporting the hazard to the designated Visitor Risk Management Officer.

3.2 Northern Territory

PWCNT currently has a process of identifying potential risks including: assessment of risks in terms of the impact upon the parks service; determination of control measures; and evaluation of the control measures effectiveness. This information is detailed in the Commission's 'Risk Management Strategy' (PWCNT, 1995). Included are strategies on such potential loss situations as visitor and public safety, work place health and safety, information technology and fraud control.

3.3 South Australia

NPWSA have a process of risk identification which includes an assessment of risks in terms of impact upon the organisation, determination of control measures, and a review of the effectiveness of control measures. NPWSA also periodically undertake risk audits on existing park assets, especially in parks experiencing high visitation, or with previously identified risks.

3.4 Queensland

QPWS has a routine system for identifying potential risk which is carried out by the regional workplace health and safety officer in conjunction with the ranger in charge of the park in question. Risk identification also occurs as an essential part of the assessment of any incidents. Appropriate action is taken on the basis of the nature of the identified risk. Actions range from low key measures, such as advisory signs, to the closure of areas and facilities. Most measures are temporary and are lifted as soon as possible, for example, once a fire danger eases, or a facility has been repaired.

3.5 New South Wales

NSWNPWS currently has a process of identifying potential risks including assessment of risks in terms of the impact upon the parks service, determination of control measures, and evaluation of the effectiveness of those control measures.

3.6 Australian Capital Territory

Formal risk identification procedures are in place for selected areas such as playgrounds, and informal procedures are undertaken for other areas, depending on the level of use and the potential for hazard. Whilst risk management is considered a high priority for field managers and staff, the formal procedures to address visitor risk management are generally of a limited nature.

3.7 Victoria

Parks Victoria has implemented a process of risk profiling which includes a risk identification and analysis process. Methods of identifying risk/s include, but are not limited to: analysis of sites with similar risks to those where incidents have previously occurred; workshops (brainstorming); inspection/survey reports; and questionnaires (Parks Victoria, 2000). Risk is analysed in terms of likelihood of occurrence, impact upon the organisation, and its importance to business operations. The risk management process also identifies the risk controls and assesses them in terms of whether they are documented, adequate, and whether they are applied.

3.8   Tasmania

TPWS currently has a process of identifying potential risks including assessment of risks in terms of the impact upon the parks service, determination of control measures, and evaluation of the control measures effectiveness. Although not encapsulated in any written policy documents, this approach occurs at a practical level.

4.1 Western Australia

As for other agencies, the number of liability claims brought against WACALM has risen in recent years. Additionally, the landmark case *Nagle v Rottnest Island Authority* (1993) alerted WACALM to the importance of having a strategic approach to visitor risk management. WACALM has a designated course of action in the event of an incident, or the advice of a potential incident. This typically involves the formal reporting of the incident by field staff to the State Operations Headquarters. This identification process requires the completion of a Visitor Risk Management (VRM) hazard report form, which is lodged with the designated VRM Officer. The VRM Officer then arranges the assessment of the extent of the risk, records the details, and initiates the appropriate action. WACALM also has an internal section responsible for claims management.

4.2 Northern Territory

Consistent with other agencies, the PWCNT has experienced an increase in the number of liability claims brought against them. Most notable is the case *Romeo v Conservation Commission of the Northern Territory*. The case involved the plaintiff and her friend visiting a popular scenic lookout near Darwin at night. The pair consumed some alcohol in a gap in the vegetation near the car park, then walked, or fell, over the edge of an unfenced cliff, resulting in the plaintiff becoming a paraplegic (Davies, 1998). It was agreed that the Commission owed the plaintiff a duty of care, but the contention was whether the Commission was found to have breached that duty of care (Davies, 1998). Given the obvious scale of the risk (i.e. the cliff face), it was argued that warning signs would have been ineffective, because "the risk existed only in the case of someone ignoring the obvious" (Davies, 1998: 12). Secondly, the mitigating action necessary to minimise the risk, (that is, to erect a 2 km fence along the cliff face) was not considered a "reasonable" action given the identified risk (Davies, 1998: 12). Thus the Commission were found not to have breached its duty as occupier of the area. This finding set an important precedent for claims of liability against Australian national park agencies, and provided an impetus for a more strategic approach to risk management within the PWCNT.

The PWCNT has a designated course of action in the event of an incident, and/or the advice of a potential incident against the organisation; a process by which these incidents are documented; and an internal group/section responsible for the management of claims.

4.3 South Australia

During the past 5 years there have been six major (>$4000) public litigation claims against NPWSA for injuries sustained in national parks. All of these cases were finalised with total costs of under $22 000, except one which originated in 1981 and was finalised with a total cost of $70 000. NPWSA has a designated course of action in the event of an incident, and/or the advice of a potential incident against the organisation; a process by which these incidents are documented; and an internal group/ section responsible for claims management.

4.4 Queensland

The increasing number of minor incidents in Queensland national parks is alleged to be causing the closures of some park trails and visitor facilities (Ryan, 2000). Minor incidents and claims against QPWS are frequently settled out of court. Following an incident, QPWS staff are required to complete an injury reporting form, and details of the incident are forwarded to Head Office. The incident is then investigated by Head Office and recorded on a database. Severe injuries are also investigated by the Division of Workplace Health and Safety (Department of Employment, Training and Industrial Relations).

4.5 New South Wales

Like other Australian park agencies, in recent years the number of minor claims against NSW NPWS have risen. The NSW NPWS have a designated course of action in the event of an incident, and/or the advice of

a potential incident against the organisation; a process by which these incidents are documented; and an internal group/section responsible for claims management.

4.6 Australian Capital Territory

EACT currently have incident reporting measures in place. Rangers or field staff record incidents in their diaries and report all incidents to the park District Manager. It is the District Manager's responsibility to investigate the cause of the incident and take appropriate action. In the event of a complaint, the District Manager is notified and takes what he/she believes to be the appropriate action. The risk management policy (in preparation) will require a more centralised reporting of incidents.

4.7 Victoria

Parks Victoria has acknowledged that the number of incidents reported in their national parks has increased, but this can be attributed to the implementation of improved reporting procedures. The vast majority of incidents and claims made against Parks Victoria are minor and resolved quickly.

In the event of *any* incident, park staff are required to complete an incident reporting form, outlining all known details of the incident. These reports are communicated to head office, usually within 24 hours of the incident occurring. Parks Victoria also has an internal group/section responsible for claims management. Whilst the majority of incidents are of a minor nature, all incidents are documented in case of future litigation. Parks Victoria is currently developing a 'visitor risk library' to facilitate better visitor risk identification and management in the future. In the event of a death or serious personal injury, the matter is fully investigated, generally with the assistance of an investigator engaged by the insurer.

4.8 Tasmania

The claims brought against TPWS typically result from visitors slipping or falling on walking tracks, boat ramps etc., and are usually limited to medical bills (e.g. < $100 000). Historically the number of claims has been small, but an increase has been noted in recent years.

TPWS have a designated course of action in the event of an incident, and/or the advice of a potential incident against the organisation; a process by which these incidents are documented (staff incidents only); and an internal group/section responsible for claims management. Incident reports are completed for both public and staff claims, and are then forwarded to the TPWS insurance broker.

5. RISK MANAGEMENT TRAINING

5.1 Western Australia

WACALM run a nationally accredited two-day training course in visitor risk management operations, designed in accordance with the AS/NZS Standard 4360 on Risk Management (1999). Participants are nominated by their regional and district managers and are generally staff with a key operational role in WACALM's recreation and tourism program. The number of courses held varies with demand, but in recent years WACALM has been conducting four per year. There is a high demand for the course by other government departments and agencies within Western Australia.

WACALM has a Risk Management Section, which is responsible for the development and implementation of risk management policies and procedures on behalf of the department across Western Australia, and for providing advice and guidance to managers on risk management and insurance matters.

5.2 Northern Territory

Both formal and informal risk management training is undertaken on a limited basis in PWCNT. Training is voluntary and is attended primarily by management staff.

5.3 South Australia

Both in-house and external specialist risk management training is undertaken by NPWSA. Further in-house risk management training is planned to take place within NPWSA in the near future. Whilst training is not compulsory, note is taken of volunteers from relevant sections, and any management unit not covered by appropriately trained personnel would be encouraged to ensure that a managing or supervisory staff member attended a future risk management course.

5.4 Queensland

The Environment Protection Agency provides training in risk management which is intended to provide participants with the knowledge and skills to identify potential risks, and to implement risk management procedures. Risk management training is the responsibility of regional workplace health and safety officers and includes the following areas:

- workplace health and safety;

- fire prevention measures and security precautions;

- professional negligence;

- liability exposure of all types;

- crisis contingency planning and disaster recovery;

- the unauthorised use of resources;

- needless waste and inefficiency; and

- management system inadequacies and poor work quality.

From 1993-1995, formal training was provided as a series of four-day courses run in conjunction with a firm of risk management consultants. Risk management training has been identified as a high priority, but formal courses are not currently available. Informal risk management training is provided at the regional level, involving experienced staff and regional workplace health and safety officers.

5.5   New South Wales

Risk management training in NSWNPWS is provided to all levels of the organisation and is open to all staff. Training is voluntary, but is typically attended by field supervisory staff.

5.6   Australian Capital Territory

No generalised training on visitor risk management has been provided by EACT to date. However, many staff have attended the Summer School of Park Management run by the University of Canberra. This course includes a risk management module. Additionally, all park staff have appropriate training, and most have some Risk Management and Incident Control Management training, which covers aspects such as managing visitors in fire conditions etc.

5.7   Victoria

A combination of in-house and external specialist training in risk management is provided by Parks Victoria. PV has developed and is implementing a two tiered risk management training program, which includes both a basic and advanced risk management training course. Courses will be run on an ongoing basis. It is anticipated that all PV staff will attend training in risk management.

At present, a trial of visitor risk profiling, which involves training in risk management awareness, is being undertaken in some parks. Parks Victoria has also developed a 'Levels Of Service' framework to guide visitor management in Parks, and the visitor risk management program is an integral part of this strategy.

5.8   Tasmania

One two day workshop on risk management training, which was open to all staff, has been held by TPWS. Twenty field and head office staff attended.

6. RISK INSPECTIONS

6.1 Western Australia

As part of a process of risk identification, WACALM undertakes periodic safety audits of their recreation sites, facilities and visitor services. WACALM's training advocates that every maintenance visit to a site requires an inspection using a checklist designed for that purpose. These are augmented by formal inspections, conducted at least annually, by designated program leaders. Formal inspections are also needed, and conducted, in the event of cyclones, severe storms or other circumstances as deemed necessary.

6.2 Northern Territory

PWCNT undertake annual inspections of visitor sites and facilities. The outcomes of these inspections, including maintenance details and schedules, are documented.

6.3 South Australia

All park recreation sites and facilities are inspected for potential risk at least once every three years by a specialist Corporate Office Workplace Health and Safety/Risk Management team working closely with field staff. In cases where significant improvement works are undertaken, an engineer's written opinion is sought prior to the commencement of work, to ensure that the design and construction are suitable for their intended use.

6.4 Queensland

Risk inspections of visitor facilities and built infrastructure are undertaken by the regional Workplace Health and Safety Officer in conjunction with the Ranger in Charge of the park. The precise approach taken in the follow-up to the inspections varies from region to region. QPWS is currently carrying out state-wide targeted and routine risk audits.

6.5 New South Wales

Depending upon the facility, risk inspections of visitor sites may be *ad hoc*, or conducted on a regular basis. For facilities with perceived obvious risks, inspections are routinely undertaken as part of programmed maintenance by field staff within their directorates. For existing facilities with no obvious risks, inspections are conducted when deemed necessary. In the event of an incident, assessment of sites where similar risks have been identified is also undertaken.

6.6 Australian Capital Territory

Formal risk inspections are undertaken for selected areas with high visitation rates. Natural features that EACT actively promote and encourage visitation to, or that have easy access, will be included in the Risk Management Strategy and condition/hazard inspections will be recorded. EACT do not aim to formally inspect remote or very low visitation sites, although these will receive occasional inspections visits from park staff.

6.7 Victoria

Parks Victoria's insurer is a statutory authority that provides risk management and insurance services on behalf of government agencies. As part of this service they undertake Park Risk Management Surveys which focus predominantly on visitor safety risks. In the past, these surveys were used to identify risks, and to some extent this is still the case. In addition, however, Parks Victoria uses these surveys as tools to assist in the monitoring of visitor risk management performance. The risk management training program and the visitor safety risk profiling process are designed to ensure staff have the skills to identify, analyse, evaluate and treat risk.

6.8 Tasmania

Although TPWS do not conduct regular risk inspections of all sites, engineer inspections of all built structures, bridges and roads are undertaken periodically.

WACALM refers to both the Crown Solicitor and private law firms for legal advice regarding any incidents or claims of public liability made against them (WACALM, 1998).

Since late 1998, incidents or claims made against PWCNT have generally been referred to private legal firms through the Attorney Generals Office.

All incidents or claims of public liability made against NPWSA are referred to a specialist South Australia Department of Environment and Heritage corporate services section. They then refer incidents of any significance to the Crown Solicitor for further legal advice.

QPWS refer solely to the Crown Solicitor for legal advice regarding any incidents or claims of public liability made against them. The Crown Solicitor has the ability to obtain additional legal opinion or assistance if required.

NSWNPWS refer primarily to in-house lawyers for legal advice regarding any incidents. Public liability claims against the State in relation to incidents on lands managed by NSWNPWS are defended by solicitors retained by a New South Wales Treasury managed fund.

In the event of an incident and subsequent liability claims against EACT, formal legal advice is always sought from the Office of the Australian Capital Territory Government Solicitors (Crown).

Parks Victoria has a legal counsel available on staff to provide legal advice. Parks Victoria's insurer undertakes the management of all Parks Victoria's public liability claims. The insurer has in-house legal counsel and may also refer matters to private sector legal firms they engage.

Prior to 30 June 2000, TPWS referred to a private legal practice for legal advice regarding any incidents or claims of public liability made against them. Since then, TPWS have referred solely to the Crown Solicitor.

WACALM holds insurance by way of a self-managed fund administered through the Insurance Commission of Western Australia. PWCNT have been self-insured against liability claims since December 1993. NPWSA are self-insured in the event of incidents resulting in liability claims against the service.

QPWS is self insured in the event of a liability claim against them. The Queensland Government considers that it is more cost effective to be self insured, that is, to carry their own risk, than to insure these risks externally (QDEH, 1995). It is Government policy to minimise external insurance for Departments, and to rely on supplementary funding from Treasury to provide 'catastrophe' cover (QDEH, 1995).

The New South Wales Treasury managed fund will pay, on behalf of NSWNWPS all sums for which the NSWNPWS shall become legally liable to pay by way of compensation, in respect of 'claims made' against the NSWNPWS caused by an occurrence in connection with their activities worldwide. The New South Wales Treasury managed fund will also pay all law costs, charges and expenses incurred in the settlement or defence of claims or litigation arising where such costs are incurred with the written consent of the fund, and all law costs, charges and expenses recoverable from them by the claimant.

The Australian Capital Territory government, including EACT, is privately insured. Parks Victoria and TPWS prefer not to disclose details of their organisational insurance arrangements.

9. INDEMNITIES FOR COMMERCIAL OPERATORS AND ORGANISED GROUPS

9.1 Western Australia

WACALM requires all commercial operator applicants to take out a minimum of $5m public liability insurance, by way of indemnity clauses within the licensing contract.

For organised non-commercial group activities an application to conduct the activity, which includes indemnity and adequate liability cover, is required. As for all other agencies, for individual users, the parks service utilises numerous warning, cautionary or information signs to identify potential risk to the public in an attempt to remove or reduce the risk. For activities such as abseiling, WACALM requires users to sign disclaimer forms.

9.2 Northern Territory

PWCNT requires all commercial operator applicants to take out a minimum of $10m public liability insurance.

PWCNT does not have a process of transferring risk for non-commercial group activities. Like all other agencies, the parks service utilises numerous warning, cautionary or information signs to identify potential risk to the public in an attempt to remove or reduce the risk. The success of these signs in limiting park liability is typically to reduce the damages the park service may be liable to pay in the event of an incident.

9.3 South Australia

The NPWSA requires all commercial operator applicants to take out a minimum of $10m public liability insurance in respect of any one claim, by way of indemnity clauses within the licensing contract.

NPWSA does not have a process of transferring risk for non-commercial group activities. Numerous warning, cautionary or information signs are used to identify potential risk to the public in an attempt to remove or reduce the risk. These signs may reduce the damages NPWSA may be liable to pay in the event of an incident.

9.4 Queensland

QPWS transfers risk in relation to commercial activities by requiring that an applicant for a permit for commercial tours, or for filming or photography involving more than four people or a structure, must obtain public liability insurance. The insurance policy must provide at least $10m cover and must name the 'State of Queensland acting through the Queensland Parks and Wildlife Service' as co-insured. The policy must cover personal injury, including death, and property damage claims made against the commercial operator or the QPWS, or its servants or agents.

This insurance will not cover QPWS for its own negligence, but will provide them with cover if an accident is caused by the operator's negligence or omission. The insurance cover must be obtained and a certificate of currency seen by a QPWS officer before a permit is issued. The policy is required to state that all interested parties must be notified if the policy is altered, and the insurance company must advise QPWS if the policy is modified or cancelled.

Transference of risk for non-commercial group competitive events, such as the annual 'King of the Mountain' race, is undertaken by asking competitors to sign indemnity forms. Organisers of such events can also be required to obtain public liability insurance that protects QPWS.

There is no formal process to transfer risk in relation to the 'independent' park visitor, but QPWS employs a range of strategies to reduce risk, including the provision of information and education, the use of warning signs, permits and permit conditions, and the design of management of access and facilities. These strategies seek to reduce the occurrence of incidents and to reduce any damages QPWS may be liable to pay in the event of an incident.

9.5   New South Wales

The NSWNPWS requires all commercial operators applicants to take out a minimum of $10m public liability insurance, and includes an indemnity clauses within the licensing contract (WACALM, 1998).

As for all other agencies, for individual users, the NSWNPWS utilise numerous warning, cautionary or information signs to identify potential risk to the public in an attempt to remove or reduce the risk. These signs may reduce the damages NSWNPWS may be liable to pay in the event of an incident.

9.6   Australian Capital Territory

EACT does not transfer the risk of commercial activities – for example, by way of indemnity clauses within the licensing contract – as commercial operators are not currently required to hold a licence. However, all major tour operators are expected to be insured as part of their standard business practices.

EACT does not have a process of transferring risk for non-commercial group activities. As for all other agencies, signs are used to identify potential risk to the public in an attempt to remove or reduce the risk.

9.7   Victoria

Parks Victoria requires all commercial operator applicants to hold a minimum of $10m public liability insurance which must include indemnification of the Managing Authority, i.e. Parks Victoria.

Parks Victoria do not have a process of transferring risk for non-commercial group activities. As for all other agencies, for individual users, the parks service utilises a number of methods to identify potential risk to the public in an attempt to remove or reduce the risk. These methods include brochure information, structures such as handrails and numerous warning, cautionary or information signs. The success of these methods in ensuring the safety and welfare of visitors and limiting park liability is typically to reduce the damages PV may be liable to pay in the event of an incident. The use of signs is considered a 'reasonable' measure in warning visitors against possible risk of injury.

9.8   Tasmania

TPWS requires all commercial operator applicants to take out a minimum of $10m public liability insurance, which notes the interest of TPWS (TPWS, 2000). This policy must be made available upon request, and a copy of it must be forwarded to the TPWS upon renewal of the licence each year.

TPWS does not have a process of transferring risk for non-commercial group activities. Like all other agencies, signs to identify potential risk to the public are used in an attempt to remove or reduce the risk. The success of these signs in limiting park liability is typically to reduce both injury and the damages the park service may be liable to pay in the event of an incident.

In Western Australia, the provisions of the *Occupiers Liability Act* (1985) generally apply in the event of liability claims against WACALM. The recently passed but as yet untested *Land Administration Act* (1997) removes the liability associated with public access routes over Crown land (WACALM, 1998).

Common Law prevails in the event of liability claims against South Australian public authorities, but a recent amendment to the *Crown Lands Act* (1929) limits liability on 'unoccupied Crown Land' to a consequence of an act or activity of the Crown (WACALM 1998).

Common Law prevails in the event of liability claims against Queensland public authorities in Northern Territory, Queensland, New South Wales, Australian Capital Territory and Victoria. There are no plans to introduce legislation which may restrict the potential liability of parks agencies

Common Law also prevails in the event of liability claims against Tasmanian public authorities. The *National Parks and Wildlife Act* (1970) will soon be significantly updated, and restriction of liability is likely to be considered.

Davies, M. 1998. *Trends in Occupier's Liability for Public Authorities and Individuals*, Paper presented at a seminar '*Spotlight on Insurance Issues*'. Australian Insurance Law Association, Dee Why.

Holmes, A. 2000. *Risk Management Policy Statement.* SADEH, Adelaide.

Joint Technical Committee OB/7 – Risk Management. 1999. *Risk Management: AS/NZS 4360*. Standards Australia, Strathfield.

Nagle v Rottnest Island Authority F.C. 93/016 (1993). Australian Torts Reporter 81-211 (1993), 112 ALR 393 (1993), 67 ALJR 426.

Northern Territory Parks and Wildlife Commission. 1995. *Risk Management Strategy*. PWCNT, Darwin.

Parks Victoria. 2000. *Risk Management Process (Draft)*. Parks Victoria, Melbourne.

Queensland Department of Environment and Heritage. 1995. *Risk Management Policy*. QDEH, Brisbane.

Romeo v Conservation Commission of the Northern Territory [1998]. HCA 5.

Ryan, S. 2000. *Compo bill fears close park trails.* Courier Mail, 12 May 2000.

Tasmania Parks and Wildlife Service. 2000. *Commercial Visitor Services.* TPWS, Hobart.

Western Australia Department of Conservation and Land Management. 1997. *Policy Statement No. 53, Visitor Risk Management*. WACALM, Perth.

Western Australia Department of Conservation and Land Management for ANZECC Benchmarking and Best Practice Program 1998. *Visitor Risk Management & Public Liability*. ANZECC Working Group on National Parks and Protected Area Management. WACALM, Perth.

Western Australia Department of Conservation and Land Management. 2000. *Visitor Risk Management Guidelines – Central Forest Region*. WACALM, Perth.

3.1   WACALM

3.1.1   Policy statement No. 56 - Risk management

3.2   PWCNT

3.2.1   Risk management strategy table of contents

3.3   NPWSA

3.3.1   Risk management policy statement

3.4   QPWS

3.4.1   Risk management policy table of contents
3.4.2   Courier Mail article – Compo bill fears close park trails

3.5   PV

3.5.1   Sample risk action plan
3.5.2   Risk library
3.5.3   Sample risk register
3.5.4   Risk analysis tables
3.5.5   Visitor safety risk library
3.5.6   Visitor safety risk analysis tables

Appendix 3.1
WACALM

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

POLICY STATEMENT NO. 56

RISK MANAGEMENT

February 2000

CALM intends to make the management of risk an integral component of operational and line management responsibilities. To facilitate this an Executive Risk Management Committee has been established which will determine and communicate policy, objectives, procedures and guidelines. This committee will also direct and monitor the implementation, practice and performance of risk management throughout CALM. Practice and procedure guidelines will be developed and provided by the committee to assist the implementation of the risk management policy within CALM.

Performance in risk management will be based and measured on the following factors:

- implementation and documentation of risk management principles;

- incorporation of risk management principles into departmental procedures and operations;

- identification, assessment and treatment of risks in accordance with accepted procedures and guidelines;

- mitigation and control of any losses;

- reduction in the overall costs of risks to CALM; and

- achievement in complying with the Australian Risk Management Standard (AS/NZS 4360).

Objectives

- ensure risk management is accepted and adopted throughout CALM as part of best management practice;

- ensure employees understand the need to manage risk and promote participation in the process;

- develop and apply efficient administrative and financial procedures for the management of risk within CALM;

- assist CALM in fulfilling its mission, performing its key functions, meeting its objectives and serving its customers.

Dr Wally Cox
ACTING EXECUTIVE DIRECTOR

Appendix 3.2
PWCNT

Subject: *RISK MANAGEMENT STRATEGY*

Document Status: *Compliance Required*

Contents

Subject: *RISK MANAGEMENT STRATEGY*

Subject: *RISK MANAGEMENT STRATEGY*

Appendix 3.3
NPWSA

DEPARTMENT FOR ENVIRONMENT AND HERITAGE

Risk Management Policy Statement

It is the policy of DEH that all staff manage the risks associated with the State's resources and assets in their care and the services they deliver as an integral part of their work.

As Chief Executive, I will provide the authority and means for DEH staff and volunteers to carry out their risk management responsibilities in accordance with South Australian Public Service ethical standards, policies and directions.

Risks are present in all public sector endeavors. Consequently, we need to understand the nature of the risks in our respective work areas and to manage them by systematically identifying, analysing, assessing, treating and monitoring risks. This process is what is meant by the term 'risk management'.

The policy objectives of managing risks across all DEH activities are to
- Safeguard the State's assets and environment through sound prudential management and control.

- Ensure continuity of quality service delivery to DEH customers and stakeholders.

- Create an environment where all staff can develop and exercise the judgement needed to manage DEH's risks well.

- Ensure DEH risks are managed and reviewed in a planned manner.

The Risk Management Audit Committee, chaired by the Chief Executive, is responsible for Executive oversight of this policy, including the setting of performance standards and annual programs for risk management.

Divisional Heads through managers their staff are accountable for the implementation and maintenance of risk management within their areas of responsibility and for ensuring that all staff gain the competence to manage the risks associated with their work and responsibilities.

This statement sets out the policy objectives and major responsibilities for risk management. Visit the HUB for detailed information about risk management in DEH.

Alan Holmes
A/CHIEF EXECUTIVE

Date: May, 2000

DEPARTMENT FOR ENVIRONMENT AND HERITAGE

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This statement sets out the policy objectives and major responsibilities for risk management. Visit the HUB for detailed information about risk management in DEH.

Alan Holmes
A/CHIEF EXECUTIVE

Date: May, 2000

Appendix 3.4
QPWS

Risk Management Policy

Table of contents

A VIEW of Lamington National Park, which has had one walking track closed over safety concerns.

Compo bill fears close park trails

Siobhain Ryan

QUEENSLAND national parks are closing walking tracks and limiting access in the wake of $11 million in lawsuits over the past decade as visitors sue for injury or damages.

A Local Government Association of Queensland inquiry report, released this week, found an estimated $3 million a year was spent on compensation claims.

Environment Minister Rod Welford said yesterday the Queensland Parks and Wildlife Service could not afford the mounting bills for damages.

"Most of the cases I'm aware of have involved hooligan behaviour," he said.

Sources claim some park visitors had won compensation for injuries from falling tree branches after camping under gum trees.

But inquiry chair Associate Professor Bob Beeton, head of the University of Queensland's School of Natural and Rural Systems Management, said the funding crisis in the Queensland Parks and Wildlife Service only compounded the problem.

"It's the chicken and egg (scenario)," he said.

"If you don't maintain the tracks, it's dangerous. If the tracks become dangerous, you close them."

Submissions to the inquiry claimed neglected tracks, poorly maintained roads, inadequate fire management and low staffing levels — all resulting from under-resourcing — had eroded the safety of the reserve system.

Opposition local government spokesman Howard Hobbs said the Beattie Government's decision to expand the reserve system, despite "a lack of ongoing funding, little or no planning, consultation or adequate management plans", had led to the state of disrepair.

One bushwalking group based at Finch Hatton near Mackay wrote to the LGAQ claiming three tracks — Eumerella, Dooloomai Falls and Mt Dalrymple — had been closed because of a lack of maintenance.

"There were more walks open to the public in this park 25 years ago than there are now," the group said.

QPWS concedes only two closures because of risks to public safety: the spectacular Coomera Gorge lookout at Lamington National Park, declared unsafe four years ago, and the entire Mt Coonowrin park in the Glasshouse Mountains closed six months ago.

National Parks Association of Queensland president John de Horne said the QPWS was forced to pay the first $500,000 of any compensation claims, draining critical resources away from day-to-day operations.

While accidents would always happen in national parks, the attitudes of visitors had changed, he said.

Appendix 3.5
PV

Risk Action Plan — *Location*

CATEGORY	
Risk Area	
RISK	

Level of Risk		Business Importance	
Control Assessment Rating			

Risk Evaluation (Including Cost Benefit Analysis)

Potential Loss Issues

Opportunities

Risk Management Decision

Accept Risk		Not Accept Risk	

Summary of Decision

Treatment Options

Retain		Avoid		Control		Transfer		Monitor	

Summary : recommended response

ACTION PLAN	Responsibility	Timing

Monitoring & Reporting Plan

	Date Compiled : / /	Date Reviewed : / /
Responsibility		
Timing		

RISK LIBRARY

CATEGORY	Risk Area
Regulatory	• Legislative obligations • Government obligations • Management Services Agreement • Delegations / authorisations • Compliance
Management	• Policy, standards and procedures • Resource allocation • Cross business functions • Records Management
Financial	• Funding levels • Revenue • Accounting policy • Financial strategy • Burglary, theft, fraud • Insurance cover
Business systems	• Systems integrity • Information Technology • Y2K
Commercial	• Land acquisition / disposal • Leases & licences • Commercial operations / agreements • Contract management • Tender procedures • Legal services
Human Resources	• Occupational Health & safety • Industrial relations • Workforce management • Training
Business Interruption	• Utilities failure (eg. Power) • Building security (eg. Fire, theft) • Property damage • Computer system security / Systems failure
Assets	• Asset maintenance, renewal and replacement • Minor Plant & equipment • Asset failure / loss • Capital Program (capital project priorities) • Financial impact of new assets
Conservation	• Environmental values • Heritage Values • Indigenous Cultural Values • Flora and fauna management • Contamination • Water quality • Pest plants and animals
Visitor services	• Visitor satisfaction / expectations • Public safety • Service standards • Community involvement / volunteers • Marketing and tourism
Natural disasters / Emergency Management	• Emergency event • Wildfire • Storm, flood • Search & Rescue

NOTE : *Risk Library will evolve as information consolidates*

21/03/00

CATEGORY	
Risk Area	

RISK	

Extent : proportion of organisation / value the risk affects

Cause	Impact
•	•

Likelihood Rating	Impact Rating	Importance Rating	Level Of Risk	Priority

Major Control Considerations

•

Control Effectiveness Assessment	Documented	Adequate	Applied

SUMMARY	Compiled : / /	Revised : / /
Level of Risk Ratings	/ /	/ /
Control Assessment Ratings	/ /	/ /
Trend		

21/03/00

DRAFT

RISK ANALYSIS TABLES

QUALITATIVE MEASURE OF LIKELIHOOD

LEVEL	DESCRIPTOR	DESCRIPTION
A	Almost certain	The event is expected to occur in most circumstances
B	Likely	The event will probably occur in most circumstances
C	Moderate	The event should occur at some time
D	Unlikely	The event could occur at some time
E	Rare	The event may occur only in exceptional circumstances

QUALITATIVE MEASURE OF CONSEQUENCE OR IMPACT

LEVEL	DESCRIPTOR	EXAMPLE DETAIL DESCRIPTION
1	Insignificant	No injuries, low financial loss
2	Minor	First aid treatment, on-site release immediately contained, medium financial loss
3	Moderate	Medical treatment required, on-site release contained with outside assistance, high financial loss
4	Major	Extensive injuries, loss of production capability, off-site release with no detrimental effects, major financial loss
5	Catastrophic	Death, toxic release off-site with detrimental effect, huge financial loss

QUALITATIVE RISK ANALYSIS MATRIX - LEVEL OF RISK

Likelihood	Consequences				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
A almost certain	S	S	H	H	H
B likely	M	S	S	H	H
C moderate	L	M	S	H	H
D unlikely	L	L	M	S	H
E rare	L	L	M	S	S

Legend :

H   high risk ; detailed research and management planning required at senior levels
S   significant risk ; senior management attention needed
M   moderate risk ; management responsibility must be specified
L   low risk ; manage by routine procedures

AS/NZS 4360 : 1995

BUSINESS IMPORTANCE TABLE

RATING	BUSINESS IMPORTANCE AND BUSINESS VALUE	
4	High Value and / or Importance	Of fundamental importance to the business as a whole, key strategic and market value.
3	Significant Importance	Key influence on business capability, major customers.
2	Normal Importance	Business unit operations and customer service are dependant on this.
1	Low Importance	Affects routine procedures, manageable at day to day level.

CONTROL ADEQUACY ASSESSMENT MATRIX

CRITERIA	Control Documented	Control Adequate	Control Applied
Criteria fully satisfied	1	1	1
Criteria partially satisfied	3	2	2
Criteria not satisfied	6	3	3

RISK RANKING FORMULA

The **Level of Risk Rating** is calculated by adding Ratings for :

Likelihood + Impact + Business Importance = Level of Risk Rating

The **Control Assessment Ranking** is calculated by adding Ratings for :

Documented + Adequate + Application = Control Assessment Ranking

Visitor Safety Risk Library

Risk Source	Risk	Response Options	Reference Manual
Trees	• Falling limbs • Falling trees • Rope swings	• Warning signage • Tree management program • Rope swing removal program	
Buildings	• Building fire	• Evacuation / exit signage • Emergency lighting • Fire hose reels • Emergency response plan	
Cliffs	• Falling over • Rock fall from above	• Barriers • Warning signage	
Structures	• Falling • Trip hazards • Inadequate design and construction	• Barriers • Warning signage • Indemnities from third parties	
Bridges / culverts	• Driving / falling off edge • Water across road • Vehicles too heavy	• Barriers • Warning signage • Depth indicators • Safe load limits	
Natural Hazards	• Snakes • Fire	• Warning signage • Brochures / park information	

Roads & Tracks	• Poor road surface • Fast traffic	• Warning signage • Speed signs	
Events	• Anti social behaviour	• Working Alone Policy	
Water Supply	• Contaminated water • Tank water • Ground water	•	

Visitor Safety Risk Analysis Tables

QUALITATIVE MEASURE OF LIKELIHOOD

LEVEL	DESCRIPTOR	DESCRIPTION	VISITATION (visits / year)
5	Almost certain	The event is expected to occur in most circumstances	> 200,000
4	Likely	The event will probably occur in most circumstances	50,000 – 200,000
3	Moderate	The event should occur at some time	10,000 – 50,000
2	Unlikely	The event could occur at some time	5,000 – 10,000
1	Rare	The event may occur only in exceptional circumstances	< 5,000

QUALITATIVE MEASURE OF CONSEQUENCE OR IMPACT

LEVEL	DESCRIPTOR	DETAIL DESCRIPTION
1	Insignificant	No injuries
2	Minor	Minor injuries immediately treated on-site with First aid treatment.
3	Moderate	Moderate injuries requiring medical treatment but without hospital admission
4	Major	Serious and / or extensive injuries requiring medical treatment with hospital admission
5	Catastrophic	Paraplegia, quadraplegia, brain damage or death

QUALITATIVE RISK ANALYSIS MATRIX - LEVEL OF RISK

Likelihood	Consequences				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
5 almost certain	S	S	H	H	H
4 likely	M	S	S	H	H
3 moderate	L	M	S	H	H
2 unlikely	L	L	M	S	H
1 rare	L	L	M	S	S

Legend :

H   high risk ; detailed research and management planning required at senior levels
S   significant risk ; senior management attention needed
M   moderate risk ; management responsibility must be specified
L   low risk ; manage by routine procedures

CONTROL ADEQUACY ASSESSMENT MATRIX

CRITERIA	Control Documented	Control Adequate	Control Applied
Criteria fully satisfied	1	1	1
Criteria partially satisfied	3	2	2
Criteria not satisfied	6	3	3

VISITOR SERVICE LEVEL TABLE

RATING	VISITOR SERVICE LEVEL	
4	Very High	Icon site where disruption to access would have regional or state impacts on visitor flows, recreational events and tourism businesses
3	High	Sites with year round access to special built or natural features that have few if any alternatives in the region.
2	Moderate	Sites with conventional year round access where disruption to access would be inconvenient to visitors but alternatives exist.
	Low	Sites where access may be closed seasonally but is checked and maintained regularly during the open season.
1	Very Low	Remote sites where visitors expect and are advised that access is not checked or maitained regularly, and may be weather dependent.

Prof Ralf Buckley

Prof Buckley is Chair in Ecotourism and Director of the International Centre for Ecotourism Research at Griffith University, and Coordinator of CRC Tourism's Program 1: Tourism Environmental Management Research. Email: r.buckley@mailbox.gu.edu.au

Michaela Guest

Prior to working within the CRC Tourism's Program 1, Michaela travelled for several years throughout much of south-east Asia and parts of Europe. Michaela completed a Bachelor of Science degree in Ecology and Environmental Policy, and in 1999 completed Honours in Science exploring the sampling methods for estimating fish and crustacean density in shallow seagrass habitat. Michaela is currently a PhD student at Griffith University on trophic dynamics in estuarine habitats.

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The Cooperative Research Centre for Sustainable Tourism was established under the Australian Government's Cooperative Research Centres Program to underpin the development of a dynamic, internationally competitive, and sustainable tourism industry. Our mission: Developing and managing intellectual property (IP) to deliver innovation to business, community and government to enhance the environmental, economic and social sustainability of tourism.

DEVELOPING OUR IP
Director of Research - Prof Bill Faulkner

1. **Tourism environmental management research**
   Co-ordinator – Prof Ralf Buckley (r.buckley@mailbox.gu.edu.au)
   • Wildlife Tourism
   • Mountain Tourism
   • Nature Tourism
   • Adventure Tourism

2. **Tourism engineering design and eco-technology research**
   Coordinator – Dr David Lockington (d.lockington@mailbox.uq.edu.au)
   • Coastal and marine infrastructure and systems
   • Coastal tourism ecology
   • Waste management
   • Physical infrastructure, design and construction

3. **Tourism policy, products and business research**
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   • Events and sports tourism
   • Tourism economics and policy
   • Strategic management
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   • Indigenous tourism

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   • IT for travel and tourism online development
   • Rural and regional tourism online development
   • E-business innovation in sustainable travel and tourism

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4. Destination management products
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