Appendix 1

APPENDIX 1: Calculation of pressure and threat scores. Pressures are extrinsic forces, activities, or events that have already had a detrimental impact on the integrity of the management unit or protected area over the past 5 years. Pressures include both legal and illegal activities and may result from direct and indirect impacts of an activity. Threats are potential or impending extrinsic pressures in which a detrimental impact is likely to occur or continue to occur over the next 5 years.

Quantifying pressures							
Occurrence of pressure in past 5 years: Yes <u>or</u> no (if '<u>yes</u>' please score the pressure below)							
Trend (is the activity or impact of the pressure changing?)		Extent (at what scale is the pressure in the PA being felt or operating?)		Impact (how marked is the negative effect or influence of the pressure?)		Permanence (approx. system recovery i.e. how long would it take for the PA to recover if the pressure was removed?)	
Description	Score	Description	Score	Description	Score	Description	Score
Increased sharply	5	Throughout (> 50%)	4	Severe	4	Permanent (> 100 years)	4
Increased slightly	4	Widespread (15% – 50%)	3	High	3	Long term (20 – 100 years)	3
Remained constant	3	Scattered (5% – 15%)	2	Moderate	2	Medium term (5 – 20 years)	2
Decreased slightly	2	Localised (< 5%)	1	Mild	1	Short term (< 5 years)	1
Decreased sharply	1	-	-	-	-	-	-
Score for pressure = extent × impact × permanence (maximum score = 4 × 4 × 4 = 64; minimum score = 1 × 1 × 1 = 1). Total pressure = sum ($\sum$) of all scores of individual pressures identified for the PA.							
Quantifying threats							
Prediction of threat in next 5 years: will <u>or</u> won't (if '<u>will</u>' please score the threat below)							
Probability (how certain are you that the threat will appear in the next 5 years?)		Extent (at what scale is the threat in the PA being felt or operating?)		Impact (how marked is the negative effect or influence of the threat?)		Permanence (approx. system recovery i.e. how long would it take for the PA to recover if the predicted threat was removed?)	
Description	Score	Description	Score	Description	Score	Description	Score
Very high	5	Throughout (> 50%)	4	Severe	4	Permanent (> 100 years)	4
High	4	Widespread (15% – 50%)	3	High	3	Long term (20 – 100 years)	3
Medium	3	Scattered (5% – 15%)	2	Moderate	2	Medium term (5 – 20 years)	2
Low	2	Localised (< 5%)	1	Mild	1	Short term (< 5 years)	1
Very low	1	-	-	-	-	-	-
Score for threat = extent × impact × permanence (maximum score = 4 × 4 × 4 = 64; minimum score = 1 × 1 × 1 = 1). Total threat = sum ($\sum$) of all scores of individual threats identified for the PA.							

Source: Adapted from Ervin, J., 2003c, *WWF: Rapid assessment and prioritization of protected area management (RAPPAM) methodology*, WWF Forests for Life Programme, Gland
Note: This is the Online Appendix of Carbutt, C. & Goodman, P.S., 2013, 'How objective are protected area management effectiveness assessments? A case study from the iSimangaliso Wetland Park', *Koedoe* 55(1), Art. #1110, 8 pages. http://dx.doi.org/10.4102/koedoe.v55i1.1110.
PA, protected area.