

# INDICATORS FOR ASSESSING GOOD GOVERNANCE OF PROTECTED AREAS: INSIGHTS FROM PARK MANAGERS IN WESTERN AUSTRALIA

Brooke P. Shields<sup>1\*</sup>, Susan A. Moore<sup>1\*</sup> and Paul F.J. Eagles<sup>1,2</sup>

- \* Corresponding author: S.Moore@murdoch.edu.au, also brooke.shields3@bigpond.com
- <sup>1</sup> Environmental and Conservation Sciences, School of Veterinary and Life Sciences, Murdoch University, South Street, Murdoch, WA 6150, Australia
- <sup>2</sup> Department of Recreation and Leisure Studies, University of Waterloo, 200 University Avenue West, Ontario, N2L 3G1,Canada

#### **ABSTRACT**

Effective management of protected areas relies on good governance. An assessment was undertaken using the standards provided by the United Nations Development Programme's characteristics of good governance for sustainable development as a starting point. Being able to assess governance based on indicators is essential for ongoing effective management through improving practice. Although indicators and evaluation frameworks are available, they do not offer protected area managers a quick, comprehensive measure of governance. We used a three-round Delphi method with a cohort of 33 managers and researchers from government and non-government organizations, and universities. This participatory research process established a set of 20 indicators addressing public participation, consensus orientation, strategic vision, responsiveness, effectiveness, efficiency, accountability, transparency, equity, and rule of law. Accompanying output measures were provided by management plans, annual reports, audits, and stakeholder engagement. The findings emphasize the contributions of management plans and annual reports in establishing evaluation requirements and providing a place where results are publicly available. Further participatory research to refine these indicators and apply them in a diversity of contexts is advocated.

**Key words**: Delphi method, indicators, governance principles, output measures, protected area governance, protected area managers, standards

### **INTRODUCTION**

As the amount of land and waters in protected areas continues to grow, it is important that such areas are managed effectively and sustainably, particularly as they often have insufficient financial and other resource inputs (Oli et al., 2014). As a result, good governance becomes a fundamental requirement to their success, as limited resources can only be effectively used if they are allocated wisely based on careful evaluation of past performance and prediction of future needs. Good governance has equity and including all stakeholders as particular concerns.

Protected areas are 'clearly defined geographical space (s), recognized, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values' (IUCN, 2008). They have

economic as well as intrinsic importance, given their provision of ecosystem services that benefit humans, such as recreation, shelter, food and medicines, as well as benefits beyond human needs (Costanza et al., 1997; Dudley, 2008; Eagles et al., 2002; Gurung, 2010; Hoekstra et al., 2005; Moore et al., 2009). Good governance of such protected areas is essential for sustainable development underpinned by functional ecosystem services.

Good governance is essential for the successful management of all the planet's protected areas. Today, it is no longer solely a government responsibility and is often a process undertaken by a number of parties (Borrini-Feyerabend & Hill, 2015; Graham et al., 2003). Being able to identify and strive for good governance is an essential feature in successfully managing protected areas. Over the last couple of decades there has been an

Table 1: United Nations Development Programme characteristics of good governance and their descriptions (Source: UNDP, 1997)

UNDP Characteristic\*

Description/Standard

ONDP CHaracteristic	Description/Standard
Participation     (Legitimacy and voice)	All men and women should have a voice in decision-making, either directly or through legitimate intermediate institutions that represent their interests. Such broad participation is built on freedom of association and speech, as well as capacities to participate constructively.
2. Consensus orientation (Legitimacy and voice)	Good governance mediates differing interests to reach a broad consensus on what is in the best interests of the group and, where possible, on policies and procedures.
3. Strategic vision (Direction)	Leaders and the public have a broad and long-term perspective on good governance and human development, along with a sense of what is needed for such development. There is also an understanding of the historical, cultural and social complexities in which that perspective is grounded.
4. Responsiveness (Performance)	Institutions and processes try to serve all stakeholders.
5. Effectiveness and efficiency (Performance)	Processes and institutions produce results that meet needs while making the best use of resources.
6. Accountability (Accountability)	Decision-makers in government, the private sector and civil society organizations are accountable to the public, as well as to institutional stakeholders. This accountability differs depending on the organization and whether the decision is internal or external to an organization.
7. Transparency (Accountability)	Transparency is built on the free flow of information. Processes, institutions and information are directly accessible to those concerned with them, and enough information is provided to understand and monitor them.
8. Equity (Fairness)	All men and women have opportunities to improve or maintain their well-being.
9. Rule of law (Fairness)	Legal frameworks should be fair and enforced impartially, particularly the laws on human rights.

<sup>\*</sup> Governance principles for protected areas from Graham et al. (2003) are given in brackets in this column.

increasing focus on evaluating the effectiveness of protected areas (Borrini-Feyerabend, 2007; Borrini-Feyerabend & Hill, 2015; Hockings et al., 2004; Hockings et al., 2006), making it timely to extend such evaluations to explicitly consider and measure governance.

Several extensive sets of indicators for measuring governance have been proposed but determination of a small number of broadly applicable indicators has remained elusive (Abrams et al., 2003; Borrini-Feyerabend et al., 2013). Coad et al. (2013) noted that governance aspects of protected area management are in urgent need of more detailed and systematic assessments. This is supported by Leverington et al. (2010) who reiterate the importance of evaluation as a vital component of governance. This paper aims to contribute to governance evaluation efforts through developing a small set of indicators that can be readily understood and applied by protected area managers in Australia and elsewhere. Having this set of indicators will have a number of benefits including providing protected area managers with the ability to identify strengths and weaknesses within their governance arrangements, and facilitating comparisons between similar areas within and among countries, thus potentially enabling the sharing between countries of more specific information, strategies and resources for protected areas facing similar issues.

### • Principles of good governance

Good governance for protected areas has been summarized as a set of principles: legitimacy and voice, direction, performance, accountability, and fairness and rights (Borrini-Feyerabend & Hill, 2015). These principles have a particularly strong focus on including all stakeholders and a concern for equity. They were first explicitly articulated by Graham et al. (2003), for consideration at the World Parks Congress in Durban 2003, and are based on the United Nations Development Programme's (UNDP) list of the characteristics of good governance (UNDP, 1997). The principles from Durban are now widely accepted and appear in IUCN publications on governance (e.g. Borrini-Feyerabend et al., 2013) and most recently in the IUCN book Protected Area Governance and Management (Worboys et al., 2015). The principles are provided as a basis for assessing the quality of governance (Borrini-Feyerabend et al., 2013; Borrini-Feyerabend & Hill, 2015).

The UNDP's list of characteristics of good governance and the associated descriptions were selected as the basis for analysis in this research (Table 1), rather than the IUCN principles for three reasons. First, the UNDP list provides more specifically named characteristics than is the case with the IUCN principles (UNDP, 1997 *cf.* Borrini-Feyerabend & Hill, 2015). Second, the description of each UNDP good governance characteristic provides a simple 'standard' against which



Snorkelling tour at Coral Bay, Ningaloo Marine Park © Tourism Western Australia

performance can be evaluated. Third, each characteristic can then be described by a small number of measurable indicators (as per the Results section of this paper) further assisting in, and being a central element of, this performance evaluation.

# Finding indicators for good governance of protected areas

An extensive list of suggested evaluation indicators was provided by Abrams et al. (2003) in their handbook for field testing focused on evaluating the governance of a protected area, as a participatory process. The authors recommend drawing from the ideas in this comprehensive list of qualitative and quantitative indicators, to develop indicators that best suit the assessment needs. Borrini-Feyerabend et al. (2013), in Annex 2 to their IUCN Governance of Protected Areas Best Practice Guidelines, provide an adapted version of Abrams et al.'s (2003) indicators. They also emphasize the importance of taking a participatory approach. In both publications, these indicators, over 100 in total, are presented according to Graham et al.'s (2003) five principles (i.e. legitimacy and voice, direction, performance, accountability, fairness). In this study, rather than potentially overwhelming managers with this list, we used a participatory approach with managers as stakeholders selecting a small number of indicators they regarded as applicable to their protected areas.

The research presented in this paper involved inviting 33 middle- to senior-level protected area managers and researchers to a workshop to identify indicators for good governance, using the UNDP characteristics of good governance as a starting point (Table 1). The aim was to identify a small number of broadly-applicable indicators and ways of determining their achievement that protected area managers could use, which would provide a comprehensive, quick and effective assessment of the governance of their protected areas explicitly addressing accepted standards (as per Table 1, column 2). The indicators also needed to highlight potential areas of concern, as well as enabling governance processes to be revised, re-implemented and re-assessed, if required (i.e. adaptive management; Pomeroy et al. (2004)). Such indicators would be applicable to individual protected areas, through to protected area systems.

#### • Relationship between effectiveness evaluations for protected areas and evaluating good governance

Over the last two decades robust means of evaluating the management of protected areas have been developed (Hockings, 1998; Hockings et al., 2006), however, the evaluation of governance has lagged behind (Leverington et al., 2010). These protected area evaluations, abbreviated as PAME (Protected Area Management

Effectiveness), provide an overall framework or way of assessing how a protected area or system is performing. The majority of evaluations are based upon the IUCN World Commission on Protected Areas Framework (Hockings et al., 2006; Leverington et al., 2008; Nolte et al., 2010). This framework has six components: context, planning, inputs, process, outputs and outcomes (Hockings et al., 2006). Governance appears as only one of 34 headline indicators servicing PAME evaluations, as the process indicator of 'Effectiveness of governance and leadership' (Leverington et al., 2010).

Lockwood (2010) provides one of the few published efforts to integrate evaluation of protected area governance with PAME evaluations. He suggests placing good governance principles 'above' the evaluation components of context, planning, inputs, process, outputs, and outcomes, while alerting us to the need to consider governance in all six components. Under his schema, the governance indicators being developed in this paper would most likely contribute to evaluating the principles of good governance. Here we extend and operationalize Lockwood's (2010) work by providing indicators for measuring achievement of these principles.

An overview of the methods we used to obtain and record managers' views regarding indicators for protected area governance and the subsequent results follow. The discussion addresses the importance of including stakeholders and publicly reporting performance, and the central place of management plans, annual reports, and audits in this process. We also discuss the importance of including financial considerations in future governance analyses. The conclusion emphasizes the need to undertake governance assessments over time and space, rather than being 'oneoff' events.

### **METHODS**

# Introducing the Delphi process and workshop participants from protected areas in Western Australia

A Delphi process was used to access and explore workshop participants' knowledge. Delphi surveys rely on experts commenting on a set of questions or statements, and have often been used in researching complex issues. The Delphi method also provides the opportunity for an expert group to consolidate a number of responses (Hess & King, 2002; Moore et al., 2009).

To develop the indicators of good governance, the process began with a workshop including 33 middle- to senior-level staff from protected area agencies in Western Australia (WA)<sup>1</sup> including the WA Department

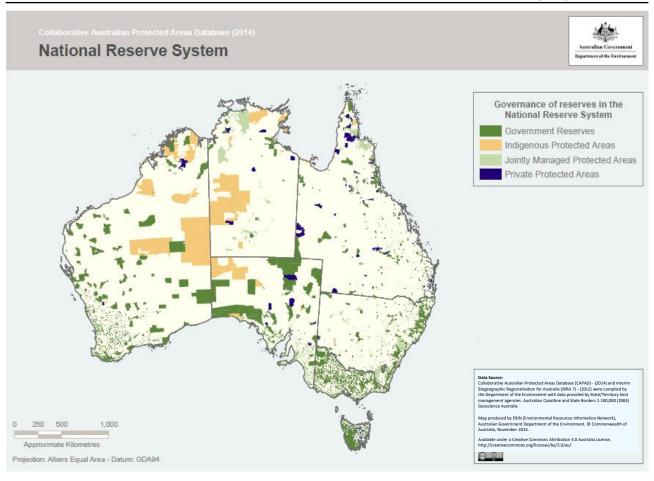
of Parks and Wildlife (WA DPW),<sup>2</sup> WA Conservation Commission, the Kings Park and Botanic Gardens Authority, and staff from non-government organizations involved in protected area management (Parks Forum, Leave No Trace – Australia), plus environmental science and tourism researchers from two universities (Murdoch University, Edith Cowan University). Over half the participants were from the WA DPW, the Department with responsibility for managing parks, marine parks, and reserves across Western Australia. Almost all the WA DPW staff were from the Parks and Visitor Services Division.

The WA DPW is responsible for managing 100 national parks, 13 marine parks and numerous other conservation reserves (WA DPW, 2016), in a state that is twelve times bigger than the United Kingdom and about three times larger than Texas (Virtual Australia, 2016) (Map 1). These areas receive 16 million visits per annum (WA DPW, 2016). They range from tall eucalypt forests in the southwest to the tropical coastlines of the north. Periurban parks experience high visitor numbers, while the more remote Purnululu National Park in northern Australia provides for much lower numbers of visitors, and largely only in the dry season. Spectacular marine parks with displays of tropical corals, such as the World Heritage listed Ningaloo Reef, attract both international and Australian visitors. In recent years indigenous protected areas (IPAs) have increasingly become an important part of Australia's National Reserve System (Map 1). As such, the research reported here is equally as relevant to these IPAs as it is for other types of protected areas.

# The content and processes of the three rounds of the Delphi survey

The workshop and follow-up correspondence were treated as a three-round Delphi:

The workshop was Round 1. Participants were briefed as a single group on the 9 UNDP characteristics of good governance and given a copy of Table 1. The group was then divided into 10 smaller groups (Characteristic 5. 'Effectiveness and efficiency' was split and allocated to two groups), with participants pre-allocated to groups of 2-4 people to ensure a mix of managers and researchers within the smaller groups. Each group was given one UNDP good governance characteristic (e.g. equity). They were asked to discuss and agree on two managerial actions (also described as indicators) that would enable measurement of 'their' characteristic. They were also asked to discuss and agree on how achievement of the indicator would be determined and the results from its measurement made publicly



Map 1. Location of government-managed parks and reserves in the state of Western Australia (western third of the Australian continent) (see map for data sources and attributions)

available (i.e. 'output measure'). These written responses were then collected and typed up as a memo for distribution to all participants, as Round 2.

- For **Round 2**, the typed memo of the workshop deliberations was emailed to all participants. Respondents were asked to read the document, confirm (or otherwise) that the information from their small group deliberations and those of the other small groups were correct, and recommend any changes. They were thus asked to comment on the deliberations of all groups, and therefore on the indicators and output measures for all 9 UNDP characteristics.
- **Round 3** involved collating the memo and Round 2 responses into a table, which was sent to all workshop participants. For Round 3 the authors of this paper divided and re-organized the managerial actions into 20 'indicators as questions' that could be asked of protected area governance with each indicator accompanied by output measures. Participants were asked to review this table and provide comments or changes. These comments were then incorporated in a final table.

In all rounds, respondents were asked to reply, even if they had no comment. They were contacted and recontacted by email, phone and in person (if possible) until they replied.

### **RESULTS**

The response rates were 100 per cent from Rounds 1 and 2, and 79 per cent from Round 3. The lower response rate in Round 3 was due to staff moving or retiring and no longer being contactable or engaged in protected area management.

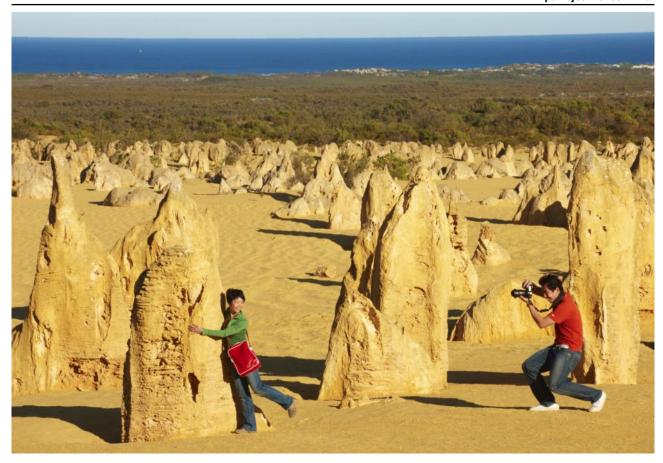
In the **Round 1** workshop numerous managerial actions were listed by participants including: identifying opportunities to be involved in and developing a framework for decision making; publishing legal and policy directives, and publishing annual reviews on the progress in implementing management plans; identifying, measuring and publishing key performance indicators; and publishing annual reports (App. 1). The changes recommended in response to the typed memo of managerial actions (i.e. Round 2 of the Delphi) were minor (e.g. changes in grammar, correcting the names of those in the small groups). The changes in response to the table providing the foundation for Round 3

Table 2: Indicators for good governance of protected areas compiled through Delphi process with protected area managers

Characteristic<sup>†</sup> Indicator Output measure **Annual report** Management engagement Stakeholder 1. Public Are there opportunities for the public to be involved in decision-making including x \* participation management plans (e.g. Conservation and Land Management Act 1984 (WA) says minimum 2 months for terrestrial, 3 months for marine)? Is there an advisory committee for the park consisting of key stakeholder groups Х (including local government, landholders, tourism operators, researchers, conservation/ 'friends of' groups etc.)? 2. Consensus Has a framework been developed for decision making that incorporates stakeholder orientation engagement and/or comment and do they have the right of appeal? Have stakeholder groups been identified for key engagement requirements (e.g. management plans) and are they advised of any decisions/outcomes (e.g. email, annual report etc.)? 3. Strategic Is there a publicly available plan/ strategic direction in place for the protected area vision based on current 'best practice' protected area management guidelines (including stakeholder engagement)? Does this plan outline/ cover any legal and/or other Is adaptive management part of the process of this strategic direction/ plan (i.e. measure, review, evaluate, respond), including publishing the results (e.g. annual report)? Does the protected area management/strategic plan follow the adaptive Responsiveness management process (i.e. measure, review, re-evaluate, report)? Is there a report on the process/progress of management/strategic plan (e.g. annual report)? Is there an asset management system\* to assist with infrastructure/capital works planning, insurance etc.? 5. Effectiveness Is there an annual report that highlights the level of achievement of proposed strategic targets (e.g. KPIs), including biodiversity conservation, visitor experiences/expectations etc.? Are there internal and external auditing processes in place to reveal the degree and success of implementation of strategic/management plans? 6. Efficiency a) Are protected areas managed under one authority or agency? Does the protected area have internal and external auditing processes in place to identify areas where efficiencies can be made? Are there opportunities for work to be conducted using partnerships with stakeholders (e.g. traditional owners, volunteers groups, schools etc.)? 7. Accountability Is there an annual report published that reports on managerial activities and accountability (including financial management, strategic goals/targets, external audit results etc.)? Does the protected area operate within a well-developed framework that is available to the public e.g. management plan that identifies policy, review, systems, KPIs etc.? Are there opportunities for stakeholders and/or the public to participate in protected area management and/or provide feedback? 8. Transparency Does the protected area publish an annual report including finances, staff numbers, visitor numbers, management plan/KPI achievements, stakeholder consultation/ 9. Equity Does the protected area employ and develop the park in accordance with local legal requirements concerning equity (including employment within the protected area, access to interpretation etc.)? 10. Rule of law Does the protected area outline the local/state/federal/international legislation it is governed by and include in its annual report its compliance with these (including any fines/charges within the park)?

<sup>\*10</sup> UNDP categories presented here, rather than the 9 as per Table 1, to retain the split from the Delphi process into efficiency and effectiveness as two separate characteristics.

<sup>\*</sup> Used to show a change as suggested by two or more respondents in Delphi Round 3.



Couple at The Pinnacles, located in Nambung National Park © Tourism Western Australia

responses (i.e. 20 'indicators as questions' and accompanying output measures for good governance) were also minor. These minor comments related to adding, removing or changing the indicators, and clarifying and changing the output measures. Over half of the respondents were happy with the Round 3 table and had no further comments.

Table 2 presents the final results of the Delphi process, that is, it includes the changes recommended through the process. An asterisk (\*) in this table indicates where changes were the result of Round 3 deliberations. An example of a change to an indicator was adding parkspecific reporting to annual reporting in addition to state/provincewide reporting (Table 2, column 4). An example of a minor change is where the wording from the original Round 3 document, where Indicator 4c mentioned the existence of an 'asset management database', was changed to an 'asset management system'.

Regarding comments about the outputs, half of the respondents suggested that the relevant indicator should be included in a management plan, with the UNDP characteristics of public participation and consensus orientation receiving the most attention. Management plans ultimately, in these results, provided an output measure for almost half of the indicators (8 of the 20).

Additional output measures were suggested and have been included in Table 2 for asset management systems; a single governing authority/agency; and compliance with local legal requirements regarding equity.

#### **DISCUSSION**

# • The importance of including stakeholders and publicly reporting on park performance

This participatory research produced 20 indicators, in the form of questions, as well as accompanying output measures (i.e. places where the requirements for the indicator would be detailed and the results from its measurement made publicly available). The output measures were management plans, annual reports, stakeholder engagement, and audits (Table 2). Collectively, these results emphasize the importance placed by managers on including stakeholders in protected area governance and management, and having publicly available reporting of the performance of protected areas. The deep interest in stakeholders illustrates the trend over the last two or three decades where protected area governance has become a more multi-level system, empowering and engaging a wider variety of participants (Lockwood, 2010). Having publicly available reporting of performance shows a deep concern with accountability and transparency through public disclosure.



Helicopter flying over the Bungle Bungle Range, Purnululu National Park © Tourism Western Australia

The interest in stakeholders is reflected in stakeholder engagement as an output measure. Such engagement was identified as an output measure for public participation, consensus orientation, efficiency and accountability (Table 2, column 6). This inclusivity underpins all of the IUCN activities associated with good governance (e.g. Borrini-Feyerabend et al., 2013) and is being increasingly emphasized as essential for successful PAME evaluations (Moore & Hockings, 2013).

A deep concern in having publicly available reporting of the performance of protected areas appears in Table 2 as an interest in management plans and annual reports, where these are publicly available documents. For over half of the UNDP characteristics, a management plan was the identified output measure, except for the characteristics of effectiveness and efficiency where an audit was the identified output measure. The other exceptions were the UNDP characteristic of transparency where annual reports were the output measure, and the characteristic of equity where the measure was compliance with local equity requirements. In some countries accountability of financial management and a basic rule of law may be lacking with respect to protected areas, however, this does not negate the importance of publicly available reporting.

### • The importance of management plans

Importantly, management plans provide a mechanism for specifying a particular indicator, prescribing its measurement, and as a means of reporting periodically and publicly, at a minimum when the plan is revised, on its achievement. Given the importance of these plans, the concerns raised by Eagles et al. (2014) regarding plan quality are worrying. These authors undertook content analysis of 11 published management plans for protected areas within the Ontario provincial parks system. This analysis focused on the question 'What is the level of policy detail on visitor and tourism policy occurring within this sample of management plans?'. They found that the level of policy detail in management plans was low, with a number of provincial-level policies mentioned on the agency website, but not in management plans. This lack of detail could impede determination of whether the standards of good governance have been achieved or not.

### Other ways of reporting publicly on governance performance: annual reports and audits

Annual reports were also an identified output measure for over half of the UNDP characteristics including strategic vision, responsiveness, effectiveness, efficiency, transparency, and rule of law (Table 2). The use of parkspecific annual reports was also highlighted. Such reports are not currently undertaken in Western Australia. The WA Department of Parks and Wildlife is required, however, by its Parliament to report annually on the performance of the system of parks and reserves it manages. Delphi respondents also expressed an interest in park-specific annual reports, especially as a place to report on the implementation and outcomes of adaptive management. Such reporting allows managers to determine whether they are achieving their desired outcomes in an efficient manner (Moore et al., 2003).

Audits were the identified output measure for the UNDP characteristics of effectiveness and efficiency. For the WA Department of Parks and Wildlife, results of an annual audit conducted by the Office of the Auditor General are published in the Department's annual report, a publicly available document. Auditing by an external party assists in accountability to stakeholders and building trust (Dando & Swift, 2003).

# Protected area management effectiveness (PAME) evaluation and indicators of good governance

The indicators and measures from this study provide a starting point for measuring good governance as part of PAME efforts. They specifically enable reporting against the UNDP characteristics and standards (Table 1), which enables their use as a reporting mechanism for the achievement of principles, an important point for evaluation, as suggested by Lockwood (2010). Importantly, the attention to output measures also opens up the possibility of using measures such as management plans to report on the 'outputs' of good governance, where outputs are one of the six widely recognized components of PAME evaluations.

### Budget planning and forecasting as important indicator

Arguably, one key element missing from the proposed indicators is budget planning and forecasting. There is potential for this indicator to be included under the UNDP characteristic of strategic vision (Table 2). Although reporting on financial performance is specified under transparency, budget planning and forecasting are not. An important addition to Table 2 therefore is a question focused on budget planning and forecasting, to assist in reporting on achievement of strategic vision.

The WA Department of Parks and Wildlife already report, through their annual report, on expenditure, however forecasting is not included. Such a requirement could be problematic, however, as the majority of their

funding comes from the State government, whose priorities can change rapidly as political circumstances change. This makes budget forecasting very difficult, and highlights that although some practices may be desirable to enhance good governance they may not be politically possible. Traditionally, government-funded protected areas must compete with other public sectors for funding, such as health, education and military, and are increasingly being given lower priority (Eagles, 2013). This is evident in Western Australia; where the Department of Parks and Wildlife had its State-financed budget cut by almost 7 per cent from 2013-14 to 2015-16 (GoWA, 2015).

#### CONCLUSION

The governance indicators and measures presented in this paper enable protected area managers and other stakeholders to quickly and effectively evaluate the governance of a protected area or areas, in accordance with international best practice, that is, against the standards provided by the UNDP (1997). Together, these indicators and measures provide a simple, quick means of assessing governance for an individual protected area through to a system of such areas. They comprehensively address the good governance principles articulated by Graham et al. (2003)3 that underpin today's approaches to good governance of protected areas (e.g. Borrini-Feyerabend et al., 2013; Borrini-Feyerabend & Hill, 2015). The results from applying the indicators can assist in reviewing and adjusting management, with particular attention to adaptive management (see Responsiveness, Table 2).

Such evaluations do not need to be laborious, as illustrated by the indicators and measures outlined in Table 2. They can be efficient and effective, and through the use of a handful of measures including management annual reports, audits, and stakeholder engagement, managers can relatively easily measure and then evaluate their performance against international standards (i.e. UNDP, 1997). These results are, however, based on only one state, with heavy involvement by a single protected area government management agency. Next important steps to extend this exploratory research include: further refining these indicators and measures with other stakeholders (Newsome et al., 2013); implementing the indicator set and accompanying measures across a range of case studies (including countries where good governance characteristics such as accountability of financial management and a rule of law may be lacking) to determine their functionality and applicability; and continuing the analysis beyond identification of indicators to their inclusion in wider



Aerial view of Lucky Bay, located in the Cape Le Grand National Park © Tourism Western Australia

PAME efforts (Leverington et al., 2010; Lockwood, 2010). Critical to these future efforts is such research being undertaken by a wide range of protected area managers, beyond government-managed entities. This expanded range includes indigenous and private arrangements, plus numerous combinations (Eagles, 2009). The Delphi process underpinning this study provides an effective means for undertaking future research.

For governance evaluations to succeed, protected area managers and their stakeholders need the resources and capacity to undertake the design and implementation of such systems. Building capacity requires a commitment to identifying the competencies needed and developing delivery mechanisms (Eagles, 2014). Agencies also need the resources and commitment to make change based on evaluation results. Institutionalization of a culture of evaluation, and especially support from an agency's executive are fundamental to success (Moore & Hockings, 2013). Also essential for success is a culture of engaging, including, and consulting with the public. The indicators and output measures developed in this paper provide a promising way forward that can be followed given existing capacities. Additional capacity will only enhance our opportunities for good governance into the future.

#### **ENDNOTES**

- <sup>1</sup> In Australia protected area management is largely a state rather than national government responsibility.
- <sup>2</sup> At the time this research was conducted the Department was named the WA Department of Environment and Conservation; for currency and convenience its current name is used in this paper.
- <sup>3</sup> Graham et al.'s (2003) good governance principles for protected areas map directly onto the UNDP (1997) characteristics of good governance and were derived from them.

### **ABOUT THE AUTHORS**

Brooke Shields works as a Research Assistant with the Nature Based Tourism Research Group at Murdoch University, Western Australia. She graduated with First Class Honours in Environmental Science in 2013, with her thesis examining governance of Western Australian protected areas. Since graduating, she has also worked with Western Australia's Department of Parks and Wildlife Visitor Research Unit. She has research interests and expertise in protected area governance, wildlife tourism and conservation, and wilderness in marine landscapes.

Susan Moore leads the Nature Based Tourism Research Group at Murdoch University, Western Australia. Her expertise is natural area tourism, protected area management and biodiversity conservation policy. She has 190 publications including journal articles, books and reports and has led more than 30 research projects delivering outputs to industry, government and non-government organizations. Her jointly authored book Natural Area Tourism: Ecology, Impacts and Management is a best seller and can be found in 471 libraries globally. Professor Moore has undertaken research and provided advice on protected area management in Taiwan, South Africa, Finland, Iceland and Indonesia, and in all states and territories of Australia. She is a member of the IUCN World Commission on Protected Areas.

Paul F. J. Eagles is an Emeritus Professor at the University of Waterloo and a Walter Murdoch Adjunct Professor at Murdoch University. He specializes in environmental, recreation and tourism planning, with 40 years of planning experience. He has undertaken planning and research in this field in over 25 countries and has 360 publications. He was Chair of the Global Task Force on Tourism and Parks for the World Commission on Protected Areas of the IUCN from 1996 to 2008. He has been a consultant on tourism for numerous agencies in Canada, World Bank, World Tourism Organization, United Nations Development Programme, United Nations Environment Programme, Forestry and Agricultural Organization of the United Nations, and nature conservation agencies of Sweden and Finland.

### **REFERENCES**

- Abrams, P., Borrini-Feyerabend, G. and Gardner, J. (2003). Evaluating governance - a handbook to accompany a participatory process for a protected area, Ottawa: Parks Canada and TILCEPA.
- Borrini-Feyerabend, G. and Hill, R. (2015). Governance for the conservation of nature. In G.L. Worboys, M. Lockwood, A. Kothari, S. Feary, and I. Pulsford (eds.) Protected area governance and management. Canberra: ANU Press, pp.169-206.
- Borrini-Feyerabend, G., Dudley, N., Jaeger, T., Lassen, B., Broome, N.P. and Phillips, A. (2013). Governance of protected areas: from understanding to action. Gland, Switzerland: IUCN.
- Borrini-Feyerabend, G. (2007). The "IUCN protected area matrix"- a tool towards effective protected area systems, Andalusia, Spain: IUCN World Commission on Protected Areas Task Force.
- Coad, L., Leverington, F., Burgess, N., Cuadros, I., Geldmann, J., Marthews, T., Mee, J., Nolte, C., Stoll-Kleeman, S., Vansteelant, N., Zamora, C., Zimsky, M. and Hockings, M. (2013). Progress towards the CBD protected area

- management effectiveness targets, Parks, 19(1). DOI: 10.2305/IUCN.CH.2013.PARKS-19-1.LC.en
- Costanza, R., d'Arge, R., de Groot, R., Farberk, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O'Neill, R.V., Paruelo, J., Raskin, R.G., Suttonkk, P. and van den Belt, M. (1997). The value of the world's ecosystem services and natural capital, Nature 387, pp.253-260. DOI: 10.1038/387253a0;
- Dando, N. and Swift, T. (2003). Transparency and assurance minding the credibility gap, Journal of Business Ethics, 44 (2-3), pp.195-200. DOI: 10.1023/A:1023351816790.
- Dudley, N. (2008). Guidelines for applying protected area management categories. Gland, Switzerland: IUCN.
- Eagles, P. F., Coburn, J. and Swartman, B. (2014). Plan quality and plan detail of visitor and tourism policies in Ontario Provincial Park management plans, Journal of Outdoor Recreation and Tourism, 7, pp.44-54. DOI: 10.1016/j.jort.2014.09.006.
- Eagles, P. F. J. (2014). Research priorities in park tourism, Journal of Sustainable Tourism, 22(4), pp.528-549. DOI: 10.1080/09669582.2013.785554.
- Eagles, P. F. J. (2013). Fiscal implications of moving to tourism finance for parks: Ontario Provincial Parks, Managing Leisure, 19(1), pp.1-17. DOI: 10.1080/13606719.2013.849503.
- Eagles, P. F. J. (2009). Governance of recreation and tourism partnerships in parks and protected areas, Journal of Sustainable Tourism, 17(2), pp. 231-248. DOI: 10.1080/09669580802495725.
- Eagles, P. F. J., McCool, S. F. and Haynes, C. D. (2002). Sustainable tourism in protected areas: guidelines for planning and management, Gland, Switzerland and Cambridge, UK: IUCN.
- GoWA (Government of Western Australia) (2015). Parks and Wildlife. Western Australia: Department of Treasury.
- Graham, J., Amos, B. and Plumptre, T.W. (2003). Governance principles for protected areas in the 21st century, Ottawa, Ontario: Institute on Governance.
- Gurung, H. B. (2010). Trends in protected areas, The Gold Coast, Australia: CRC for Sustainable Tourism. Available at: http://sustain.pata.org/wp-content/uploads/2015/01/ STCRC001 Gurung Trends-In-Protected-Areas WEB.pdf.
- Hess, G.R. and King, T.J. (2002). Planning open spaces for wildlife: I. Selecting focal species using a Delphi survey approach. Landscape and Urban Planning, 58(1), pp.25-40. DOI: 10.1016/S0169-2046(01)00230-4.
- Hockings, M., Stolton, S., Leverington, F., Dudley, N. and Courrau, J. (2006). Evaluating effectiveness: a framework for assessing management effectiveness of protected areas, Gland, Switzerland: IUCN.
- Hockings, M., Stolton, S. and Dudley, N. (2004). Management effectiveness: assessing management of protected areas? Journal of Environmental Policy and Planning, 6(2), pp.157 -174. DOI: 10.1080/1523908042000320731.
- Hockings, M. (1998). Evaluating management of protected areas: integrating planning and evaluation. Environmental Management, 22(3), pp.337-345. DOI: 10.1007/s002679900109.
- Hoekstra, J.M., Boucher, T.M., Ricketts, T.H. and Roberts, C. (2005). Confronting a biome crisis: global disparities of habitat loss and protection. Ecology Letters, 8(1), pp.23-29. DOI: 10.1111/i.1461-0248.2004.00686.x.
- IUCN (International Union for Conservation of Nature) (2008). What is a protected area? Available at: http:// www.iucn.org/about/work/programmes/gpap home/ pas gpap/.



Perth Coastal Plain, Yanchep National Park © Russell Barton

- Leverington, F., Costa, K.L., Courrau, J., Pavese, H., Nolte, C., Marr, M., Coad, L., Burgess, N., Bomhard, B. and Hockings, M. (2010). Management effectiveness evaluation in protected areas a global study, Brisbane, Australia: University of Queensland.
- Leverington, F., Hockings, M. and Costa, K. L. (2008).

  Management effectiveness evaluation in protected areas:

  a global study, Gatton, Queensland: IUCN World Commission on Protected Areas.
- Lockwood, M. (2010). Good governance for terrestrial protected areas: a framework, principles and performance outcomes. *Journal of Environmental Management*, 91(3), pp.754-766. DOI: 10.1016/j.jenvman.2009.10.005.
- Moore, S.A. and Hockings, M. (2013). Australian protected areas and adaptive management: contributions by visitor planning frameworks and management effectiveness assessments. Australasian Journal of Environmental

- Management, 20(4), pp.270-284. DOI: 10.1080/14486563.2013.833487.
- Moore, S.A., Wallington, T.J., Hobbs, R.J., Ehrlich, P.R., Holling, C., Levin, S., Lindenmayer, D., Pahl-Wostl, C., Possingham, H. and Turner, M.G. (2009). Diversity in current ecological thinking: implications for environmental management. *Environmental Management*, 43(1), pp.17-27. DOI: 10.1007/s00267-008-9187-2.
- Moore, S. A., Smith, A. J. and Newsome, D. N. (2003). Environmental performance reporting for natural area tourism: contributions by visitor impact management frameworks and their indicators. *Journal of Sustainable Tourism*, 11(4), pp.348-375.
  - DOI: 10.1080/09669580308667211.
- Newsome, D., Moore, S. A. and Dowling, R. K. (2013). *Natural* area tourism: ecology, impacts and management, Bristol: Channel View Publications.
- Nolte, C., Leverington, F., Kettner, A., Marr, M., Nielsen, G., Bomhard, B., Stolton, S., Stoll-Kleemann, S. and Hockings, M. (2010). Protected area management effectiveness assessments in Europe - a review of application, methods and results, Bonn, Germany: Bundesamt fur Naturschutz (BfN).
- Oli, K.P., Chaudhary, S. and Sharma, U.R. (2014). Are governance and management effective within protected areas of the Kanchenjunga landscape (Bhutan, India and Nepal)? *PARKS*, 19(1), pp.25-36. DOI: 10.2305/IUCN.CH.2013.PARKS-19-1.KPO.en
- Pomeroy, R.S., Parks, J.E. and Watson, L.M. (2004). How is your MPA doing? A guidebook of natural and social indicators for evaluating marine protected area management effectiveness, Gland, Switzerland and Cambridge, UK: IUCN.
- UNDP (1997). Governance for sustainable human development, New York: UNDP. Available at: http://gis.emro.who.int/HealthSystemObservatory/Workshops/WorkshopDocuments/Reference%20reading%20material/Literature%20on%20Governance/GOVERN~2.PDF.
- Virtual Australia (2016). Australian states. Available at: http://www.virtualoceania.net/australia/states/.
- WA DPW (Western Australian Department of Parks and Wildlife) (2016). *Department of Parks and Wildlife 2013-14 Yearbook*. Available at: https://www.dpaw.wa.gov.au/images/20140586 DPAW Yearbook13-14 webonly.pdf.
- Worboys, G.L., Lockwood, M., Kothari, A., Feary, S. and Pulsford, I. (2015). *Protected area governance and management*, Canberra: ANU Press.

### **APPENDIX 1**

Summary of managerial actions and output measures as collated from the Delphi Round 1 workshop and subsequently distributed to participants as the basis for Round 2 input.

PUBLIC PARTICIPATION. Public participation means all people should have a voice in decision making, either directly or through legitimate intermediate institutions that represent their interests.

Managerial activity 1.1: Identify annually the spectrum and number of opportunities for people to be involved in decision making, for example through submissions to management plans, community forums, volunteering opportunities.

Managerial activity 1.2: Identify key stakeholder groups and conduct an annual forum for representatives of those key stakeholders.

CONSENSUS ORIENTATION. Consensusoriented decision making is the ability to mediate differing interests to reach broad consensus on what is in the best interest of the group.

Managerial activity 2.1: Develop a framework for decision making that requires the outcome of any process

to be achieved through the consensus views of the stakeholders involved. Publishing an annual report that reveals the outcomes of decision making as achieved through consensus was noted as an important output measure.

Managerial activity 2.2: Utilize a reporting and auditing framework that ensures that a consensus approach was taken and the framework's guidelines were followed.

# STRATEGIC VISION. Strategic vision refers to a broad and long-term perspective on good governance including an understanding of the historical, cultural and social complexities in which that perspective is grounded.

Managerial activity 3.1: Outline law and policy directives that outline the strategic plan for the park. Having a management plan was assumed for this indicator.

Managerial activity 3.2: Publish the legal and policy directives that guide the strategic plan for the park. Reviewing, measuring and evaluating are important here.

#### RESPONSIVENESS. Responsiveness occurs when institutions and processes try to serve all stakeholders using a proactive manner regarding complaints and public criticisms.

Managerial activity 4.1: Identify once every five years the efficient and effective planning processes used for the management plan/strategic plan/project/programme plans. Connected to corporate goals, legislation and policy. Includes policy implementation, review and revision and embraces adaptive management.

Managerial activity 4.2: Publish an annual review of policy and plan implementation based on an independent annual audit process and an annual report per park and group of parks.

Managerial activity 4.3: Create an asset management database.

## EFFECTIVENESS. Effectiveness refers to the capacity to realize organizational objectives.

Managerial activity 5.1: Publish annually the level of achievement of stated management objectives including KPIs that are measurable.

Managerial activity 5.2: Implement measures, such as review and audits, that reveal the degree of implementation of KPIs.

EFFICIENCY. Efficiency refers to making the best use of resources. It is the capability of acting or producing effectively with a minimum amount or quantity of waste, expense or unnecessary effort.

Managerial activity 6.1: Create a unified, single authority for the management of parks.

Managerial activity 6.2: Identify KPIs, to be audited by an external body, such as the Auditor General's Office. Managerial activity 6.3: Identify the level conservation achieved through partnerships with stakeholder groups.

#### ACCOUNTABILITY. Accountability the that officials requirement answer stakeholders on the disposal of their powers and duties, act on criticisms or requirements made of them and accept responsibility for failure, incompetence or deceit.

Managerial activity 7.1: Publish an annual report that reveals managerial activities in sufficient detail as to reveal accountability.

*Managerial activity 7.2*: Develop a framework to operate within (e.g. management plan), which identifies policy, review, systems and KPIs. This must be accompanied by independent audit, accompanied communication and review.

# TRANSPARENCY. Transparency is the sharing of information and acting in an open manner.

Managerial activity 8.1: Publication of an annual report reporting on KPIs such as staff numbers, budget, visitor numbers, management plan implementation; stakeholder consultation information; transparency on ownership, management and income sources.

Managerial activity 8.2: Engage in ongoing visitor monitoring of overall use, as well as specific facilities, programmes and activities.

### EQUITY. Equity is just treatment, requiring that similar cases are treated in similar ways.

Managerial activity 9.1: Ensure equity in employment. Managerial activity 9.2: Ensure equity in access including disability, foreigners, complaint handling and fees (social class and affordability).

# RULE OF LAW. Application of the rule of law refers to legal frameworks being fair and enforced impartially.

Managerial activity 10.1: Annually publish compliance reports against the management plan and its user base using SMART KPIs.

Managerial activity 10.2: Report on comparable practice or reference best practice in reporting rule of law activities.

#### **RESUMEN**

La gestión eficaz de las áreas protegidas se basa en una buena gobernanza. Se hizo una evaluación utilizando como punto de partida las características normativas de la buena gobernanza para el desarrollo sostenible establecidas por el Programa de las Naciones Unidas para el Desarrollo. La evaluación de la gobernanza basada en indicadores es esencial para una gestión eficaz a través del mejoramiento de la práctica. Aunque existen indicadores y marcos de evaluación, estos no ofrecen a los administradores de áreas protegidas una medida rápida y completa de la gobernanza. Utilizamos un método Delphi de tres rondas con una dotación de 33 gestores e investigadores de organizaciones gubernamentales y no gubernamentales, y universidades. Este proceso participativo de investigación estableció un conjunto de 20 indicadores relativos a la participación del público, orientación de consenso, visión estratégica, capacidad de respuesta, eficacia, eficiencia, rendición de cuentas, transparencia, equidad, y estado de derecho. Las medidas de resultados se apoyaron también en planes de gestión, informes anuales, auditorías y grupos de interés. Las conclusiones ponen de relieve la contribución de los planes de gestión y los informes anuales en el establecimiento de los requisitos de evaluación y en la provisión de un lugar donde los resultados puedan estar disponibles al público. Se recomienda una mayor investigación participativa para perfeccionar estos indicadores y aplicarlos en una diversidad de contextos.

### **RÉSUMÉ**

La bonne gouvernance est cruciale pour garantir l'administration efficace des aires protégées. Une évaluation s'appuyant sur les principes de bonne gouvernance du Programme des Nations Unies pour le Développement a été mise en place. Pour assurer une gestion durable, efficace et en perpétuelle amélioration, il est essentiel de pouvoir s'appuyer sur un éventail d'indicateurs précis. Bien que les indicateurs et les outils de mesure soient disponibles, ils ne permettent pas aux gestionnaires d'aires protégées d'obtenir une évaluation rapide et exhaustive de la gouvernance. Nous avons utilisé la méthode Delphi en trois étapes et engagé un groupe de 33 managers et chercheurs en provenance d'organisations gouvernementales, non-gouvernementales, et d'universités. Cet exercice collectif a établi un ensemble de 20 indicateurs portant sur la participation du public, la recherche de consensus, la vision stratégique, la réactivité, l'efficacité, le rendement, la responsabilisation, la transparence, l'équité et la primauté de droit. L'évaluation des résultats a été rendue possible grâce à des plans de gestion, des rapports annuels, des audits et l'engagement des parties prenantes. Les conclusions démontrent l'importance des plans de gestion et des rapports annuels pour permettre la juste évaluation et l'archivage des résultats afin qu'ils soient consultables. Davantage de recherche participative est préconisée pour affiner ces indicateurs et les appliquer dans une diversité de contextes.