



**~ Chapter 9 ~**

Thesis Review, Limitations and  
Concluding Remarks

## Chapter 9

### **Thesis Review, Limitations and Concluding Remarks**

#### **9.0 Introduction**

This chapter brings the thesis to a conclusion. It has five sections. Section 9.1 provides a brief synopsis of the content and deductions of each chapter while Section 9.2 presents a summary of the research findings. Section 9.3 reviews the research approach adopted for this study. This is done to highlight the strengths of the approach taken in developing inductively derived theory about the subject area studied. Nonetheless, this study does have its limitations, and these are detailed in Section 9.4, providing options for further study. Section 9.5 provides some concluding observations and remarks for enhancing the acceptance and use of visitor education as a park management tool.

#### **9.1 Thesis review**

Chapter 1 established the objective of the research as the understanding of why existing approaches to visitor education were proving ineffective in the QPWS, and more generally in other Australian and possibly worldwide protected area agencies. The role and value of visitor education in the QPWS immediately prior to and during the life of the Queensland Government's 1999–2001 Corporate Plan for the Environmental Protection Agency and Queensland Parks and Wildlife Service was the focus of this investigation – a period that was significant as it marked the first two years of the Queensland Government's initiative to amalgamate its environmental protection obligations under one central agency. It was in the EPA's Corporate Plan that the Queensland Government said that they were going to revitalise the visitor education capacity of the QPWS. In setting the scene for this study, Chapter 1 also traced the evolution of the protected area concept and outlined the significance and management of protected areas and the use of visitor education as a park management tool. It also established that while the role and value of visitor education was well documented and considered a core function by many Australian protected area agencies, its acceptance and integration with an organisation's systems and processes was not complete.

Chapter 2 presented a review of the literature in the context of this study and as it applied to government policies and the use of visitor education as a park management

tool. The framework governing the use of visitor education in a protected area management environment was traced to establish the link between Government intent and operational procedures of a protected area agency. In addition, the concept of organisational culture was also explored to illustrate that the link between policy and practice was based on the priorities, beliefs and norms of individuals and groups within an organisation. This aspect of the study was important, as many of the internal documents analysed claimed that a negative organisational culture towards visitor education existed within the QPWS. The chapter also explored the role and value of visitor education as a park management tool. It established the efficacy of visitor education, along with barriers to its implementation at an operational level. The chapter identified visitor education as an integral part of protected area management; however, as the literature suggested, many barriers existed, thus diminishing the role and value of visitor education in many protected area agencies. Models for establishing management effectiveness and the delivery of 'best practice' visitor education were also outlined.

Chapter 3 detailed the context and methods employed for establishing whether the issues identified in Chapter 1 and explored in Chapter 2 were affecting the QPWS's ability to achieve key visitor education outcomes. Case study along with policy/document and content analyses and survey questionnaires were the principal research tools employed to inductively build theory and to examine the framework in which visitor education operated in the QPWS.

Chapters 4, 5 and 6 reported the environment in which visitor education was operating at the time the Queensland Government expressed, as a policy intent, a desire to revitalise the visitor education capacity of the QPWS. Chapter 4 outlined the organisational structures and frameworks influencing the role and value of visitor education in the QPWS. Chapter 5 described interpreter and park manager awareness and use of their organisation's *I & E Strategy*, a document designed to provide the framework and guide the development and implementation of regional, district and park visitor education strategies and actions. Chapter 6 detailed the opinions held by interpreters and park managers as to the acceptance and use of visitor education in the QPWS. Each chapter addressed a particular research objective to provide data on which thesis assumptions could be drawn.

Chapter 7 brought together and critiqued the main issues identified in Chapters 4, 5 and 6 to determine whether these issues were in fact significant barriers to the work

that interpreters performed and to the acceptance and use of visitor education as a park management tool. This chapter also explored the implications of these issues for a revitalised QPWS visitor education capacity while Chapter 8 provided the means to ensure this revitalisation would be successful. It presented the actions and strategies that would enhance the role, value, acceptance and use of visitor education as a park management tool. In particular, four principal actions and five strategies were detailed.

## **9.2 Summary of findings**

The research was conducted in three stages: thesis development; investigation and evaluation; and assessment and reporting (refer Figure 3.1). Stage 1 (Thesis Development) established the theoretical context of the study. Stage 2 (Investigation and Evaluation) consisted of three inter-related parts that established the investigative component of the study, while Stage 3 (Assessment and Reporting) drew the objectives explored in Stage 2 together to critique the key issues and their implications as a means of identifying the preferred strategies and actions to enhance the Queensland Government's revitalisation of the QPWS's visitor education capacity. Stage 2's three inter-related parts and Stage 3 each had a research objective and associated research questions. These are discussed in more detail in the following sections.

### *9.2.1 Establishing adequacy of organisational policies and processes*

The first part of the Investigation and Evaluation stage involved establishing the policies and priorities for visitor education as a park management tool in the QPWS. The Government's stated intent to revitalise the QPWS's visitor education capacity suggested that existing policies and processes were inadequate in assisting the government in meeting its nature conservation agenda. Consequently, the first research objective was:

*To identify the ways in which existing organisational policies and processes established the role and value of visitor education as an integral aspect of protected area management in Queensland.*

This objective was strongly linked to identifying the policies and processes that underpinned protected area management in Queensland, and in particular, the organisational policies and processes that guided the planning and delivery of visitor

education activities across the State. It was also motivated by the fact that the QPWS (and its predecessor, the QNPWS), like many Australian protected area agencies, did not have a process in place to assess the implementation or effectiveness of key government priorities for the conservation of nature nor the effectiveness of its visitor education services (DNRE 1999), the greatest gap being benchmarks by which organisational performance and/or the achievement of key government nature conservation outcomes could be measured. This research objective allowed me to establish the organisational context in which visitor education in Queensland operated prior to and during the life of the *2000–2002 QPWS Interpretation and Education Strategy*. An important finding was that policy provides the link between legislation and government directives and the strategies to conserve and manage visitors, protected places and species at an organisational and operational level.

### *9.2.2 Assessment of whether current visitor education policy was meeting the objectives of protected area management in Queensland*

The second part of the Investigation and Evaluation stage addressed current QPWS visitor education policy and its ability to meet the objectives of protected area management in Queensland. This was because the conservation/recreational use of protected areas is a management conundrum. Visitor education (along with a range of park management techniques such as site hardening [visitor infrastructure and facilities], regulation [zoning and permitting] and enforcement [checking compliance and enforcement]) is the preferred medium by which the Queensland government educates the public about conservation and the need to minimise one's impact while recreating in natural areas. Thus, the second research objective was:

*To assess the extent that existing visitor education policies and processes were meeting the objectives of protected area management in Queensland.*

Determining the level of awareness and support held by interpreters and park management staff for the organisation's *I & E Strategy* was an integral aspect of this objective. So was establishing the level of agreement between interpreters and park managers as to the success of the *I & E Strategy* to achieve key nature conservation outcomes. This research component established that while the *I & E Strategy* did provide a framework for the planning and delivery of visitor education activities across Queensland, awareness and ownership of this document were lacking among interpreters and park managers. The net effect of this situation was a culture of

interpreters 'doing their own thing' focusing on immediate park and/or area needs rather than a statewide/organisational approach to visitor education planning and delivery. Better communication of this document and its purpose was required.

### *9.2.3 Identification of organisational barriers to the acceptance and use of visitor education as a park management tool*

The third part of the Investigation and Evaluation stage was undertaken in response to establishing the extent of the issues identified in the literature, and in particular, issues identified as part of the review of organisational policies and reports conducted during the Thesis Development stage. The third research objective investigated during this phase was:

*To identify organisational barriers to the acceptance and use of visitor education as a park management tool.*

The opinions held by interpreters and park managers as to the role and value of visitor education in the QPWS were central to this objective, as was the emphasis QPWS park managers (District Managers, Senior Rangers and Rangers-in-Charge) placed on visitor education as a park management tool. This investigation also aimed to determine the effect that organisational culture (to accept and/or implement change) had on the planning and delivery of visitor education activities in the QPWS. This phase of the study established five key issues affecting the ability and capacity of interpreters to deliver on the Government's community nature conservation agenda: the lack of knowledge, use and/or ownership of the *I & E Strategy*; inability of the *I & E Strategy* to link the intentions of Government and the activities performed at an operational level; a lack of funding and resourcing for visitor education; a reduced capacity to deliver QPWS's community nature conservation agenda; a lack of support provided by supervisors and/or work colleagues; and a (perceived) negative organisational culture. Collectively, these barriers represented the institutional problems that would need to be addressed for the Queensland government's revitalisation of its QPWS visitor education capacity to be successful.

### *9.2.4 Enhancing the role, value, acceptance and use of visitor education among park management staff*

The Assessment and Reporting stage of this study brought together the results of the first two stages of this study to determine the preferred strategies and actions required

to ensure and enhance the role, value, acceptance and use of visitor education as a park management tool. The research objective investigated during this final stage was:

*To identify ways in which the acceptance and use of visitor education can be enhanced in agencies with a responsibility for protected area management*

The meta-analysis and synthesis process undertaken as a function of the Assessment and Reporting stage allowed key issues identified during the Investigation and Evaluation stage to be assessed and reported, and for implications for the revitalisation of the QPWS's visitor education capacity to be drawn. This phase of the study then set the scene for the final research objective to identify the actions and preferred strategies that would enhance the support for visitor education as a park management tool in the QPWS and perhaps for other agencies with responsibility for protected area management in general. Four key actions emerged. These were:

- **Better promotion of visitor education as a park management tool** – by adopting and implementing strategies that enhance the value and acceptance of visitor education as a park management tool among park managers and operational staff.
- **Clear and adequate internal communication** – to inform and reiterate to all levels of the organisation the role and value of visitor education as a park management tool, and the policies that guide its delivery.
- **The development of an effective I & E Strategy** – that provides a clear link between the mandate of the organisation, available resources and the means to implement visitor education activities at an operational level.
- **The sourcing of adequate funding and resources** – by lobbying for, and investigating alternative means to supplement funding and resourcing shortfalls.

The strategies that interpreters most favoured as a means of enhancing the acceptance and use of visitor education within the QPWS were:

- working collaboratively with others
- lobbying for better resources and more funding
- adopting realistic targets and workloads
- better promoting role of interpreters and interpretation
- experimenting with new ideas and practices.

### **9.3 Specific observations and recommendations**

The following discussion provides some specific observations and recommendations to the study undertaken, focusing briefly on the implications identified in Chapter 7 and the strategies detailed in Chapter 8 to enhance the role, value, acceptance and use of visitor education as a park management tool:

#### **Communication and promotion of visitor education**

The need for effective communication between interpreters and between interpreters and park managers is essential. Not only is assistance and co-operation a necessary component for the achievement of visitor education outcomes, but also the support and advice of peers and work colleagues is crucial for enhancing the value and acceptance of visitor education as a park management tool. In addition, park managers need to take responsibility too – to be more open and informed on the benefits and application of visitor education.

Many interpreters believed park managers did not understand the work that they did, and that if only park managers knew what they did, then park managers would most likely agree with them and use visitor education accordingly. This may indeed be the case. Consequently, interpreters should take whatever steps possible to share their knowledge of how visitor education can assist park managers in the management of a protected area. This is an important goal in itself and an important component of earning park managers support and co-operation. However, communication based only on information dispersal is unlikely to be sufficient. Interpreters need to take more responsibility for helping park managers through all phases of the decision-making process. That is, if interpreters want park managers to use visitor education as a fundamental part of park management, then they will need to put greater effort into demonstrating how visitor education can assist park management activities. For example, in encouraging park managers to implement visitor education campaigns, interpreters need to include instruction on when visitor education can make a difference. Park managers need to know when and where visitor education is most effective. Interpreters should also be aware that in some situations, a greater emphasis on park management techniques such as site hardening, access restrictions or enforcement may be more appropriate than visitor education.

Similarly, communication between interpreters and between interpreters and park managers not only needs to focus on what is being communicated but also on how that



communication is conducted. Different means of communication clearly influence how easily the information is learned and remembered. For example, the use of face-to-face contact and direct, in-context training is clearly preferable. But all media channels are worthwhile (e.g. in-person, electronic, printed), and reliance upon any single option (e.g. email) is unlikely to be effective. Consistent communications should be introduced and reinforced using a variety of means. In each case, the consistency, credibility and attractiveness of the message source should be carefully maintained.

### **Organisational culture**

The management of protected areas and the distribution of responsibility across the State result in different views of the role and value of visitor education. Park managers, wildlife officers, ecologists and scientists each view the use of visitor education as a park management tool differently. Thus, support for visitor education will vary. However, the promotion of visitor education as a park management tool and as a method to engage the community in nature conservation is essential for its acceptance and support as part of the culture of the organisation.

Staff commitment to the goals of the organisation and the priority they place on initiatives to achieve nature conservation outcomes also produce a culture that supports some management activities and not others. While the implication of this culture on the use of visitor education as a park management tool requires further investigation, interpreters' current belief is that a negative organisational culture towards visitor education exists. A negative organisational culture is a real constraint and an impediment to the effective functioning of the QPWS, the acceptance of work groups by other work groups and the achievement of specific nature conservation goals.

Contact between the manager and the public is a vital element of conservation management. The promotion of a positive organisational culture will allow park management tools such as visitor education to develop positive relationships between people and the environment and between people and government agencies with nature conservation obligations. An informed, supportive public is also important to government decision-making and the allocation of resources for conservation.

### **I & E Strategy development and implementation**

An *I & E Strategy* should respond to organisational complexity and provide strategies that meet the needs of different protected areas, districts and regions. This is because the needs of each protected area, district and region differ and therefore tend to subvert the achievement of a state-wide approach to visitor education. An *I & E Strategy* needs to be an integral part of all organisational policies and documents that refer to the education of park visitors and the general community. The development of regional interpretation and education strategies as an extension of the organisation's *I & E Strategy* is also necessary for the achievement of state-wide nature conservation outcomes.

An *I & E Strategy* should also have a long-term outlook. It should be easy to read, provide clear direction, include outcomes and actions that are achievable, and contain a review process which allow changes in organisational policy and priorities to be incorporated in a timely manner. It should also enlist a marketing approach that draws on the personal values and ambitions of the people required to implement the *I & E Strategy*. The formulation of an effective *I & E Strategy* is difficult; however, the main implementers of the *I & E Strategy* (interpreters and park managers) should be consulted to obtain their views on the practicability of the proposals and to enlist their support. This will provide an enhanced level of ownership and ensure that visitor education activities developed and conducted at an operational level support the stated aims of the organisation.

The development of effective visitor education materials and activities requires knowledge of the target audience, their perception of the environment and the purpose of their visit, in order to adjust activities accordingly to obtain maximum educative results. The evaluation of materials and activities to determine if desired outcomes have been achieved is also a necessary visitor education activity. Research should be included as a performance measure to ensure that this activity is undertaken. This will allow materials and activities to be responsive to the needs of the audience and better able to meet the objectives of the organisation.

### **Funding and resourcing**

The mission of protecting and conserving Queensland's natural assets can be met only if the QPWS can confront the threats of Government fiscal policy and tighter budgets. The evolving economics and demographics of Queensland mean that there is less

money to manage the State's protected area estate. Adequate funding is necessary for visitor education to be responsive to the educational needs of the community, otherwise the QPWS's goals of promoting understanding and developing positive human/nature relationships will be largely unmet. Consequently, visitor education may require its own budget, and/or alternative sources of money.

A dedicated visitor education budget will facilitate community engagement and promote the QPWS as the lead agent for nature conservation in this State. It will also allow interpreters to properly plan, co-ordinate and implement visitor education activities across the State. This is important for meeting the nature conservation objectives of the organisation, for continuity, and for assuring quality outcomes.

User-pays interpretation is a viable option. It is an accepted practice among many protected area agencies as a means of recouping some of the costs for providing visitor education services to the public. However, most QPWS interpreters disagreed with user-pays interpretation as an initiative to supplement funding shortfalls, at the time of this study. To be successful, user-pays interpretation will require the support of all interpreters as a means of offsetting visitor education funding shortfalls.

Interpreters may also need to think 'outside the square' on how they can attract additional funding. Commonwealth and State grants and funds are available for a wide range of initiatives. The promotion of the health benefits of getting people active through visiting and enjoying national parks and other protected areas should be explored. The *Healthy Parks Healthy People* initiative is a good example. Parks Victoria initiated the *Healthy Parks Healthy People* programme in May 2000 to encourage increased visitation to parks and gardens by highlighting their health benefits. The Sydney Parks Group in New South Wales, the Department for Environment and Heritage in South Australia and the Department of Environment and Conservation in Western Australia have since adopted this initiative (refer: [http://www.nationalparks.nsw.gov.au/npws.nsf/Content/healthy\\_parks\\_story](http://www.nationalparks.nsw.gov.au/npws.nsf/Content/healthy_parks_story)).

#### **9.4 Appropriateness of research methodology**

The research reported in this thesis was motivated by a desire to understand why the Queensland Government saw a need to revitalise the QPWS's visitor education capacity, and where possible contribute to this objective in some way. This involved

understanding the role and use of visitor education within the QPWS from policy to implementation. A grounded theory approach, with its emphasis on developing inductively-derived theory about a phenomenon, has proved effective in guiding the direction and methods of this research study. The focus on case study and the use of questionnaire surveys to obtain quantitative and qualitative data are instruments of the grounded theory paradigm, and are well suited to this type of study where the opinions of a geographically and organisationally diverse group of employees were required.

While the use of focus groups did not result in the desired debate and validation of survey data, one-on-one discussions with peers and key QPWS staff working in interpretation and park management areas were a significant feature of each research stage. Collaborative efforts in the design and piloting of the two survey questionnaires were considered essential if QPWS interpreters and park managers were to embrace the significance of the study to identify and (hopefully) resolve issues affecting the acceptance and use of visitor education as a park management tool. Collaboration was also important in building trust with the team leader of the Interpretation and Community Relations unit. Without this trust, access to many of the internal documents produced by interpretive staff would not have been as forthcoming. Collaboration with the Interpretation and Community Relations unit team leader also allowed two reports detailing the preliminary findings of the two surveys to be received and forwarded onto the QPWS Director for examination (Appendix 8).

Nonetheless, this study provided an opportunity to study policy, policy implementation, organisational culture and values in a geographically dispersed organisation, which is rare among the types of organisations and groups normally considered in the literature.

### **9.5 Limitations of the study, and future research**

All studies have limitations and this research is no exception. Overall, this study had three general limitations that provide opportunities for future research:

1. The short time period investigated
2. The focus of trying to understand one aspect of the organisation's overall culture;  
and
3. The specific nature of the research undertaken.

This study investigated a significant period in the history of visitor education in the QPWS. It covered a period of change in the way the Queensland Government administered and managed its environmental obligations. The EPA drew together all government agencies responsible for managing the environment into one agency. The Queensland (National) Parks and Wildlife Service went from being an independent government department to a division of a large government agency. This in itself raises many issues worth investigating, including the affect of such a merger on employees (eg. sense of belonging, career direction/aspirations, group dynamics), and the effectiveness of large bureaucracies (eg. policy implementation and ability to achieve key outcomes, prioritisation and resourcing of non-core business). Yet the study focused on a single aspect of the organisation's Corporate Plan that was to guide EPA/QPWS policy and direction for the following two years. No attempt was made to follow this thread through subsequent Corporate Plans.

Parker (2000, p63) suggests that in "order to prescribe a culture for all (or part of) an organization it is necessary to understand the nature of the activity that the whole or part is engaged in". In respect to the EPA/QPWS, the mandate of the organisation, the various groups within the organisation and the characteristics of individuals interact to produce a dynamic mix of understandings and management actions that underpin its approach to nature conservation and the use of visitor education as a park management tool. Little is known about organisational structures, cultures and management processes of organisations charged with managing natural environments (Ross 2001). There is a need to increase our understanding of organisational culture and subcultures, including inter-group processes in organisations involved in protected area management. This is necessary to understanding priorities and approaches of staff to on-ground management of natural areas. It is also necessary to put into context interpreters' assertions that a negative organisational culture towards visitor education exists within the QPWS.

This study also had a more universal limitation that may affect its contribution to the understanding of institutional problems and barriers to the acceptance and use of visitor education as a park management tool. The study focused on a particular function of a division of a larger government agency responsible for the administration and management of protected areas in the State of Queensland, Australia. It aimed to understand why the Queensland Government said as a policy intent that they were going to revitalise the visitor education capacity of their Parks and Wildlife Service. The study did not attempt to place this issue in the context of the world stage, apart

from a few general references that indicated that the issues being investigated here were problems elsewhere as well. While the actions and strategies that emerged from this study are applicable for enhancing visitor education in the QPWS, there is a need to establish the global extent of the institutional problems and barriers affecting the acceptance and use of visitor education as a park management tool.

As a result, specific and general recommendations for future research would include:

Specific

1. Longitudinal research to be undertaken to trace the emphasis placed on visitor education in EPA/QPWS policy and other strategic documents over time.
2. Qualitative research to be undertaken to test the reality of interpreters' convictions that a negative organisational culture towards visitor education exists within the EPA/QPWS as a sub-culture of the organisation's overall culture.
3. Comparative research to be undertaken to establish the global extent of the institutional problems and barriers affecting the acceptance and use of visitor education as a park management tool.

General

4. Similar studies to be undertaken across each Australian State and Territory protected area agency to determine the institutional problems and barriers affecting the acceptance and use of visitor education as a park management tool within each organisation.
5. Longitudinal research to be undertaken to trace the contribution that visitor education has on visitor's environmental knowledge, attitudes and behaviours over time.

## **9.6 Conclusion**

Protecting the environment is one of the greatest challenges facing governments and societies around the world. Meeting this challenge requires sophisticated planning, research, monitoring, recording, management, delivery and evaluation. Visitor education – communicating with and educating the community – is an integral and important part of any effective environmental management and protection program, as

it encourages people to respect the environment, conserve nature and lead environmentally-responsible lives. However, without appropriate resourcing, an informed and co-operative interpretive workforce, and the provision of unqualified support from non-interpretive work colleagues, supervisors and other management staff, visitor education achievements will be negligible and place further dependence on park management techniques and regulatory actions to manage depreciative behaviours.

This study details that QPWS interpreters have the skills and experience to make a positive contribution to the goals of the organisation, but there are many barriers affecting their performance, such as high workloads, short project timeframes, and the perceived presence of a negative organisational culture towards the acceptance and use of visitor education as a park management tool. This study has also detailed that there is a lack of communication between interpreters about the organisational resources available to guide the visitor education activities they perform and between interpreters and park managers. The result is a weakening of morale and work effectiveness. These barriers threaten the QPWS's capacity to implement the Government's community nature conservation agenda for the education of visitors and the general community. They may also impede the QPWS's ability to attract and retain employees with the education, skills and dedication of the current workforce. An active, robust visitor education capacity is necessary if the Queensland Government is to achieve its community nature conservation agenda.

The lessons learnt from this study apply not just to the understanding of the role and value of visitor education within a workplace such as the QPWS but also for many other organisations that use visitor education to explain natural phenomena, inform visitors of management issues, provide advice about natural hazards and the safety precautions one can take, and promote the adoption of a minimal impact ethic.

THE END ...

## **Publications arising from this thesis**

### **Refereed journal articles**

Parkin, D. and Morris, K. (2005), '*Pete's Story: Interpreting the Consequences of Risk-Taking Behavior*', *Applied Environmental Education and Communication*, v4, pp139–150.

### **Reports and other publications**

Parkin, D.R. (2003a), *Organisational acceptance, community engagement and the use of conservation education as a park management tool: the interpreter's view*, an unpublished report to Pamela Harmon-Price, Senior Interpretation Officer, Queensland Parks and Wildlife Service, Environmental Protection Agency on the results of a survey to determine interpreter views on the role and value of interpretation within the Queensland Parks and Wildlife Service, Brisbane, 80p.

Parkin, D.R. (2003b), *Organisational acceptance, community engagement and the use of conservation education as a park management tool: the park managers view*, an unpublished report to Pamela Harmon-Price, Senior Interpretation Officer, Parks Division Queensland Parks and Wildlife Service, Environmental Protection Agency on the results of a survey to determine QPWS park manager acceptance and use of interpretation and education as a park management tool, Brisbane, 37p.