IUCN Conservation Outlook Assessments - Guidelines for their application to natural World Heritage Sites

Version 2.0
12.10.2016

Acknowledgements

These Guidelines were made possible through the collaborative efforts of many. Particular thanks go to the Methodology Advisory Group, who oversaw the initial development of the guidelines (including Bastian Bertzky, Jon Day, Marc Hockings, Mathew Foster, Pedro Rosabal, Sue Stolton, and Stephen Woodley), as well as the Outlook Methodology Review Group, who worked to further refine and improve the conservation outlook assessment methodology for 2016 (Geoffroy Mauvais, Susanna Lindeman, Sue Stolton, Jon Day, Scott Perkin, Peter Shadie).

Thanks are also due to the assessors who undertook pilot assessments and provided valuable feedback on the methodology, as well as all assessors and reviewers who undertook the first round of Conservation Outlook assessments in 2014, valuably informing subsequent methodological improvements for the assessments. Finally, thanks go to the former and current staff of the World Heritage Programme for their contributions, including Mariam Kenza Ali, Tim Badman, Tilman Jaeger, Leticia Leitao, Remco van Merm, Christelle Perruchoud, Yichuan Shi, Elena Osipova, Mizuki Murai and Matea Osti.

The preparation of these Guidelines has been made possible through the support of the MAVA Foundation.

List of acronyms

AZE	Alliance for Zero Extinction
CMP	Conservation Measures Partnership
COM	World Heritage Committee Meeting
EOH	Enhancing Our Heritage
GIS	Geographical Information Systems
IBA	Important Bird Areas
ICCROM	International Centre for the Study of the Preservation and Restoration of Cultural Property
ICOMOS	International Council on Monuments and Sites
IPA	Important Plant Areas
IUCN	International Union for Conservation of Nature
NGO	Non-Governmental Organization
OUV	Outstanding Universal Value
PA	Protected Area
SOC	State of Conservation
SoOUV	Statement of Outstanding Universal Value
SP	State Party
SSC	IUCN Species Survival Commission
UNEP-WCMC	United Nations Environment Programme World Conservation Monitoring Centre
UNESCO	United Nations Educational, Scientific and Cultural Organization
WCPA	IUCN World Commission on Protected Areas
WHC	World Heritage Convention

Contents

Overview

The purpose of these Guidelines is to provide advice on undertaking Conservation Outlook Assessments. The primary audiences for the Guidelines are Site Assessors, who are being invited by IUCN to lead the development of site assessments, as well as Reviewers who will contribute to this process. The Guidelines will also be useful for anyone involved or interested in the process. These Guidelines should be read in conjunction with the *Conservation Outlook Assessment Worksheets*. As IUCN develops the World Heritage Outlook process, subsequent versions of the Guidelines will be produced.

Background on IUCN Conservation Outlook Assessments

- → **What are Conservation Outlook Assessments?** IUCN Conservation Outlook Assessments are a projection of the potential for a natural World Heritage site to conserve its values over time. This projection is based on desk-based assessments of 1) the state and trend of values, 2) the threats affecting those values, and 3) the effectiveness of protection and management. IUCN Conservation Outlook Assessments are intended to be independent, accurate, transparent and repeatable. They are designed to be applied to natural World Heritage sites, although the methodology could be adapted to apply more widely to protected areas and areas of conservation importance.
- → **A standardized methodology**: IUCN has developed a standardized methodology for desk-based Conservation Outlook Assessments for natural World Heritage sites, detailed in these Guidelines and the associated *Conservation Outlook Assessment Worksheets*. Conservation Outlook Assessments are coordinated by an Assessment Coordinator based within IUCN's Secretariat working with a team of Site Assessors who are familiar with the sites and the assessment process.
- → **Information sources:** Assessments are based on analysis of information from a wide range of sources, including consultation feedback via IUCN members, experts and partners (see Annex 1 for an annotated list of information sources). Where relevant, GIS and remote sensing tools may be used on a case-by-case basis. Aside from GIS and remote-sensing, no new research is undertaken. Site visits are not involved and assessments are not intended to replace site-based monitoring and evaluation systems.

Guidelines structure

The Guidelines are divided into two sections:

- → **Section 1** provides guidelines for Conservation Outlook Assessments, including identifying and describing values, assessing threats, assessing protection and management, assessing the current state and trend of values and assessing Conservation Outlook (Steps 1 through 5); and
- → **Section 2** provides guidelines for the tables associated with Conservation Outlook Assessments, including understanding benefits, compiling active conservation projects and project needs and references (Steps 6 through 8).

The Guidelines are structured around the eight assessment steps with corresponding worksheets (see the separate *IUCN Conservation Outlook Assessment Worksheets* document). Key assessment principles include a) clearly justifying assessments and including quantitative information where possible, b) consistently referencing information sources, and c) defining information gaps leading to a Data Deficient rating.

Section 1: Guidelines for Conservation Outlook Assessments

Consultation: The IUCN Assessment Coordinator contacts and consults Knowledge-holders prior to the assessment, requesting feedback on values, threats, and protection and management through a standard consultation form. The consultation process is run in coordination with the Site Assessor. The relevant protected area management authorities at both national and site level are also contacted, informed of the assessment process and invited to contribute.

Step 1: Identifying and describing values - Worksheet 1: Published documentation, including Statements of Outstanding Universal Value, IUCN evaluations and other relevant information sources are reviewed to identify and describe a site's World Heritage values, as well as other important biodiversity values.

Step 2: Assessing threats - Worksheets 2(a) and 2(b): Threats are identified using a checklist to help ensure that assessments are comparable across sites. They are then assessed against five ratings: **Very Low Threat, Low Threat, High Threat, Very High Threat** and **Data Deficient**. The assessment focuses on direct threats rather than underlying drivers, and threats are split by whether they are current or potential.

Step 3: Assessing protection and management – Worksheet 3: The state of 15 standardized protection and management topics is assessed against five ratings: **Highly Effective, Mostly Effective, Some Concern, Serious Concern**, and **Data Deficient**.

Step 4: Assessing the current state and trend of values - Worksheet 4: The current state and trend of values is assessed against five ratings: **Good, Low Concern, High Concern, Critical** and **Data Deficient** for World Heritage values, and also for other important biodiversity values. Trend is assessed in relation to whether the condition of a value is Improving, Stable or Deteriorating over the last five years.

Step 5: Assessing Conservation Outlook – Worksheet 5: The Conservation Outlook for each site is projected on the basis of the results of Steps 1 to 4, and is assessed against five ratings: **Good, Good with Some Concerns, Significant Concern, Critical,** and **Data Deficient**.

Section 2: Guidelines for associated tables

Step 6: Understanding benefits – Worksheet 6: The assessment of benefits is split into two parts. Benefits are first identified on the basis of a checklist. The Site Assessor then selects a short list of key benefits and describes them, also providing a brief summary of all benefits at the end. Wherever possible, assessment of factors negatively affecting provision of benefits is undertaken by indicating the level of impact (**Low, Moderate, High, Very High**) and their trend (**Increasing, Continuing, Decreasing**).

Step 7: Compiling active conservation projects and project needs – Worksheet 7: The organizations and conservation projects active on site, as well as potential project needs, are compiled here.

Step 8: References – Worksheet 8: All the information used in assessments is referenced so that future Conservation Outlook Assessments can review the previous information base. References are cited in the text of the assessment and also compiled in a reference table.

Background on Conservation Outlook Assessments

1.1 What are Conservation Outlook Assessments?

IUCN Conservation Outlook Assessments are a projection of the potential for a natural World Heritage site to conserve its values over time. This projection is based on desk-based assessments of:

- → the state and trend of values;
- → the threats affecting those values; and
- → the effectiveness of protection and management.

The Conservation Outlook Assessment framework is illustrated in Figure 1. The five Conservation Outlook categories against which each site is assessed are listed below.

CONSERVATION OUTLOOK CATEGORIES AND CRITERIA

Good: The site's values are in good condition and are likely to be maintained for the foreseeable future, provided that current conservation measures are maintained.

Good with Some Concerns: While some concerns exist, with minor additional conservation measures the site's values are likely to be essentially maintained over the long-term.

Significant Concern: The site's values are threatened and/or are showing signs of deterioration. Significant additional conservation measures are needed to maintain and/or restore values over the medium to long-term.

Critical: The site's values are severely threatened and/or deteriorating. Immediate large-scale additional conservation measures are needed to maintain and/or restore the site's values over the short to medium-term or the values may be lost.

Data Deficient: Available evidence is insufficient to draw a conclusion

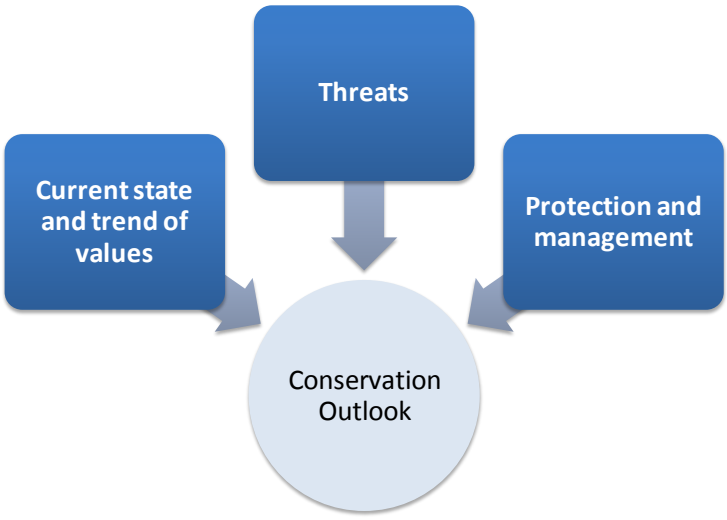

Figure 1: The Conservation Outlook Assessment framework. Conservation Outlook Assessments are a projection of the potential for a natural World Heritage site to conserve its values over time**.**

1.2 Assessment methodology and process

IUCN has developed a standardized methodology for desk-based assessments[1] of natural World Heritage sites, which is detailed in Section 1: The Guidelines for Conservation Outlook Assessments. This methodology was developed in collaboration with a technical Advisory Group, drawing on the IUCN World Commission on Protected Areas' (WCPA) established methodologies and framework for Management Effectiveness of Protected Areas, the results of pilot assessments undertaken in a range of selected sites, and the lessons learned from the assessment frameworks developed for the *Great Barrier Reef Outlook report*[2] *(*2009), *the Enhancing Our Heritage Toolkit*[3], the *Managing Natural World Heritage Manual*[4], the World Heritage *Periodic Reporting questionnaire*[5], and other relevant literature. The current Version 2.0 of the Guidelines was developed in 2016 in order to take into account the feedback received during the first round of Conservation Outlook Assessments in 2014 and the results of the review by the Methodology Review Group.

Conservation Outlook Assessments involve assessing the current state and trend of values, the threats affecting those values and the effectiveness of protection and management in order to project the potential of a site to conserve its values over time – i.e. its Conservation Outlook. Assessments also identify benefits of natural World Heritage sites, active conservation projects taking place in sites, and site project needs.

Assessments are coordinated by the IUCN Secretariat working with a team of Site Assessors who are familiar with the sites and the assessment process. The development of a standardized methodology applied by a team of Site Assessors and supported by consultation aims to make each assessment a fairly rapid exercise; no new research is carried out and site visits are not involved.

The Conservation Outlook Assessment process is structured around eight steps, which are detailed in Section 1 and 2. Each step corresponds to a standardized assessment Worksheet (see the *Worksheets for Conservation Outlook Assessments*).

1.2.1 Information sources

Conservation Outlook Assessments are based on best-available information mobilized from a wide range of sources, including consultation. All information used in the assessments is referenced so that future assessments can review the previous information base. Aside from GIS and remote sensing work on a case-by-case basis, no new research will be undertaken for the assessments.

The types of information sources used in site assessments are listed in Annex 1. Information is sourced from IUCN's database on World Heritage sites, publicly available World Heritage Committee reports, published Management Effectiveness Evaluations, scientific research, and information provided by a wide range of knowledge-holders, including site managers, national authorities, and IUCN's network of 11,000 experts, particularly the World Commission on Protected Areas (WCPA) and the Species Survival Commission (SSC). Each type of information source has its different strengths and limitations in terms of depth, coverage and quality. It is expected that the assessments will help identify information gaps which, if filled, will aid future assessments.

---

[1] The use of the term assessment is in line with the definition in the IUCN WCPA Management Effectiveness Framework: *the judgement of performance against some predetermined criteria.*

[2] http://www.gbrmpa.gov.au/corp_site/about_us/great_barrier_reef_outlook_report

[3] http://whc.unesco.org/documents/publi_wh_papers_23_en.pdf

[4] http://whc.unesco.org/en/managing-natural-world-heritage/

[5] http://whc.unesco.org/en/periodicreporting

Starting from 2017, previous versions of Conservation Outlook Assessments will also serve as a source of information for current assessments and Site Assessors will be able to maintain the parts of the previous assessment which are still accurate (e.g. description of values), and update the parts where changes have occurred since the last assessment (particular attention should be given to assessment of the current state of values, threats and protection and management, as well as assessment of the overall Conservation Outlook).

1.2.2 Roles in the assessment process

The different roles in the assessment process are described below and are illustrated in Figure 2. All assessments are carried out in close consultation and collaboration with IUCN's Global Protected Areas Programme, regional offices, as well as WCPA and SSC.

- → **The Assessment Coordinator** based within IUCN Secretariat provides ongoing support to Site Assessors in applying the assessment methodology. The Coordinator contacts and consults Knowledge-holders prior to assessments, requesting feedback on values, threats, and protection and management through a standard consultation form. This consultation process is run in coordination with the Site Assessor. The Assessment Coordinator also reviews draft assessments to ensure that they conform to the Guidelines, and provides other support as necessary.

- → **Site Assessors** are protected area specialists familiar with World Heritage. On the basis of IUCN's online document library, consultation feedback, and other information sources, Site Assessors undertake a desk-based Conservation Outlook Assessment in English, French, or Spanish, in line with the Guidelines.

- → **Knowledge-holders** are individuals/organizations who have first-hand knowledge of a site, including researchers, site managers, non-governmental organizations, relevant national management authorities, community groups, WCPA and SSC members etc. They provide feedback using a standard consultation form available in IUCN's official languages of English, French and Spanish. Feedback can include the provision of documents, as well as specific comments on the state of a site's values, threats and protection and management. With the exception of information supplied in published documents, feedback received from knowledge-holders is confidential and non-attributable.

- → **Expert Reviewers** are Knowledge-holders with advanced protected area expertise and extensive first-hand knowledge of a site. They provide detailed reviews of draft assessments.

- → **The World Heritage Panel** is IUCN's established governance body for World Heritage matters and is composed of senior IUCN and WCPA specialists. The World Heritage Panel has oversight of the approval process for Conservation Outlook Assessments.

1.2.3 Reviewing assessments

Each site assessment undergoes multiple internal and external reviews before finalization. Draft assessments are internally reviewed to verify that they meet the standards set out in the Guidelines. These assessments are then reviewed by selected Expert Reviewers with extensive knowledge of a site. Site managers are also invited to comment on the assessments. Regional review groups in each IUCN region then review the overall conclusions for all sites in the region and provide their comments to the World Heritage Panel.

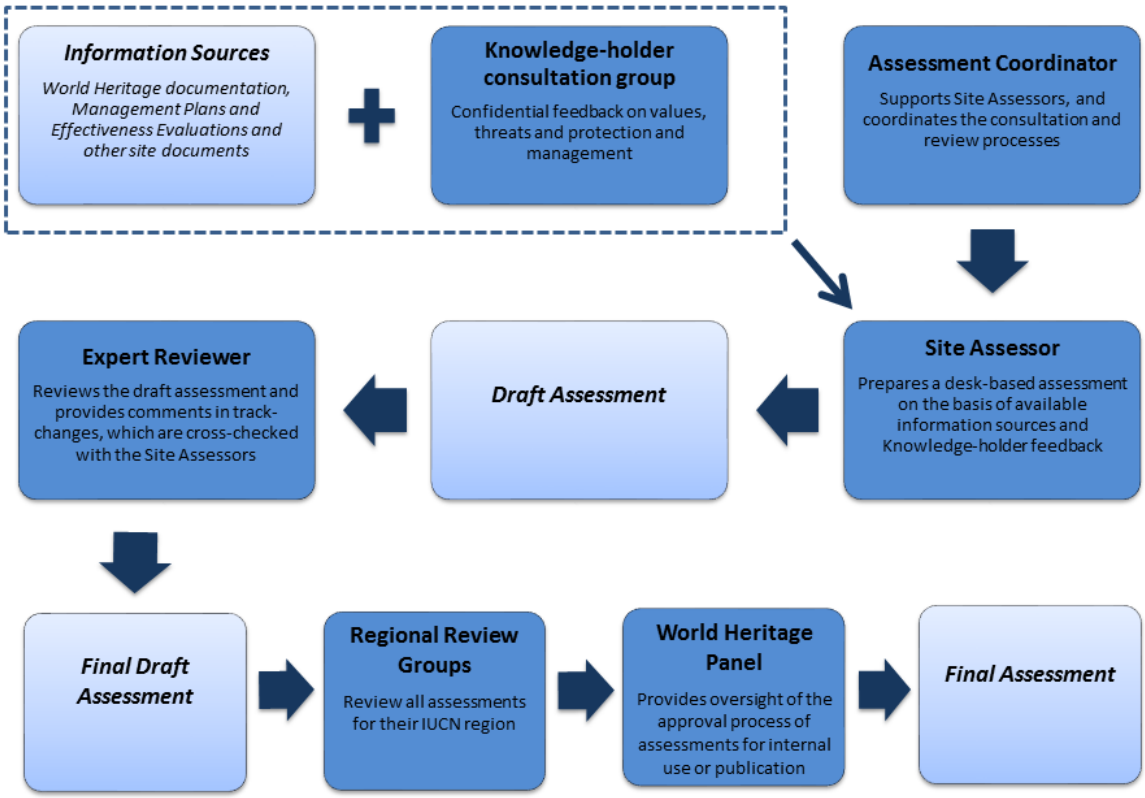

Figure 2: Roles in the Conservation Outlook assessment process

Section 1: Guidelines for Conservation Outlook Assessments

Consultation

OVERVIEW

The IUCN Assessment Coordinator contacts and consults Knowledge-holders prior to the assessment, requesting feedback on values, threats, protection and management through a standard consultation form. The relevant national and site-level management authorities are also contacted, informed of the assessment process and invited to contribute.

The consultation process is indispensable to ensuring that site assessments are accurate and focused on the most pressing issues. Knowledge-holders include, but are not be limited to: stakeholders involved in the management of sites (including IUCN member organizations, relevant government authorities, site managers, NGOs, community groups, international agencies etc.), World Commission on Protected Areas (WCPA) members, Species Survival Commission (SSC) members, other IUCN commission members, researchers and IUCN staff. Knowledge-holders are identified through the World Heritage Programme's contact database, IUCN's network of experts and the iterative process of consultation.

CONSULTATION GUIDELINES

a) **Consultation should begin sufficiently early** as it is an iterative process that requires significant time.

b) **Transparency:** All information used in assessments is referenced for transparency and so that future assessments can review the previous information base. Information sources, including consultation comments, should be clearly referenced within the 'description' column in the case of Worksheet 1, and in the 'justification for assessment' columns in Worksheets 2, 3 and 4, e.g. (Consultation feedback, 2009).

c) **Confidentiality:** All comments provided by Knowledge-holders are strictly confidential and are made available to the Site Assessor only on the basis of a confidentiality agreement.

d) **Site documents:** Any documents that Site Assessors receive directly should be forwarded to the IUCN Assessment Coordinator.

e) **Acknowledgement:** If they so wish, Knowledge-holders are acknowledged for their contributions to Conservation Outlook Assessments. This acknowledgment is not directly linked to specific sites or regions. The consultation form provides an opportunity for Knowledge-holders to indicate whether acknowledgment is desired.

Step 1: Identifying and describing values - Worksheet 1

STEP SUMMARY

The first step before undertaking an assessment is to identify and describe a site's values, including World Heritage and other important biodiversity values (if applicable).

World Heritage values are defined here as the natural features of a site which make up the Outstanding Universal Value (OUV) that led to the inscription on the World Heritage List. They are directly related to the criteria for which a site was inscribed. The World Heritage criteria for natural sites are given below in Box 1.1. 'Other important biodiversity values' are identified for sites that are listed for scenic and/or geological values, but which also have important biodiversity values. Wherever possible, it should also be described how these other biodiversity values are linked to the site's OUV. Other international designations (e.g. Ramsar site, Biosphere Reserve, Geoparks) should not be included here, as this information will be compiled and presented automatically for each site on the online World Heritage Outlook platform. Ecosystem services, spiritual values etc. are assessed under Step 6: Understanding Benefits.

Note that each criterion encompasses a number of values and that these should be broken down as relevant. For example, criteria (x) would be broken down into 'rare and endemic birds', 'rare and endemic mammals', 'Montane flora' etc. as appropriate.

Box 1.1: World Heritage criteria for natural sites

Criterion (vii) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance

Criterion (viii) be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features

Criterion (ix) to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals

Criterion (x) to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of Outstanding Universal Value from the point of view of science or conservation

ASSESSMENT GUIDELINES

a) **Filling in Worksheet 1**: Values are numbered V1 etc. in column 1, briefly identified in column 2, described in detail in column 3 and then cross-referenced to the relevant World Heritage criterion in column 4. 'Other important biodiversity values' are numbered VX1, grouped and described separately.

b) **Identifying World Heritage values:** Statements of Outstanding Universal Value, Statements of Significance, IUCN Evaluation Reports, nomination dossiers, and IUCN/WCMC data sheets from the time of inscription of the site on the World Heritage List are the main basis on which World Heritage values are identified:

→ *Statements of Outstanding Universal Value* (SoOUV)[6] are the official statements adopted by the World Heritage Committee at the time of inscription of a site on the World Heritage List. Since 2007, when the World Heritage Committee agrees to inscribe a natural site, it also adopts a Statement of OUV that encapsulates why the site is considered to be of OUV, how it satisfies the relevant criteria, the conditions of integrity, and how it meets the requirements for protection and management in order to sustain OUV in the long-term. This requirement has only been in place since 2007 and the sites inscribed on the World Heritage List prior to this date are required to prepare and present for adoption by the Committee a Retrospective Statement of Outstanding Universal Value, but some of World Heritage sites still do not have such a statement.

→ Prior to 2007, *Statements of Significance* were produced for World Heritage sites and were generally prepared as part of the nomination dossier. These statements cover value and integrity, but do not consider protection and management. Statements of Outstanding Universal Value are now replacing Statements of Significance.

→ *IUCN Evaluation Reports* are the product of an 18 month evaluation process, which includes desktop reviews of the nomination file submitted by the State Party, a comparative analysis of the nominated site with existing World Heritage sites and other noteworthy protected areas, and a field visit of the nominated site. These reports include a detailed description of a site's values, and often also include a description of other significant biodiversity, geological and/or esthetic values for which the site was not nominated. When a nominated site is recommended for inscription, the IUCN Evaluation Report specifies under which World Heritage criteria it should be inscribed, and gives a justification for its inscription under those criteria. IUCN Evaluation Reports can serve as a useful resource for identifying the values of natural and mixed World Heritage sites, particularly if there is no Statement of Outstanding Universal Value. Site Assessors can also review the original site nomination dossiers.

→ *IUCN/WCMC Data Sheets:* These provide detailed site descriptions. The data sheets prepared at the time of inscription are available for most sites, but are not official World Heritage Committee records.

Please ensure that the breakdown of World Heritage values is sufficiently detailed and relates to the criteria for the site. For example, values breakdowns could include:

Criterion	**Example values breakdowns**
(vii) to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance	• An extensive and spectacular landscape of majestic quartz sandstone peaks • Outstanding scenic value expressed by the topographic variation, geology and vegetation • The most dramatic known manifestation of the phenomenon of insect migration

[6] See the World Heritage Advisory Bodies and World Heritage Centre's guidance note on preparing ***Retrospective Statements of Outstanding Universal Value for World Heritage Properties - http://cmsdata.iucn.org/downloads/whouven.pdf***

	• An exceptional example of permanent lakes in a desert setting
(viii) to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features	• Globally significant rock record, fossil localities and geomorphological features • One of the most significant fossil areas and a classic representation of on-going glacial processes • An outstanding example of an earlier and major stage in the evolutionary history of the world's flora • Geological records of transition of hydrographic system from fluvial to hyper-arid conditions
(ix) to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals	• Rich mosaic of arctic ecosystems • Ongoing ecological and biological processes associated with the evolution of the unique Fynbos biome • An outstanding example of an oceanic island ecosystem in which evolutionary processes are active
(x) to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation	• Rare and endemic birds • Rich montane flora and fauna • Mountain Gorillas and other threatened mammals • A highly significant breeding ground for green turtles and hawksbill turtles

The above examples should help with the completion of Worksheet 1 during the preparation of a first Conservation Outlook Assessment for a specific site which will be the case with any newly inscribed sites. For those sites which were assessed during the first World Heritage Outlook cycle (all 228 natural and mixed sites inscribed prior to 2015) the breakdown was already checked and approved, so it doesn't require further work. However, the assessors could still suggest changes where appropriate.

c) **Identifying other important biodiversity values:** 'Other important biodiversity values' are typically identified for sites that are listed for geological and/or scenic values, but which also have important biodiversity values. These values may need to be identified and assessed based on other data sources. The IUCN Assessment Coordinator can support this process.

Please note the designation or nomination of a site (e.g. as a Ramsar site or a KBA) is not a "biodiversity value" in and of itself; it is the biodiversity element (species or ecosystem) that triggers the identification of the site as important for biodiversity that needs to be identified (e.g. "site contains threatened and geographically restricted mammals"). Please also indicate in the description field how the identified values link or relate to a site's World Heritage status or Outstanding Universal Value. General information

on a site's other official designations (e.g. as a Ramsar site, KBA, IBA, Biosphere Reserve etc) will automatically appear on the site assessment page on the World Heritage Outlook website, so this does not need to be specified by the Site assessor.

d) **Wording of the World Heritage criteria**: Please note that the numbering of the natural criteria was changed in 2005 [Criterion (vii) was previously N(iii), Criterion (viii) was previously N(i), Criterion (ix) was previously N(ii); and Criterion (x) was previously N(iv)]. For sites that were inscribed prior to 1994 the World Heritage criteria at the time of inscription were differently worded to the present day criteria. Most of these changes have been addressed by revising the assignment of criteria, so can be largely ignored for the purposes of the assessment. However, a range of sites that were inscribed under criterion N(ii) [now criterion (ix)] were inscribed in relation to "*Man's interaction with his natural environment*." Assessment Coordinators will alert Site Assessors to these sites on a case-by-case basis.

e) **Describing values:** Values should be described to a good degree of detail and where possible should be as quantitative as possible (Worksheet 1, column 2), and should be referenced, e.g. (SoOUV, 2011). Good analysis and description of values is crucial as it drives other steps of the assessment process, such as assessment of the current state of these values, assessment of threats to these values, and the consequent effectiveness of site protection and management.

f) **Finalizing the list of values**: In order to ensure the consistent identification of values across sites, the draft list of values should be finalized in collaboration with the IUCN Assessment Coordinator.

Step 2: Assessing threats - Worksheets 2(a) and 2(b)

STEP SUMMARY

The assessment of threats is split into two parts - Worksheets 2(a) and 2(b):

1. **Checklist of threats** (Worksheet 2(a)) – Threats are identified using a checklist format to help ensure that assessments are comparable across sites. This checklist is based on the IUCN-CMP threat taxonomy[7]. If present, threats are described in column 3. Please note that threats should be very briefly described, e.g. 'wastewater disposal from recreational boats at and around the property', 'commercial poaching of elephants' etc (the identified threats are then copied into column 1 of Worksheet 2(b) and described in detail). Threats are identified as being within or outside the site in columns 4 and 5. If a threat is located within a site, please indicate its extent[8] in column 5 (throughout [>50%]/widespread [15-50%]/scattered [5-15%]/localised [<5%]). The extent categories are based on the Rapid Assessment and Prioritization of Protected Area Management (RAPPAM) methodology. If the extent of the threat is not known, please indicate "not known". If not applicable, please indicate "Not applicable".

2. **Assessing threats** (Worksheet 2(b)) – The assessment focuses on direct threats rather than underlying drivers, and threats are split by whether they are current or potential (see glossary). The threats identified in Worksheet 2(a) are listed in column 1 and are then cross-referenced to the values they affect in column 2 (using the references Vx1, V1, V2 etc). The justification for the assessment is presented in column 3 and referenced, e.g. (SOC report, 2009),Threats are then assessed against five assessment ratings - **Very Low Threat, Low Threat, High Threat, Very High Threat,** and **Data Deficient** - in columns 4-8 (these ratings are defined in Table 2.1 below). Finally, the capacity of site management to respond to identified threats is noted in column 9.

3. The state of current and potential threats, as well as the overall state of threats, should be summarized and assessed in the last three rows of the worksheet.

THREAT RATINGS

Table 2.1: Threat ratings

Rating	Criteria
Very Low Threat	Few or no threats are evident and accepted predictions indicate that negative impacts on the site's values and integrity are likely to be minor.
Low Threat	Some minor threats are evident and there is concern that based on accepted predictions there are likely to be some localized but reversible negative impacts on the site's values and

[7] http://www.conservationmeasures.org/initiatives/threats-actions-taxonomies/threats-taxonomy

[8] "Extent is the range across which the impact of the activity occurs. The extent of an activity should be assessed in relation to its possible occurrence. For example, the extent of fishing would be measured relative to the total fishable waterways. The extent of poaching would be measured relative to the possible occurrence of the species population. The extent of acidification from pollution would likely be measured throughout an entire protected area. "Throughout" means that an activity occurs in 50 per cent or greater of its potential range, "widespread" means occurrence in between 15 and 50 per cent, "scattered" occurs in between 5 and 15 per cent, and "localized" in less than 5 per cent of its potential range." Source: Ervin, J. 2003. WWF: Rapid Assessment and Prioritization of Protected Area Management (RAPPAM) Methodology WWF Gland, Switzerland.

Rating	Criteria
	integrity.
High Threat	There are clear threats to the site, and current and/or predicted future impacts are likely to result in significant negative effects on the site's values and integrity.
Very High Threat	The threats to the site are very high, and current and/or predicted future impacts are likely to result in the irreversible loss of the majority of the site's values and its integrity.
Data Deficient	Available evidence is insufficient to draw a conclusion.

ASESSEMENT GUIDELINES

a) **Information sources**: Threats are identified and assessed on the basis of IUCN/UNESCO State of Conservation reports, Reactive Monitoring Mission reports, Periodic Reporting Questionnaires (section 3), IUCN Evaluation Reports, Management Plans, Management Effectiveness Assessments, consultation feedback, and other data sources as appropriate (see Annex 1 for an annotated list of information sources). Consultation feedback provides up-to-date information on the state of threats.

b) **Writing the 'justification of assessment':** Where relevant, the 'justification of assessment' should include detailed figures, e.g. poaching data, area affected by encroachment, number of artisanal mines etc, linked to references, e.g. (SOC report, 2011). The justification for assessment also needs to consider:

→ The **risk** posed by a threat (its likelihood x consequence on the site's values). **Risk** is defined as the likelihood of a threat (rare, unlikely, possible, likely or almost certain) combined with its impact (insignificant, minor, moderate, major or catastrophic) on World Heritage and/or other important biodiversity values (see the risk matrix in Figure 3).

→ the **extent** of the threat inside the site, defined as the range across which the impact of the threat occurs. Threats can be localised, scattered, widespread or occur throughout a site. It should be noted, however, that even if a threat is occurring in a small area of the property and/or during a short timeframe, it should still be considered significant if it threatens the site's World Heritage and/or other important biodiversity values.

→ Any **cumulative effects** of the threat on the site's values, in addition to direct and indirect/secondary effects, should also be evaluated. Cumulative effects result from the impact of an action when added to other past, present and reasonably foreseeable future actions. For example, forest fragmentation and impacts on wildlife as the result of multiple logging projects;

→ the **trend** (whether the threat has been decreasing, static or increasing over the past 5 years);

c) **Assessing the overall state of threats:** The assessment summaries for current and potential threats, as well as for the overall state of threats, should focus on World Heritage values and also note threats to other important biodiversity values. These summaries should include a brief description of the most significant threats; their likely direct, secondary and cumulative impacts on the site's values.

LIKELIHOOD						
Rare	Unlikely	Possible	Likely	Almost certain		CONSEQUENCE
Very Low	High	Very High	Very High	Very High	Catastrop	
Very Low	High	High	Very High	Very High	Major	
Very Low	Low risk	High	High	Very High	Moderate	
Very Low	Low risk	Low risk	High	High	Minor	
Very Low	Very Low	Low risk	Low risk	High	Insignifica	

Figure 3: Risk matrix

Step 3: Assessing protection and management – Worksheet 3

STEP SUMMARY

Protection and management is assessed against 14 standardized topics, which reflect IUCN best-practice guidance on protected area management, and are harmonized with those used in the *Managing Natural World Heritage Resource Manual* (prepared by IUCN and WCPA in 2011) and as also reflected in Questionnaire 2 of the second cycle of *Periodic Reporting*. Standards to assist in undertaking the assessment are provided in Table 3.2. The state of each topic is assessed against five ratings: **Highly Effective, Mostly Effective, Some Concern, Serious Concern** and **Data Deficient**. These ratings are defined in Table 3.1.

PROTECTION AND MANAGEMENT RATINGS

Table 3.1: Protection and management ratings

Rating	Criteria
Highly Effective	The protection and management system under implementation is effective and able to maintain the site's values and integrity. Aspects of site management can be regarded as being best-practice.
Mostly Effective	The protection and management system under implementation is adequate and is likely to essentially maintain the site's values and integrity over the medium-term. However, it may be insufficient to maintain the site's values and integrity over the long-term.
Some Concern	The protection and management system is not fully addressing the threats to the site's values, resulting in a number of conservation issues. However, these issues could be reversed and effectively addressed in the short-term if management capacity and/or protection are improved.
Serious Concern	The protection and management system shows major deficiencies and is unable to maintain the site's values and integrity over the short or long-term. Major interventions are required to enhance management capacity and/or protection.
Data Deficient	Available evidence is insufficient to draw a conclusion.

ASSESSMENT GUIDELINES

a) **Information sources**: Protection and management is assessed on the basis of Management Plans, Management Effectiveness Assessments, State of Conservation Reports, Mission Reports, Periodic Reporting Questionnaire, consultation feedback and other data sources as appropriate (see Annex 1 for an annotated list of information sources). Consultation feedback provides up-to-date information on the state of protection and management.

b) **Time horizons**: Long-term = more than 10 years; Medium-term = 5 to 10 years; and Short-term = 1 to 5 years.

c) **Specific protection and management contexts:**

→ **Transboundary, transnational and serial sites**: Sites that are jointly managed by two or more governments/institutions should be assessed as a single site, while noting any differences in management effectiveness between different component parts. Paragraph 114 of the Operational Guidelines notes that: *"In the case of serial properties, a management system or mechanisms for ensuring the co-ordinated management of the separate components are essential."*

For a transboundary or serial property, its overarching integrated management system should also be assessed. It needs to be indicated if a management plan and an overarching management authority for the entire transboundary/serial property exist and their effectiveness needs to be assessed.

→ **Sites affected by conflict**: Assessment of sites in areas subject to conflict or post-conflict situations, and particularly those affected by armed conflict, should take into consideration the considerable management and governance challenges faced by these sites and, where relevant, acknowledge the efforts made by management authorities as well as rangers and protected areas managers working in the field in these difficult and often dangerous situations.

d) **Assessing the overall state of protection and management**: This assessment summary should provide an overall picture of the site's current protection and management and should also note: i) external threats beyond the control of the management authority; ii) whether the site is transboundary/transnational, or serial, and whether it is affected by conflict and the ensuing challenges; and iii) any protection and management issues relating to other important biodiversity values, where applicable. The assessment should also note the ability of the site management to address threats originating outside the site.

e) **Best-practice example:** Where relevant, best-practice examples should be noted in the last row of Worksheet 3, including a short explanation of why they are considered to be best practice and key lessons learned that could be replicated in other sites.

Table 3.2: Standards for protection and management topics (Source: Managing Natural World Heritage Manual). Sites ranked 'Effective' or 'Highly' Effective should meet the majority of these standards.

Standards - to be used in assessing the 14 Protection and Management topics
Relationships with local people (including stakeholder relationship, participatory management, rights and access to benefits and equity) ▪ Have the key stakeholders been identified and are they involved in site management? ▪ Are indigenous people and human rights being respected? ▪ Are traditional management practices and the involvement of Indigenous people in natural and cultural resource management and decision-making fostered as appropriate? ▪ Is there a programme of outreach, communication and information exchange with local communities and other key stakeholders using mechanisms appropriate to the stakeholders? ▪ Do relationships with stakeholders in and around the site help facilitate effective conservation of the site's values? ▪ Are the needs of stakeholders addressed effectively within the management system for the site, without compromising the conservation of the site? If yes, are benefits provided by the World Heritage site shared equitably with local people? If not, what are the main conflicts with stakeholders that need to be addressed? ▪ Is local employment fostered and are community wellbeing programs implemented where appropriate? ▪ Are the impacts of site management on the community positive or at least neutral and stable or improving?
Legal framework ▪ Is the legal framework for the World Heritage site effective in maintaining its values? If not, what changes should be proposed to enhance the legal framework? ▪ Are land tenure issues resolved so that there is no impediment to management?
Enforcement ▪ Is the legal framework effectively enforced (e.g. adequate capacity to detect infringements through patrols and other enforcement activities, an effective system for the prosecution of offenders, fair permit system with compliance monitored and enforced)?
Integration into regional and national planning systems ▪ Is the site well-integrated into the national and regional planning systems? ▪ Is management of the site integrated with broader landscape /seascape management and sustainable development priorities?
Management system ▪ Does the site have a management plan, and is it up to date and implemented? ▪ Does the management plan identify values, management objectives, desired management outcomes, and key threats? ▪ Does the planning process provide sufficient opportunity for stakeholder input? ▪ Is there relevant, current and accessible information about natural values, threats, protected area use and community issues available to management? ▪ Is there a legitimate, accepted, transparent and accountable governance framework? ▪ Is governance and decision-making open to scrutiny by stakeholders, with information presented in appropriate format and reasoning behind decisions evident?

Standards - to be used in assessing the 14 Protection and Management topics

Management effectiveness

- Are the objectives of the management plan being achieved?
- Is there a process for monitoring, review and adjustment of the management plan during the life of the plan?
- Is the management plan actively used to guide management?
- Has a management effectiveness evaluation been undertaken for this site using available management effectiveness tools/methodologies (e.g. the WWF and World Bank Management Effectiveness Tracking Tool [METT], the IUCN framework for assessing management effectiveness of protected areas). If yes, please indicate the main results/conclusions.
- Are natural resources management activities conducted to a planned work programme, and aimed at minimizing threats and protecting values, using adaptive management practices?
- Is the management system adequate to maintain the site's values?

World Heritage Committee decisions and recommendations, if applicable

- Has the State Party implemented the decisions and recommendations of the World Heritage Committee related to the site?
- If not, what are the key limitations to fully implementing these decisions?

Boundaries

- Are the boundaries of the site, including buffer zone, effective in relation to the management and protection of its values?
- Are the boundaries clearly marked or fenced as necessary to conserve values?
- Does the site have a buffer zone and is its use of the buffer zone of the site regulated in ways that enhance site protection?

Sustainable finance

- Has the site assessed the level of financial resources required to ensure its effective management?
- Are financial resources adequate to implement the management measures required to maintain the site's values? If not, what is the funding gap?
- What are the existing sources of funding and are these sources secure and are they likely to remain so?
- If not, what measures are in place to obtain additional financial resources to support management?

Staff training and development

- Is staff capacity/numbers adequate to manage the site, with appropriate support staff?
- Do staff have the necessary capability and training to conduct essential management activities including community relations and biodiversity conservation?
- Are staff respected and nurtured, and staff health, safety and well-being are given a high priority by the management authority?
- Is there adequate equipment and infrastructure available and accessible to staff as appropriate to manage the site?
- Is equipment and infrastructure well maintained and regularly replaced as necessary so that the functioning and safety of management assets remains high?

Sustainable use

- Are there any assessment of the type and level of resources that could be used from the site without jeopardizing the site's conservation?
- Are there effective mechanisms in place to ensure resource use permitted in and around the World Heritage site is sustainable and does not impact negatively on values?
- Does any resource use at present represent a threat to the conservation of the site? If yes, how can this be addressed?

Education and interpretation programmes

- Do education, interpretation and awareness programmes significantly enhance the understanding of values of the site among stakeholders?
- Is there any education or awareness programme in place on regulations about the adequate use of the site's natural resources?

Standards - to be used in assessing the 14 Protection and Management topics

Tourism and visitation

- Is there an understanding and promotion of the sites values in local and national tourism policies?
- Is there a tourism and/or visitation plan for the site? If yes, is it under implementation?
- Do visitor services and facilities meet standards of design, environmental sustainability and safety and are they appropriate for the character, values and use of the protected area?
- Is the tourism industry within the protected area managed to support protected area objectives?
- Are visitor impacts managed to minimize harm to the natural and cultural values of the protected area (for example through permits, access control, facilities, education and enforcement)?

Monitoring

- Are the values for which the site was inscribed on the List of World Heritage adequately and systematically monitored?
- If not, can the management agency establish cooperation programme with academic and/ or research centres to support monitoring activities?
- Are management plans, tools and decisions adapted and improved as a result of monitoring outcomes?

Research

- Is there a targeted research programme in place as part of the adaptive management system of the site?
- If not, can the management agency establish cooperation programmes with academic and/or research centres to support research?
- Is there adequate knowledge, based on up to date data and information, about the site to support planning, management and decision-making to ensure that values is maintained over the long-term?

Step 4: Assessing the current state and trend of values - Worksheet 4

STEP SUMMARY

Assessing values involves both an assessment of their current state and their trend over the last five years. Both World Heritage and other important biodiversity values are assessed:

1. **Current state** is assessed against five ratings: **Good, Low Concern**, **High Concern**, **Critical** and **Data Deficient** (see Table 4.1). The baseline for the assessment should be the condition at the time of inscription, with reference to the best-recorded historical conservation state.
2. **Trend** is assessed in relation to whether the condition of a value is **Improving, Stable, Deteriorating** or **Data Deficient**, and is intended to be snapshot of recent developments over the last five years. Trend should be reported in column 9 of Worksheet 4.

ASSESSMENT GUIDELINES

a) **Build on previous assessment steps**: The assessment of values should draw on the information in Steps 3 and 4 relating to threats and protection and management. Note that benefits like ecosystem services etc. are covered in Step 6: Understanding Benefits.

b) **Information sources**: The information used to assess the current state and trend of values should be as quantitative as possible. Information sources include State of Conservation Reports, Periodic Reports, Management Effectiveness Assessments, Management Plans, the IUCN Red List of threatened species, scientific papers, and consultation feedback, which provides up-to-date information on the current state and trend of values (see Annex 1 for an annotated list of information sources).

c) **Naming species**: Assessments should use both the vernacular and scientific names for species.

d) **Assessing the overall state and trend of World Heritage and other important biodiversity values:** These assessment summaries should present how the state and trend of values has changed since the time of inscription, or the best-recorded conservation state, and highlight any key declines/improvements.

Table 4.1: World Heritage values ratings

Rating	Criteria
Good	All elements necessary to maintain the site's values are essentially intact, and their overall condition is stable or improving. Available evidence indicates only minor, if any, disturbance to the values of the site.
Low Concern	Some loss or alteration of the elements necessary to maintain the site's values has occurred, but their overall condition is stable or improving and is not causing persistent or substantial effects on the values of the site.
High Concern	Loss or alteration of many elements necessary to maintain site values has occurred, which is leading to a significant reduction in the values of the site.
Critical	Loss or alteration of a majority of elements necessary to maintain site values has occurred and has caused a major loss of the values of the site.

Step 5: Assessing Conservation Outlook – Worksheet 5

STEP SUMMARY

Conservation Outlook Assessments aim to not only track the current state of natural World Heritage sites, but to also use the information collected in the assessment to project the sites' longer-term ability to conserve its values.

Definition: Conservation Outlook is a projection of the potential for a site to conserve its values over time. This projection is based on an assessment of the state and trend of values, the threats affecting those values and the effectiveness of protection and management.

Conservation Outlook is assessed against five ratings: **Good, Good with some concerns, Significant Concern**, **Critical,** and **Data Deficient** (see Table 5.1). In Worksheet 5, the 'justifications of assessment' and assessments for rows 3-9 should simply be copied from Worksheets 2-4. Only the Conservation Outlook summary and assessment in Worksheet 5 are new.

Note that Worksheet 5 will constitute the assessment summary and will be most visible on the online site assessment pages. It should therefore be as detailed and as self-explanatory as possible.

CONSERVATION OUTLOOK RATINGS

Table 5.1: Conservation Outlook ratings

Rating	Criteria
Good	The site's values are in good condition and are likely to be maintained for the foreseeable future, provided that current conservation measures are maintained.
Good with some concerns	While some concerns exist, with minor additional conservation measures the site's values are likely to be essentially maintained over the long-term.
Significant Concern	The site's values are threatened and/or may be showing signs of deterioration. Significant additional conservation measures are needed to maintain and/or restore values over the medium to long-term.
Critical	The site's values are severely threatened and/or deteriorating. Immediate large-scale additional conservation measures are needed to maintain and/or restore the site's values over the short to medium-term or the values may be lost.
Data Deficient	Available evidence is insufficient to draw a conclusion

ASSESSMENT GUIDELINES

a) **Guidelines for Conservation Outlook judgements:**

- → The previous assessment of threats, protection and management (including capacity of site management to respond to threats), and site values should all be considered when applying the ratings in Table 5.1.
- → Where there have been major data gaps in the assessments undertaken, these should be noted.
- → The assumptions upon which the Conservation Outlook is based should be clearly presented in the 'justification for assessment' column of Worksheet 5.

b) **Time horizons**: Long-term = more than 10 years; Medium-term = 5 to10 years; and Short-term = 1 to 5 years.

c) **Significant Concern:** This category generally includes sites that are subject to the State of Conservation monitoring process, including reactive monitoring missions.

d) **Critical**: This category generally includes those sites that are already inscribed on the List of World Heritage in Danger and those that are subject to severe threats that could lead to the loss of their values.

e) **Disclaimer:** Conservation Outlook Assessments project (an estimate of future possibilities based on a current trend) but do not predict (a statement that some outcome is expected).

Section 2: Guidelines for associated tables

Step 6: Understanding benefits – Worksheet 6

STEP SUMMARY

The primary focus of the World Heritage Outlook is to track the conservation state, trend and outlook of World Heritage sites. Collecting additional information on the benefits (ecosystem services) natural World Heritage sites provide to people, and the threats to these benefits, is useful when considering how sites can help to support healthy ecosystems which deliver benefits to people, and may also help maintain World Heritage and other important biodiversity values over time.

The collection of information on benefits is split into two parts:

1. **Identify benefits using the checklist** (Worksheet 6(a)): Benefits are identified using a checklist based on the benefit categories. The list of benefit types and sub-categories has been developed based on different existing classifications, including the classification used by the Protected Areas Benefits Assessment Tool[9]. The assessor should mark the benefits that are present and those that could reasonably be assumed to be present but for which there is little/no information (i.e. data deficient). Benefits that are not ticked are assumed to be absent.
2. **Describe selected benefits** (Worksheet 6(b)): The assessor describes the selected benefits in the 'summary' column. The description should be referenced wherever possible.
3. **Assessor factors negatively affecting provision of selected benefits:** Where information is available, the assessor should include information on factors negatively affecting the provision of selected benefits (indicating the level of impact [Very High, High, Moderate, Low] and the trend [Increasing, Continuing, Decreasing]). Where no information on such factors is available, the fields can be left blank. The list of these factors consists of five direct drivers of change: habitat change (land use change), pollution, overexploitation, climate change and invasive species. This classification is based on that used in the UK NEA (2011). Any comments or additional information on these factors can be added in the "Comments on factors" column for each benefit.

In 2014 the IUCN World Heritage Programme undertook a study specifically focused on the benefits provided by natural and mixed World Heritage sites. Part of the study used the information collected through the Conservation Outlook Assessments and this also provided an opportunity to collect some additional information, including on direct drivers of change. The assessors can consult the study at https://portals.iucn.org/library/sites/library/files/documents/2014-045.pdf.

ASSESSMENT GUIDELINES

a) **Limits of the assessment:** It is important to keep in mind that Step 6 is not meant to be a full assessment of benefits, but an identification of the types of benefits provided by a site.

[9] Dudley, N., Stolton S. (2009). The Protected Areas Benefits Assessment Tool: A methodology. World Wide Fund for Nature.

b) **Benefits compatible with a site's conservation objectives**: In the case of provisioning services, assessors should only consider as benefits those activities that are compatible with a site's conservation objectives, e.g. legal collection of medicinal plants from a site for local use.

c) **Valuing benefits:** Assessors are not expected to value benefits in monetary and quantitative values. However, where such figures are easily available from existing studies these can be included with clear references and disclaimers where relevant.

d) **Intangible benefits:** Assessors should identify not only tangible benefits, but also intangible ones related to cultural values, e.g. for sacred sites.

e) **Intrinsic benefits:** It is important to note that the number of benefits does not necessarily equate to increased importance of a site, and that all sites have an intrinsic value that is not necessarily related to human use.

Step 7: Compiling information on conservation projects in the site, and site needs – Worksheet 7

STEP SUMMARY

To date, there has been no systematic attempt to compile information on the organizations and conservation projects in natural World Heritage sites (both active projects and projects that have taken place within the last 5 years), or on site needs that could be addressed through future project work. The purpose of Worksheet 7 is to begin compiling this information. Conservation organizations/individuals active in a site, the duration of the project, and details of activities of the project and/or project needs are identified and contacts provided if available (e.g. email, weblink). Site needs are then described in the second half of the worksheet. An example of site needs for a site are listed below:

- Implement quarantine controls and rapid-response plans to deal efficiently with potential arrivals of known invasive species
- Implement plans for control and/or eradication of rats and cats.

ASSESSMENT GUIDELINES

a) **Limited or incomplete information is still useful:** If limited information is available on the organizations and conservation projects active within a site, Site Assessors are encouraged to provide whatever information is easily available, even if incomplete.

Step 8: References – Worksheet 8

STEP SUMMARY

All information used in assessments is referenced for transparency and so that future assessments can review the previous information base. Information sources should be clearly referenced within the 'description' column in the case of Worksheet 1, and in the 'justification for assessment' columns in Worksheets 2, 3 and 4, e.g. (Smith, 2009). References should be compiled in Worksheet 8.

REFERENCE GUIDELINES

References should be listed alphabetically and follow the Harvard system, also known as the author–date system which is structured as follows: author(s), date, title, place of publication, publisher (this is the standard IUCN format). Where possible URLs for documents available online should be included. (*Note: If referencing grey literature and websites please give the year that the data was compiled if possible*)

- → **Books:** Pomeroy, R.S., Park, J.E. and Watson, L.M. (2004). *How is your MPA doing? A Guidebook of Natural and Social Indicators for Evaluating Marine Protected Areas Management Effectiveness.* Gland, Switzerland and Cambridge, UK: IUCN.
- → **Chapter or extract from a book:** Margarey, M.E. (1988). 'Examination of the Cervical and Thoracic Spine'. In: R. Grant (ed.) *Physical Therapy of the Cervical and Thoracic Spine*, pp.81–109. New York: Churchill Livingstone.
- → **Articles from periodicals or journals**: Rips, L.J., Shoben, E.J. and Smith, E.E. (1973). 'Semantic Distance and the Verification of Semantic Relations'. *Journal of Verbal Learning and Verbal Behaviour* 12:1–20.
- → **Unpublished or soon to be published works**:
  - For books: McNeely, J. (In press). *The politics of biodiversity: a reader*. Gland, Switzerland: IUCN.
  - For journal articles: Jones, J. (2006). 'Planting tree saplings in the Amazon'. To be published in *Journal of Amazonian Botany* 5.
- → **Papers or presentations (ppt) delivered during meetings or conferences:** Smith, D. (2002). 'How the Dodo Died', paper delivered at the Annual Conference of Extinct Species, London, 29 February 2002.
- → **Publications authored by organizations:** Where no author is given, the organization acting as the author should be cited as such, e.g. IUCN (2006). *Progress and Assessment Report 2006*. Gland, Switzerland and Cambridge, UK: IUCN.
- → **Academic theses and dissertations:** Holford-Stevens, L.A. (1971). 'Select Commentary on Aulus Gellius, Book 2'. PhD thesis. Oxford: Oxford University.
- → **Citing electronic references**: Jones, Jack. 'The cultivation of saplings in the Amazon rainforest'. J*ournal of South American Botany* [online periodical], (15 June 2005). <http://www.southamericanbotany/info/articles>. Accessed 10 July 2006.

Glossary

→ **Boundary:** For natural World Heritage sites, boundaries should reflect the spatial requirements of habitats, species, processes or phenomena that provide the basis for their inscription on the World Heritage List. The boundaries should include sufficient areas immediately adjacent to the area of Outstanding Universal Value in order to protect the site's heritage values from direct effect of human encroachments and impacts of resource use outside of the nominated area.

→ **Buffer zone**s are areas that are not part of the site, but surround all or part of it and provide for its protection. These areas are described in the Operational Guidelines as "*An area surrounding the World Heritage site which has complementary legal and/or customary restrictions placed on its use and development to give an added layer of protection to the World Heritage site*." (Paragraph 104).

→ **Conservation Outlook** is a projection of the potential for a natural World Heritage site to conserve its values over time. This projection is based on an assessment of the state and trend of values, the threats affecting those values and the effectiveness of protection and management.

→ **Current vs. potential threats**: Current threats are the proximate human activities or natural processes/disasters that are causing the destruction, degradation, and/or impairment of a site's values (e.g. illegal logging and extreme weather events). Current threats are ongoing, while potential threats are likely to occur in the future. Their effects can be direct, indirect or cumulative:

- **Direct effects** are caused by an action occurring at the same time and place, e.g. forest loss following logging.
- **Indirect or secondary effects** are effects that occur later in time or further removed in distance, e.g. degradation of soil and water quality as a result of erosion due to forest loss.
- **Cumulative effects** result from the impact of an action when added to other past, present and reasonably foreseeable future actions, e.g. forest fragmentation and impacts on wildlife as the result of multiple logging projects.

→ **Drivers:** Underlying direct threats are demographic and macroeconomic factors that ultimately drive the loss of biodiversity. Examples of drivers include population pressures, poverty and poor governance.

→ **Green List**: The IUCN Green List of Well Managed Protected Areas is an initiative to encourage, measure, celebrate and share the success of protected areas in reaching good standards of management. It is currently being developed to assist national governments and their community partners in conservation to meet the commitments embodied in the CBD Strategic Plan for Biodiversity and particularly Target 11. A requirement of this target is the effective and equitable management of protected areas. Protected areas considered for the Green List will meet internationally agreed standards for established and successful management, with consideration for the local and national context, and will demonstrate successful outcomes for biodiversity conservation, effective management and equitable governance.

→ **Integrity** is a specific term used in the World Heritage Convention. It is described in the Operational Guidelines as "...*a measure of the wholeness and intactness of the natural and/or cultural heritage and its values. Examining the conditions of integrity, therefore requires assessing the extent to which the site: a) includes all elements necessary to express its OUV; b) is of adequate size to ensure the complete representation of the features and processes which convey the site's significance; c) suffers from adverse effects of development and/or neglect*" (Paragraph 88).

→ **Management effectiveness:** The assessment of how well the protected area is being managed - primarily the extent to which it is protecting values and achieving goals and objectives.

→ **Management plan:** An explicit set of rules governing how to apply the principles and framework of natural resource management in a given area. This plan may be adapted to various changes in the natural and social environment, or upon the basis of new information about how a system functions. (Source: Hockings et al., 2006, p.xiii)

→ **Other important biodiversity values**: Other important biodiversity values' are typically identified for sites that are listed for geological and/or scenic values, but which also have important biodiversity values, including those identified under international, regional and national designations such as Ramsar, KBA, IBA, IPA, AZE, Natura 2000 etc.

→ **Outstanding Universal Value** is a specific term used in the World Heritage Convention, and is defined as *"...natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole."* (Source, Operational Guidelines, see Figure 4)

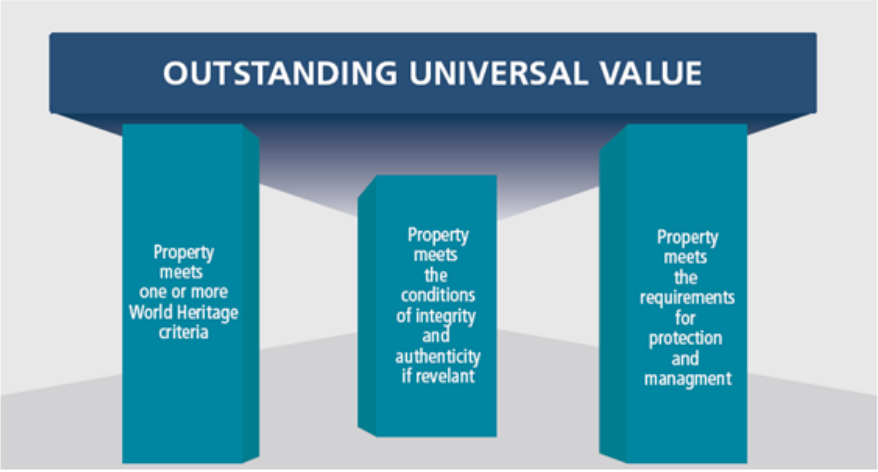

Figure 4: The three pillars of Outstanding Universal Value are reflected in the three main Conservation Outlook Assessment topics – values, threats, and protection and management

→ **Sustainable use:** The use of resources at rates that do not exceed the capacity of ecosystems to replace these.

→ **Threats within and outside a site**: Threats within and outside a site are differentiated by their points of origin. Threats within a World Heritage site are caused by actors or events located within the site or its immediate surroundings, while threats outside a site can originate locally, regionally, nationally or globally, and are caused by actors or events outside the site.

→ **Time horizons**: Long-term = more than 10 years; Medium-term = 5 to10 years; and Short-term = 1 to 5 years.

→ **Values**: Values are the 'building blocks' making up the biodiversity, scenic and geological features that are valued.

→ **World Heritage values**: Biodiversity, scenic and geological values can mean different things to different people. Within the World Heritage Convention, natural values refer to the four criteria listed in Box 1.1. What makes a site outstanding and universal is its "value", which implies clearly defining the importance of a site, and rating its importance in relation to other sites around the world. In natural World Heritage terms therefore the value of the site is what makes it one the most outstanding natural places on Earth.

Annex 1: Annotated list of information sources

Note: Most of the information sources below will be emailed to Site Assessors by the IUCN World Heritage Outlook Coordinator.

- → **Confidential Consultation Forms:** These are standard forms in English, French or Spanish containing feedback from Knowledge-holders on the state of values, threats and protection and management. These forms are strictly confidential and are only accessible to IUCN's World Heritage Program and the Site Assessors, on the basis of a confidentiality agreement.
- → **Designation information**: Many World Heritage sites are also designated at Ramsar sites[10] or Biosphere Reserves under UNESCO's MAB program[11]. The IUCN Assessment Coordinator can provide support on obtaining this information.
- → **GIS and remote sensing imagery:** Depending on availability, remote sensing imagery can be used to assess level and rate of forest loss, encroachment, and the occurrence of mines, dams and/or roads in and around a site. GIS datasets can be used to cross reference existing ecological datasets with natural World Heritage sites. Where relevant, both GIS and remote sensing data may be used on a case by case basis at the request of the Site Assessor.
- → **Grey literature:** World Heritage sites tend to be the focus of many conservation projects. Useful sources of information include: Important Plant Areas database[12]; Important Bird Areas[13]; Alliance for Zero Extinction[14]; WWF's ecoregion[15] etc.
- → **IUCN and IUCN/UNESCO Mission Reports:** Publicly available reports from IUCN missions (including advisory and joint missions) provide a detailed analysis of pressing conservation issues affecting a site, as well as recommendations to address these issues.
- → **IUCN Evaluation Reports**: The evaluation report written by IUCN at the time of a site's nomination can provide a historic basis for assessing the trend in values, threats and protection and management. Evaluation reports can also be helpful in identifying the values for which a site was inscribed on the World Heritage List. Available for all sites.
- → **IUCN/UNEP-WCMC Data Sheets:** The IUCN/UNEP-WCMC Data Sheets provide detailed site description, including information about land tenure, climate, species and habitats, management and threats[16]. The data sheets prepared at the time of inscription are available for most sites.
- → **IUCN/UNESCO State of Conservation Reports:** The State of Conservation reports prepared by IUCN and UNESCO for the World Heritage Committee discuss the state of a site's values, threats to those values and protection and management issues, and propose a draft decision to the World Heritage Committee. These reports are based on State Party reports, and on other available information. These reports are either

[10] http://ramsar.wetlands.org/Database/AbouttheRamsarSitesDatabase/tabid/812/language/en-US/Default.aspx
[11] http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/mab/
[12] http://www.iucn.org/about/union/secretariat/offices/iucnmed/iucn_med_programme/species/key_biodiversity_areas/
[13] http://www.birdlife.org/action/science/sites/
[14] http://www.zeroextinction.org/
[15] http://www.worldwildlife.org/science/ecoregions/item1847.html
[16] The UNEP-WCMC data sheets will be available on the online document library and are also available at http://www.unep-wcmc.org/world-heritage-information-sheets_271.html

requested by the World Heritage Committee or by IUCN/UNESCO because of urgent threats to a site's Outstanding Universal Value.

→ **Management Effectiveness Evaluations:** Published evaluations of the effectiveness of site management to maintain World Heritage values[17]. Not available for all sites.

→ **Management Plans:** Management plans may include threat assessments, assessments of key values etc., in addition to information about a site's protection and management regimes. Not always available or up to date. Available for some sites.

→ **Maps of the World Heritage site** – Can be accessed on UNESCO's World Heritage Centre website http://whc.unesco.org/ and on Protected Planet www.protectedplanet.net. Note that the quality of maps is highly variable.

→ **Media reports:** The level of media coverage will vary considerably between sites. This source of information should be consulted with care, and should preferably only be referred to when the issues they raise are confirmed by other reliable sources.

→ **Periodic Reporting Questionnaires:** Section 2 of the Periodic Reporting Questionnaire is a site-based questionnaire, which is intended to be completed by World Heritage managers. The questionnaire draws heavily on the IUCN WCPA management effectiveness framework and includes a detailed threat (i.e. factors affecting the site) assessment as well as assessment of the state of conservation, and the effectiveness of protection and management.

→ **Previous World Heritage Outlook site assessments:** Previous versions of Conservation Outlook Assessments will serve as a source of information for current assessments. Site Assessors can maintain the parts of the previous assessment which are still accurate (e.g. description of values), and update the parts where changes have occurred since the last assessment. Previous site assessments are available from the IUCN World Heritage Outlook website: http://www.worldheritageoutlook.iucn.org/search-sites

→ **Protected Planet** (www.protectedplanet.net) - Protected planet allows you to find information about individual protected areas.

→ **Scientific publications:** Where relevant, available recent scientific publications relating to a site or its values should be consulted.

→ **Statements of Outstanding Universal Value** or **Statements of Significance:** Where available, the Statement of Outstanding Universal Value (required for all inscriptions since 2005) provides the official public statement of the values for which a site was inscribed on the World Heritage List. Older sites often lack a Statement of Outstanding Universal Value, but many have a Statement of Significance instead, which is usually less detailed. For all sites inscribed before 2005 a process to define retrospective Statements of Outstanding Universal Value is currently being undertaken.

→ **World Heritage Committee Decisions**: These are the official decisions taken by the World Heritage Committee, containing recommendations for conservation action. These decisions are based on the IUCN/UNESCO State of Conservation Reports.

[17] IUCN WCPA and UNEP WCMC have developed a searchable database of management effectiveness assessments carried out worldwide which can be accessed at: http://www.wdpa.org/ME/