Methodology Description

# Queensland Protected Areas Integrity Statements (Australia)

### 1.1 Organisation

Queensland Parks and Wildlife Service – QPWS (Australia)

### 1.2 Brief description of methodology

To assess whether management is protecting the unique values of each protected area and as an 'early warning' system for emerging threats and impacts, QPWS has developed a monitoring and reporting framework which can be used for ecological integrity, cultural integrity and presentation (community relations and visitor management). The evaluation tools can be integrated into management planning and periodic reporting. This methodology is based on the identification of values and indicators and helps managers assess current status and activities, identify gaps and develop future programs on a strategic basis. The development of indicators from a values based approach allows strategic direction setting that is not solely reactionary to current threats. Directions for monitoring can be adapted to changing situations including the availability of funding and research partners very quickly.

### 1.3 Purposes

to improve management (adaptive management)

for accountability/ audit for prioritisation and resource allocation to raise awareness and support

# 1.4 Objectives and application

The 'integrity statements' are aimed primarily at assessing the status of values of protected area and should be used as tools for adaptive management. By 'rolling up' results across a district they are also useful for setting priorities for monitoring, research and management interventions, and thus for allocating resources on an informed and logical basis. In addition, they provide useful information for public communication and awareness raising. They are designed to be used in combination with a 'rapid assessment' scorecard which assesses the adequacy of input and processes.

By 2007, approximately 90 Integrity statements had been completed for protected areas in the Southern region of Queensland. These reserves ranged from national parks of  $150,\!000$ ha to very small Conservation reserves of less than 30ha . The method is not fully adopted throughout the parks system.

# 1.5 Origins

The methodology was originally developed as a commitment in the protected area system Master Plan (Queensland National Parks and Wildlife Service 2001), with ideas based on the 'ecological integrity' approach taken in Canada. A workshop of staff and other experts in 2000 defined the categories of values – both ecological and cultural - which should be assessed throughout the parks system, and recommended that while some common factors should be measured in all locations, individual key values defined for each protected area should be the basis for monitoring and reporting systems. Due to the large number of protected areas and the paucity of recorded information in most cases, it was recognized

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that an integrated system of monitoring and reporting should be used to: Ensure that information from all sources (scientific, traditional, community, expert opinion and anecdotal) should be recorded in a consistent and easily accessible form; and

• Set priorities for future monitoring and research in the protected area system. To maximize the accessibility and usefulness of evaluations to all field staff, an excel spreadsheet was designed to capture the information for natural, cultural and presentation values, and these automatically generate documents suitable for public distribution. Over time, further ideas from a range of sources including Parks Canada (Parks Canada Agency 2005), The Nature Conservancy (Parrish *et al.* 2003) and the Enhancing our Heritage toolkit (Hockings *et al.* 2007) have been incorporated and the spreadsheets can now be used to generate monitoring priorities.

### 1.6 How the methodology is implemented

The spreadsheets are usually completed by planning or natural resource management staff from regional or district officers. People with broad knowledge of natural and cultural systems of the area, as well as good recording and facilitation skills, are needed. Some training in the methodology and its aims is necessary beforehand. The usual process is:

Stage one: preliminary gathering of base protected area data (including plans, reports and papers), and drafting the key values, directions and threats where this information is available. Effective work at this stage reduces staff time at workshops and increased the credibility of the assessor. From the often vast array of possible values, key values are identified. This is usually done through qualitative judgment, but can be further quantified if necessary Criteria for key values (natural, cultural and presentation) include:

- 1. representativeness and extent;
- 2. rarity and irreplacability (e.g. rare and threatened species; most important habitat for an endemic species, only remaining example of building type);
- 3. level of threat;
- 4. level of importance to the local or wider community and to park visitors (e.g. landscapes with traditional importance; animals recognised as special by visitors, even if common species);
- 5. importance to functioning of ecosystem;
- 6. usefulness as indicator of park integrity, climate change, or other critical factors;
- 7. current target for monitoring and research.

Stage two: workshops with protected area staff and other experts to confirm or add to the list of key values, an to estimate the desired and current status of the defined values and any management issues associated with their conservation, as well as threats to the protected area. Information is based on the knowledge of these people as well as written information, monitoring records, photographs and remote sensing imagery, protected area journals etc. Data is recorded directly onto computer and projected for group consensus. These workshops can usually cover at least one protected area in a day, or more depending on the complexity of the protected area, the number of people involved, and the amount of information available. In some case these workshops are held on-site and field conformation may be included, but generally existing knowledge is used and workshops can be conducted in district offices. Follow-up workshops or extended workshops are needed to complete the monitoring plan with decisions on attributes, measurable indicators, monitoring methods and acceptable threshold levels.

*Stage three*: Information and write-ups are completed and confirmed, further expert opinion may be sought, and summaries produced, and the completed sheets are returned to field staff for their review and use. Follow-up assessments should be completed every three to five years to reveal trends and emerging issues.

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# 1.7 Elements and indicators

Natural Values	
Significant landscapes and regional	Scenic values
ecosystems	Significant regional ecosystems
	Significant landscapes
	Research values
Significant plants and animals	Rare and threatened plants
	Rare and threatened animals
	Species of special significance
	Research values
Ecosystem services	Catchment protection
	Landscape function
	' benchmark' value
	Air quality
	Other
Reserve in Context	Surrounding land uses
	Impact of these on the park
Threats to natural values	Pollution from adjacent areas
	Impacts from park management
	Siltation/erosion
	Increasing fragmentation of habitat in the region
	Internal Fragmentation
	Pest Plants
	Pest Animals
	Inappropriate fire regimes
	Visitor Impacts
	Hydrological modification
	Other

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Natural values - potential	Vegetation and habitat extension and corridors Improved environmental management of park Improved environmental management off Park Other
Cultural values	<u>'</u>
Indigenous	Known values and significance to Indigenous people
	Indigenous material culture
	Stories and histories
Non-indigenous culture	Material culture
	Social values
	Aesthetic values
	Cultural landscapes
	Other
Threats to cultural values	Fire
	Vegetation
	Erosion
	Weathering (wind and water)
	Pests (termites)
	Inappropriate use of cultural sites or buildings
	Recreation impacts
Cultural values – potential	Potential for cultural tourism
	Community partnerships - management or
	presentation
	Interpretation potential
	Research Potential
	Other
Key values - presentation/ interpretation	Geology/ landscape
	Plants/ vegetation
	Animals
	Culture/ heritage
	Others
Major recreation values/ opportunities	List activities
	Landscape settings
Threats to presentation values	Pest Plants / Weeds
	Pest Animals
	Erosion / siltation
	Over usage / visitation pressure
	Vandalism or unauthorised use
	Conflict between user groups
	Management limitations

# 1.8 Scoring and analysis

X

# 1.9 Further reading and reports

X

Download the RAPPAM methodology in English, Spanish or Portuguese.

Click here for further information on the RAPPAM tool.

# **Protected Areas Management Effectiveness Information Module Methodology Description**