
World Heritage Sites and the extractive industries

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Preface

Effective conservation of the integrity and Outstanding Universal Value of natural World Heritage Sites is a complex and multifaceted challenge for State Parties to the World Heritage Convention; the private sector and other natural resource users; the World Heritage Committee and its Advisory Bodies; and the international community as a whole. This short independent study has been commissioned through IUCN in conjunction with the World Heritage Centre, as well as the International Council on Mining and Metals (ICMM) and Shell, as private sector interests with established specific conservation commitments to World Heritage Sites. ICMM and Shell have funded the exercise. It focuses on the relationship between the extractive industries and natural World Heritage properties. Although its focus is on decisions that may be taken in this regard by the World Heritage Committee, the review is intended to inform a wider range of stakeholders about the issues, challenges and opportunities arising from the tension and potential interdependence between the economic imperatives of mineral and hydrocarbon extraction and the conservation imperatives of preserving the world's natural heritage.

The maps in the report were kindly provided by IUCN and the United Nations Environment Programme World Conservation Monitoring Centre (IUCN and UNEP-WCMC, 2012).

I thank the reference group, and Rachel Asante-Owusu of IUCN who is co-ordinating the exercise, for their support and advice during this task. I am also grateful to all those – not named in the report, for confidentiality reasons – who took the time to discuss the issue with me.

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Abbreviations

AOS	Arabian Oryx Sanctuary
EIA	environmental impact assessment
ESIA	environmental and sociological impact assessment
ICCN	Institut Congolais pour la Conservation de la Nature
ICME	International Council on Metals and the Environment
ICMM	International Council on Mining and Metals
ICOMOS	International Council on Monuments and Sites
IFC	International Finance Corporation
IPIECA	International Petroleum Industry Environmental Conservation Association
IUCN	International Union for Conservation of Nature
km	kilometre
np	no page number
OECD	Organisation for Economic Co-operation and Development
OUV	Outstanding Universal Value
SEA	strategic environmental assessment
TFCA	transfrontier conservation area
TOR	terms of reference
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WCMC	World Conservation Monitoring Centre
WDPA	World Database on Protected Areas
WH	World Heritage
WHC	World Heritage Committee

Summary

1. There is growing concern about the adverse impact of the extractive industries (exploration for and extraction of minerals, oil and gas, as well as associated infrastructure) on natural World Heritage Sites. The International Council on Mining and Metals and Shell have committed not to operate in these properties, as have some banks that finance extractive industry operations. Many other mining and energy companies, and banks, recognise the sensitivity of World Heritage Sites and other protected areas and assess the risk of operating in or near them accordingly. Nevertheless, State Parties and the private sector have not been able to halt the growth in damage to the Outstanding Universal Value and integrity of natural World Heritage Sites by extractive industry exploration and exploitation within and beyond the properties' boundaries. Artisanal mining also has negative effects on some properties, but is not the focus of this study.
2. **The objectives of this study** are to undertake a critical evaluation of current World Heritage processes and practices with regard to the relationship between the extractive industries and natural World Heritage Sites, taking into account the views of all stakeholders and making reference to a series of case studies; to propose ways to strengthen the World Heritage Convention in this regard; and to provide feedback on the issue to the World Heritage Committee and State Parties to the Convention.
3. For this purpose, relevant documentation has been reviewed and seven case studies of interaction between the extractive industries and World Heritage Sites have been investigated. Confidential discussions have been held with 41 informants from governments; mining and energy firms and industry organisations; financial institutions; and technical agencies, including the World Heritage Centre and IUCN (Advisory Body to the World Heritage Committee on natural World Heritage Sites).
4. While the **private sector** has developed a degree of self-regulation with regard to the extractive industries and natural World Heritage Sites (and banks make frequent reference to the Equator Principles and the International Finance Corporation's Performance Standards), this cannot be a substitute for effective and consistent regulation of companies' resource use and environmental behaviour by **State Parties** (including, in some cases, the regulation of state-owned firms). For a number of economic, political and institutional reasons, this regulation is not always adequate. At the level of the Convention, the **World Heritage Committee** has been discussing the issue since its 23rd meeting in 1999, and a number of international meetings have been held on the subject. Although it

has Operational Guidelines, the Committee has so far had no formal policy guidelines on this issue. It has now decided to develop them.

5. Degrees of commitment to the conservation of natural World Heritage Sites differ within and among **mining and energy companies**. Some firms remain willing to explore or operate inside or near these properties, risking significant damage to their integrity and Outstanding Universal Value – as well as their own reputations. Those that have committed not to operate in them are concerned about the potential competitive disadvantage but recognise the reputational benefits, as well as the potential environmental rewards, that their commitment achieves. They – and many other companies whose risk assessment procedures recognise the sensitivity of such sites – appreciate the simple clarity that World Heritage designation of an area brings to their decision-making.
6. **Governments** – especially but not only those of developing countries – must balance conservation and economic imperatives. They need the income and employment that the extractive industries bring, but they recognise the environmental and economic importance of conserving natural World Heritage. In some cases, their governance of the extractive industries, and of natural resource use and management more generally, is not fully effective. Internal co-ordination of mineral, energy, economic and environmental agencies may be inadequate. There are also instances where new natural World Heritage properties are inscribed without termination of all existing mineral or energy concessions, without comprehensive assessment of resource use issues and planning of resource use controls beyond new properties' boundaries, and without complete definition or legal proclamation of buffer zones and related protective measures.
7. State Parties, the international agencies and the private sector need **clearer insights into each other's behaviour**. Rather than mistrust or surprise at what emerges from the other parties' decision-making, they should be able to predict and explain the steps and procedures that each of them follow, and the outcomes that result.
8. All stakeholders should recognise that the function of World Heritage Sites is the conservation of globally recognised Outstanding Universal Value, and not the generation of economic benefits. At the same time, while from some perspectives this implies trade-offs and opportunity costs, natural World Heritage Sites may contribute economically significant ecosystem services. Furthermore, there are ways in which governments can engage with the private sector **in broader planning and management frameworks to combine mineral and hydrocarbons extraction with environmentally responsible**

initiatives. Within these broader spatial frameworks, such initiatives can help maintain the Outstanding Universal Value and integrity of World Heritage properties, and contribute to broader conservation objectives - without permitting mineral or hydrocarbon exploration or exploitation within the properties or allowing negative impacts on them from any such activities outside their boundaries.

9. At the technical level, it is increasingly evident that, while buffer zones may play an important role in preventing extractive industry or other impacts on natural World Heritage Sites, these properties should be integrated within **broader frameworks of environmental assessment and management** that take full account of all ecosystem and economic processes that could affect them, wherever such processes may occur. Integrated land use planning is an important tool in developing these frameworks, particularly when extractive activities are still at the concession or exploration stage (as in the majority of cases of real or potential threats by the extractive industries to natural World Heritage Sites). Where these broader monitoring and management systems are fully established and effective, the need for a buffer zone may fall away. Whatever mode of impact assessment is adopted, clear, specific guidelines are required on the assessment of impact on the Outstanding Universal Value and integrity of natural World Heritage properties.
10. When a natural World Heritage Site has been defined and inscribed (together, where relevant, with its buffer zone), an important challenge for state regulatory agencies and for the private sector is the rigorous preservation of the integrity of the property. There have been instances in the past where the **boundaries** of properties may have been too readily adjusted to allow for mining or hydrocarbon extraction. Boundary modification for these purposes is not appropriate.
11. Mining and energy companies' ability to fund substantial environmental programmes in the vicinity of their operations should not be viewed as adequate recompense for negative impacts on natural World Heritage properties. Nor are offsets an admissible strategy to compensate for such impacts. Nevertheless, the extractive industries should not automatically be seen as a threat to these properties. Instead, there may be opportunities, within broader planning and management frameworks, to identify **mutually beneficial strategies** for company support to environmental initiatives and capacity development that directly or indirectly benefit them. In the 21st century, a positive environmental profile is an increasingly valuable asset for the private sector.
12. The study makes a number of **recommendations** for action by State Parties, the private sector, the World Heritage Committee, the World Heritage Centre, IUCN and the international community. These

should be seen in the context of many other recommendations that have been made with regard to the extractive industries and natural World Heritage Sites, notably in 2000 and 2008. The study recognises that, while there are no easy solutions, there are genuine opportunities for progress.

13. **Recommendations to State Parties** focus on stronger governance of the extractive industries and their environmental impacts, ensuring that all existing exploration or exploitation concessions in natural World Heritage properties are withdrawn, with appropriate compensation where applicable; that no new ones are granted within them, nor any beyond their boundaries that could negatively affect them; that all stakeholders, including relevant private and state-owned mining and energy interests, are thoroughly consulted when nominations for new inscriptions on the World Heritage List are prepared; that potential World Heritage Sites are retained on Tentative Lists for the shortest practicable time; and that all the relevant Operational Guidelines of the World Heritage Committee are scrupulously followed.
14. **Recommendations to the private sector** urge those mineral and energy companies and banks that have not already done so to commit clearly not to operate or fund operations in natural World Heritage Sites or to undertake any activities that could negatively affect them. In jurisdictions where public funding for the governance of natural resource use is restricted and the coverage and effectiveness of natural resource use controls may be incomplete, the private sector should be proactive in working with State Parties and local institutions to enhance capacity and procedures for effective environmental management and avoidance of negative extractive industry impact on natural World Heritage properties (without creating conflicts of interest through influence over the development of regulatory agencies and procedures).
15. The study proposes wording for **World Heritage Committee policy guidelines** that would proscribe extractive industry operations in natural World Heritage Sites and provide for the Committee to encourage and assist State Parties in terminating any existing concessions or operations and taking legislative and planning measures to prevent negative impacts on such properties by extractive industry operations beyond their boundaries.
16. The study proposes **amendments to The World Heritage Committee's Operational Guidelines** 107 and 172 to provide for more stringent review of proposals to modify buffer zone boundaries and to expand the scope of the invitation to State Parties to inform the Committee about developments that might affect the Outstanding Universal Value of properties. It also proposes revision of section IIIB of the

Guidelines to require specification of the stakeholder participation and consultation, as well as records of concurrence by ministries responsible for mining and energy, which have occurred during preparation of nominations of new properties for inscription on the World Heritage List. Corresponding revisions are proposed to the manual on preparing nominations. The study recommends that State Parties' submission of properties for their Tentative Lists include maps of the properties.

17. **The World Heritage Centre and IUCN** are urged to work with the United Nations Environment Programme World Conservation Monitoring Centre to enhance the mapping of World Heritage Site buffer zones and of properties on State Parties' Tentative Lists; to work with State Parties and the extractive industries to undertake a global survey of mineral and energy concessions in natural World Heritage properties and their buffer zones and to enhance the monitoring of natural World Heritage properties; and to work with affected State Parties to develop a fuller understanding of artisanal mining in and near natural World Heritage Sites.
18. The study calls on **the international community** to support consistent, efficient and effective decision-making by the World Heritage Committee with regard to extractive industry impacts on natural World Heritage properties; to strengthen resourcing for the World Heritage Centre and IUCN so that they can play their monitoring, assessment and advisory roles more effectively; to provide funding and advisory support to State Parties seeking to enhance their governance of natural resource use and of the extractive industries in relation to natural World Heritage Sites; and to enhance the international governance of the environmental impacts of extractive industries, specifically on natural World Heritage properties.

1. Introduction

1.1. Background

In recent years, there has been growing concern about the adverse impact of the extractive industries (exploration for and extraction of minerals, oil and gas, as well as associated infrastructure) on natural World Heritage Sites. The World Heritage Centre (the focal point in UNESCO for all matters related to the World Heritage Convention) began to discuss it with the then International Council on Metals and the Environment (ICME) in 1998, and it was addressed at the 23rd session of the World Heritage Committee (which comprises 21 State Parties to the Convention on a rotating basis) at Marrakesh in 1999. The issue remained on the agenda throughout the following decade, which saw milestone declarations in 2003 by the International Council on Mining and Metals (ICMM) and Shell that they would not explore or exploit mineral or hydrocarbon resources in natural World Heritage Sites. (ICMM's commitment referred to all World Heritage Sites.) A number of banks involved in financing the extractive industries have also developed policy on World Heritage Sites and other protected areas over the last decade, linked to their commitment to the Equator Principles for project finance and the International Finance Corporation's development of Performance Standards on Environmental and Social Sustainability. Several banks have committed not to finance extractive industry projects in natural World Heritage Sites.

The World Heritage Committee itself has no formal policy statement in this regard, although it makes frequent reference to the ICMM commitment in its recommendations to State Parties about addressing current or potential threats to World Heritage properties that arise from extractive industry operations. Indeed, although it has comprehensive Operational Guidelines, the World Heritage Committee has no statement of policy other than the Convention itself and the policy document on climate change that it adopted in 2007 (UNESCO, 2008). At its 2011 meeting, it decided to develop "Policy Guidelines' for the implementation of the *World Heritage Convention*, drawing in part on the results of expert meetings and consultative bodies".¹

Despite the attention that the issue has received and the various 'no-go' commitments that have been made, there is evidence that the threat to natural World Heritage properties from extractive industry exploration and exploitation activities is growing – especially in Africa (section 2.2). In addition to the obvious fears about damage to the Outstanding Universal Value (OUV) of the affected properties, there is concern among some in the private sector about loss of competitive advantage. The playing field is not level, they feel, if they adhere to their voluntary no-go commitments while other companies profit from exploitation of resources in these sensitive areas.

A series of contacts between the World Heritage Centre, IUCN (which is the technical Advisory Body to the World Heritage Committee on natural World Heritage Sites), ICMM, Shell and various banks led to the current assignment in 2011-12. Implementation of this study is guided by a reference group comprising representatives of these parties. IUCN has made the contractual arrangements for the assignment, which is funded by ICMM and Shell.

1.2. Terms of reference

The terms of reference (TOR) for this project are reproduced at Annex 1. There are three objectives:

¹ WHC-11/35.COM/12B.

1. critical evaluation of current World Heritage processes and practices with regard to the relationship between the extractive industries and natural World Heritage Sites, taking into account the views of all stakeholders and making reference to a series of case studies;
2. proposals to strengthen the World Heritage Convention, specifically through enhanced World Heritage processes and institutional arrangements that would improve co-operation between extractive industries and the Convention;
3. provision of feedback to the World Heritage Committee and State Parties to the Convention.

The TOR envisaged that the project would produce a 'Summary Information Document' on its findings, and that this would be submitted to the World Heritage Committee. The reference group would then hold a workshop to discuss the Committee's response to the document and decide on appropriate next steps. A final report would incorporate feedback from the workshop.

The project was launched at a meeting of the reference group in London on 13 October 2011, and has proceeded according to the schedule agreed then. However, it has become clear that the scheduling of World Heritage Committee preparatory procedures precludes consideration of the outcomes of the current exercise at the next meeting of the Committee (St Petersburg, Russia, 24 June – 6 July 2012). The World Heritage Centre has already started preparing an Information Document for that meeting, telling the Committee about the work done so far on policy guidelines. That document will also inform the Committee about the work undertaken on the extractive industries and natural World Heritage Sites. In consultation with the World Heritage Centre, the reference group will decide on appropriate further steps. These are likely to include inputs to the proposed policy guidelines (due for consideration by the World Heritage Committee at its 37th meeting in 2013), and possibly to the planned revision of the Operational Guidelines (due for adoption in 2015). The exercise may be linked in to discussions of the issue at the IUCN World Conservation Congress to be held in Jeju, Korea, 6 – 15 September 2012.

1.3. Approach and methods

As envisaged by the TOR, the study has been undertaken by reviewing documentation and holding interviews (mostly by telephone) with key informants. An initial list of informant names was suggested by members of the reference group, and additional names were added in the course of the interviews. Some of the informants contacted did not respond. All interviews have been strictly confidential, and informants were assured that the report would not directly quote them or ascribe views to named individuals or organisations.

Table 1. Informants for the study

Employees of:	
Governments	5
Technical agencies (including World Heritage Centre, IUCN)	15
Mining companies, organisations	9
Oil and gas companies, organisations	6
Financial institutions	6
Total	41

The few government representatives interviewed work in departments or agencies concerned with environmental management and/or nature conservation. Technical agency personnel include employees of the World Heritage Centre and the IUCN World Heritage Programme, as well as other international

environmental organisations. Most of the private sector representatives work in departments concerned with sustainable development and the management of impact on sensitive environments, or the two relevant industry bodies in this field: ICMM and the International Petroleum Industry Environmental Conservation Association (IPIECA).

After consultations, the reference group specified the following World Heritage Sites as case studies for the project, in the belief that they represent a range of experiences and lessons:

1. Alejandro de Humboldt National Park, Cuba
2. Arabian Oryx Sanctuary, Oman
3. Mapungubwe Cultural Landscape, South Africa
4. Mount Nimba Strict Nature Reserve (Côte d'Ivoire and Guinea)
5. Virunga National Park, Democratic Republic of Congo
6. Wadden Sea (Germany and the Netherlands)
7. Waterton-Glacier International Peace Park (Canada and the United States of America).

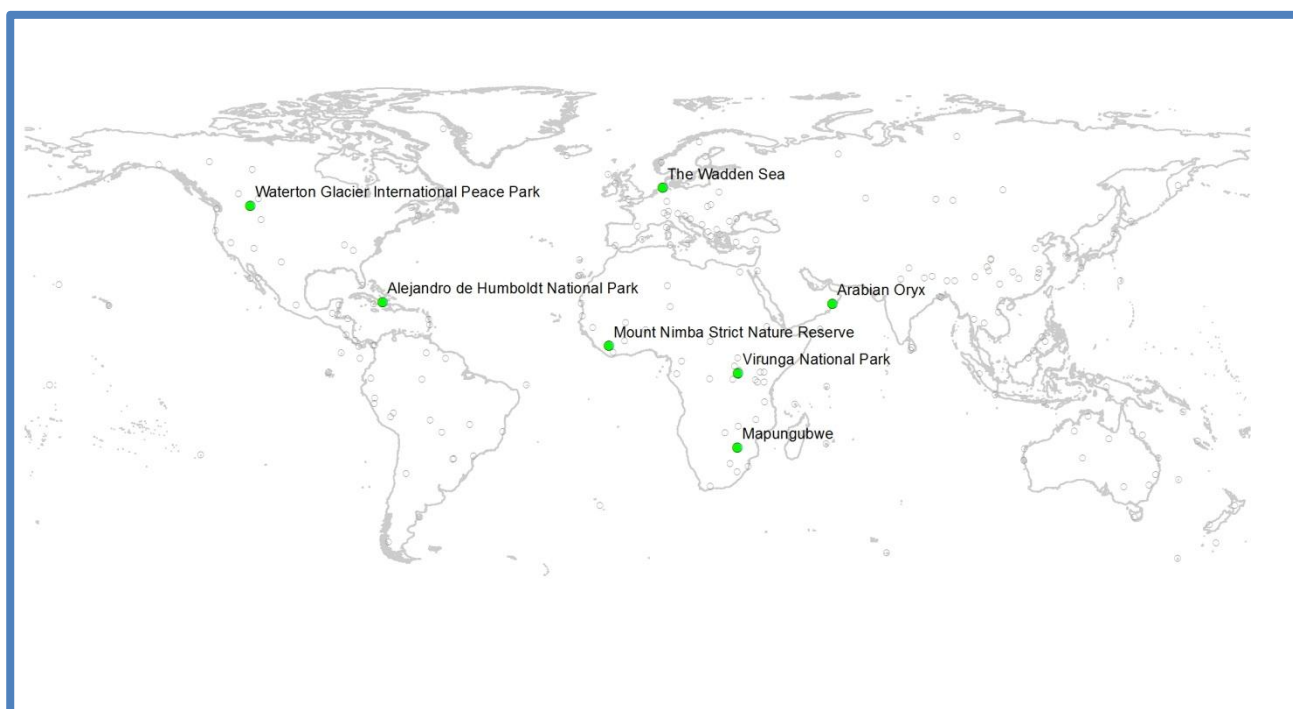


Figure 1. Case studies

Source: IUCN and UNEP-WCMC, 2012.

As the name implies, Mapungubwe is a cultural World Heritage Site, not a natural one. Nevertheless, the reference group felt that experience with the extractive industries before and since its inscription is instructive for natural World Heritage properties.

Fortunately, the World Heritage Committee website has comprehensive information on all the case study properties. But, despite several attempts, it has so far proved impossible to speak to any informant from government, the private sector or an NGO about the Arabian Oryx Sanctuary or Mapungubwe.

Following the launch meeting in London on 13 October 2011, the reference group held further meetings to guide the exercise on 22 November (by teleconference); 24 January 2012 (by teleconference); 29 February (at the World Heritage Centre in Paris) and 17 April and 14 June (by teleconference). The advice received at these meetings has been taken into account in the preparation of this report.

2. The issue

2.1. Impacts of the extractive industries on natural World Heritage Sites

Activity of the extractive industries can have the following negative effects on natural World Heritage Sites. In some cases, these effects may significantly impair, or even negate, the OUV that was the basis for their inscription.

- Exploration and prospecting for minerals within a World Heritage property cause varying levels of damage to biodiversity and disruption to ecosystem processes. While drill sites or test quarries may be of limited spatial extent, they are often supported by the construction of roads, accommodation and other infrastructure that extends the footprint and negative impact of exploratory operations. In low income countries, these activities are likely to attract more job seekers than they actually employ. These people, and the entrepreneurs who generate income by providing services to them, are also likely to have negative environmental impacts at or near the exploration site(s) – including destruction of flora and fauna for fuel and food, pollution of soil and water resources and impairment of aesthetic properties that may have contributed to the original assessment of OUV.
- The actual exploitation of mineral or hydrocarbon resources within a property is likely to magnify and exacerbate all the impacts outlined above. However, active mining and oil and gas exploitation within natural World Heritage Sites are still not common, and are still limited mainly to artisanal rather than larger-scale, industrialised activities.
- Extractive industry operations – be they exploration or exploitation - can have negative effects on natural World Heritage Sites even if they take place outside the boundaries of the property. Other things being equal, effects of the kind outlined above are likely to decrease in severity the further the activity is located from the boundary. The concept of buffer zones, as set out in paragraphs 103 – 107 of the Operational Guidelines (UNESCO, 2011a: 26-27), is intended to help manage and control such impacts within a specific distance from a property's boundary. However, activities further away and beyond any buffer zone – higher up a catchment, for example – can also damage the OUV of a property.
- In some countries, artisanal mining is a significant mode of mineral extraction. This is labour-intensive mining undertaken by small groups or by individual entrepreneurs, with relatively little equipment, often at significant risk and usually without formal licensing or regulation by state authorities. In the Democratic Republic of Congo, for example, it is widespread but never legal. Some consider artisanal mining to be particularly destructive because of its unregulated character. Although it may be easier to identify than some other local threats to natural World Heritage Sites, such as bush meat harvesting (with which it is often connected (Hayes and Burge, 2003: 34 – 35)), artisanal mining is not monitored systematically. Data on its incidence and significance are far from complete and it is not the focus of this study. But it is important to recognise that it can have a major impact in some cases – including protected areas that the formal mining sector has agreed (or has been forced by government) not to exploit. Indeed, government attempts to regulate or ban the practice may drive artisanal miners into remoter areas – which may include the natural World Heritage Sites with which this study is concerned.

The situation with regard to larger-scale mining and energy operations is complicated by the fact that a company may be awarded a concession to explore or exploit a mineral or hydrocarbon resource but not proceed with any operations. This may be because government regulations require further assessments

and permits, after award of a concession, before the company can start work on site. Or economic conditions may make it unprofitable for the company to proceed, even though it has authority to do so. Concessions may exist on paper only, sometimes for many years – creating uncertainty about whether they have become dormant, or will one day be taken up.

Especially in low income countries, the perceived socio-economic benefits of the extractive industries may be considered to outweigh the natural environmental costs. As noted above, mining (and to a lesser extent oil and gas operations) create employment, and stimulate additional activity and incomes through their multiplier effects in the local economy. Governments may be keen to generate taxation revenue from the operations of extractive industries, and to achieve broader economic benefits through the infrastructure that they build. In poorer countries, but also in some richer ones, there is often a tension between the need to protect the special qualities of World Heritage Sites and the broader need to build the local and national economy.

2.2. Scale and trend

There is no reason to doubt the judgement of the experienced senior participants in World Heritage processes who perceive a growing scale and accelerating pace of real or potential extractive industry impact on natural properties. But it is important to identify what empirical data can underpin this concern. Despite good progress by the United Nations Environment Programme (UNEP) World Conservation Monitoring Centre (WCMC), comprehensive monitoring, recording and update of such data are still in their infancy. One important new source of data will be the review that IUCN and the WCMC plan to undertake of the state of conservation of all 211 natural World Heritage Sites in 2012. This will include a global study of the ways in which the extractive industries are affecting these sites.

One longer-term source of information is the reactive monitoring reports produced by the World Heritage Centre and IUCN for the World Heritage Committee, in response to specific issues identified as requiring attention. It is possible to identify the proportion of the sites covered by each of these annual sets of reports in which extractive industry operations have been named as a concern. These currently show that 20 – 25% of the 50 – 60 reports per year identify significant issues arising from mining activities. Between 1986 and 2004, 8 (18%) of all World Heritage Sites in Africa were ‘reported for mining-related issues’; 2 (5%) in the Arab States; 9 (10%) in the Asia-Pacific region; 18 (14%) in Europe and North America; and 6 (11%) in Latin America and the Caribbean (UNESCO, 2007: 181). Of the 59 natural properties on which state of conservation reports were submitted to the World Heritage Committee at its 34th meeting in Brasilia in 2010, 25 (42%) were affected in some way by mining operations. At the 35th meeting in Paris in 2011, 22 natural properties (41%) out of the 54 on which reports were submitted had been affected by mining

A report to the World Heritage Committee in 2010 on trends in the state of conservation of World Heritage properties² said that:

As far as mining is concerned, an average of 8.4% of the properties reported on since 2005 are affected; this represents around a quarter of all the natural properties reported on. Even though stable over the years, and besides the adoption by the International Council on Mining and Metals (ICMM) in 2003 of a position statement indicating that “ICMM member companies undertake not to explore or mine in World Heritage properties. All possible steps will be taken to ensure that existing operations in World Heritage properties as well as existing and future operations adjacent to World Heritage properties are not incompatible with the outstanding universal value for which these properties are listed and do not put the integrity of these

² WHC-10/34.COM/7C, pp 9, 16.

properties at risk”, *this threat remains high and was the object of recurrent debates during World Heritage Committee sessions.*

Threats due to oil and gas exploitation seem to have decreased since 2005. Indeed, affecting 3.6% of the properties reported on in 2005, this threat affected only 1.7% of them in 2009....

*Out of the 49 to 55 **natural** properties examined each year since 2005, an average of 25% is affected by mining activities, which is a stable threat over the years (variation between 22 and 28%).*

The report concluded that

Issues linked to mining activities appear to be constant but remain however sufficiently important to require further debate.³

It is important to note that such reports are based only on properties for which state of conservation reports were submitted. They do not constitute a comprehensive assessment of all natural World Heritage properties. The report’s reference to the ICMM position statement should be seen in the context of ICMM’s limited coverage of the global mining industry (only 21 member companies) – although this represents a high proportion of metals and minerals mined around the world.

The corresponding report to the World Heritage Committee in 2011⁴ identified an increased number of cases where properties are threatened by planned or existing mining as well as oil exploration and exploitation projects. This trend appears to be especially notable with regard to natural properties in Africa. In the 2011 report, mining and oil related issues are considered in a large number of properties (including the Mount Nimba Strict Nature Reserve; (Côte d’Ivoire/Guinea); the Virunga National Park (Democratic Republic of Congo); the Lagoons of New Caledonia (France); the Virgin Komi Forest (Russian Federation) and the Belize Barrier Reef (Belize)). While some concerns are raised because of mining or oil projects in the vicinity of the properties, which might affect their OUV, a range of projects are located within the boundaries of World Heritage properties. Although the report gives no statistics on the rate of increase, or the total number of World Heritage Sites threatened in various ways, it concludes that:

The World Heritage Centre and the Advisory Bodies consider that the increasing trend shown above should be a matter of utmost concern for the World Heritage Committee. They note that States Parties appear to continue to pursue these projects, in spite of the position of the World Heritage Committee and considering the impacts that such projects have on the Outstanding Universal Value of World Heritage properties. They note that experience shows that, often, licenses have been attributed by Ministries in charge of oil or mining, without the Ministry in charge of the properties being informed, and sometimes in spite of the conservation legislation governing the property. There appear to be serious issues of policy, capacity and governance that need to be addressed in many States Parties⁵.

The IUCN Programme for West and Central Africa recently commissioned a study of the impact of the expanding mining sector on nature conservation in West Africa. It found that, in the countries of that region, the percentage of the national territory for which mining concessions had been awarded (although in many cases not yet exploited) ranged from eight in Senegal to 63 in Guinea. It did not focus on World Heritage Sites, but reported that, of 111 protected areas in the region for which data were available,

³ WHC-10/34.COM/7C, p 22.

⁴ WHC-11/35.COM/7B, pp 8 – 9.

⁵ WHC-11/35.COM/7B, p 9.

extractive industries were recorded as causing or threatening negative impacts in 28 (25%) (IUCN, 2011a: 42; see also IUCN, 2011b). However, there are extensive areas of West Africa with limited known mineral and hydrocarbon resources, which means that the problem is not universal for natural World Heritage Sites or other protected areas in that part of the continent.

With regard to oil and gas activities in sub-Saharan Africa, a recent paper based on WCMC and private sector data

conducted a GIS-based analysis of overlap and proximity between natural WH sites and areas allocated to oil and gas concessions as well as pipelines and oil wells for all of sub-Saharan Africa. We found that oil and gas concessions were located within 27% of the WH sites, though no currently active oil wells were operating directly within the WH sites. A proximity-based assessment of oil and gas concessions within 5 km of WH site boundaries included only one additional WH site, suggesting that sites susceptible to indirect impacts from oil and gas development are likely to be those already overlapped by concessions. Our findings indicate that activity from oil and gas development in sub-Saharan WH sites has to date been limited; however, future pressure cannot be ruled out, due to continued presence of concessions within more than one quarter of the network, and projected expansion of oil and gas exploration within the region.

Over 90% of the concessions overlapping with WH sites, tentative sites and other nationally and internationally designated protected areas were in the exploration/development or drilling/prospecting stage. All of the concessions overlapping existing WH sites were awarded after WH designation. For tentative WH sites which were based on existing nationally designated protected area boundaries, and for which the date of establishment was known (approximately 67% of the tentative sites with overlapping concessions), 80% of the concessions were awarded after such sites had become protected.

Osti et al., 2011: 1863, 1872.

It is clear from the above that some governments are awarding oil and gas concessions in areas that they had previously inscribed as natural World Heritage Sites, as well as in areas on the Tentative Lists of protected areas envisaged for future nomination to the World Heritage Committee (see section 4.3).

Another academic study, also based on WCMC and private sector data, has explored the degree of overlap between mining activities and protected areas, including natural World Heritage Sites. The findings broadly confirm the trends outlined above. As the author of the study has not yet obtained permission for the private sector data to be quoted, it is not possible to give further details on these findings here.

2.3. Reactions and approaches to the issue

Sections 2.3.1 - 2.3.3 below sum up the formal steps and positions that the three main sets of stakeholders have taken with regard to the current and potential impacts of extractive industry activities on natural World Heritage Sites. Chapter 3 gives background on the perspectives and concerns that these stakeholders express.

2.3.1. Private sector

As noted in section 1.1, one industry association and one company have made explicit commitments not to operate in natural World Heritage Sites. They both did so in 2003. Following at least five years of

interaction with the World Heritage Centre and IUCN (partly by its predecessor, the ICME), **ICMM** committed its members, *inter alia*, to

1. *respect legally designated protected areas*
2. *not explore or mine in World Heritage properties. All possible steps will be taken to ensure that existing operations in World Heritage properties as well as existing and future operations adjacent to World Heritage properties are not incompatible with the outstanding universal value for which these properties are listed and do not put the integrity of these properties at risk*

ICMM, 2003: np.

These commitments form part of a longer position statement in the context of ICMM's Sustainable Development Framework, and are linked to a commitment to work with IUCN "to address application issues and to strengthen the IUCN system of protected area categorisation. ICMM recognises that sufficient reform of this system will lead to recognition of categories of protected areas as 'No-go' areas and others with a multiple-use designation." At that time, ICMM felt that "of the existing international systems of protected area designation only that of the World Heritage Convention and its Operational Guidelines currently meet all... requirements sufficiently for ICMM member companies to recognise existing World Heritage properties as 'No-go' areas" (ICMM, 2003: np).

Shell's 2003 commitment is incorporated in a broader current statement on its website:

We believe some areas are too sensitive to enter. But we also believe that through a transparent process, partnerships and stringent operating practices it is possible to operate responsibly in some areas that are under protection or rich in biodiversity. We define areas high in biodiversity value as:

- *areas protected by the International Union for Conservation of Nature (categories I-VI);*
- *wetlands of international importance (according to the Ramsar convention);*
- *Natura 2000 sites (under the European Birds Directive and Habitats Directive);*
- *important bird areas (defined by Birdlife International); and*
- *biosphere reserves (under the UNESCO Man and the Biosphere Programme).*

We made the following four commitments in 2003:

1. *We will not explore for, or develop, oil and gas resources in natural World Heritage Sites.*
2. *We will further improve the way we operate in IUCN Category I-IV protected areas, and areas of high biodiversity value.*
3. *We will publicly report on our activities in IUCN Categories I-IV.*
4. *We will work with IUCN and others to help safeguard protected areas.*

Shell, 2012.

Banks can have a strong influence on the performance of the extractive industries with regard to natural World Heritage Sites, because of the conditions that they can attach to their loans to mining and oil and gas companies. Many of the leading global lenders have subscribed to the Equator Principles for project finance, and belong to the Equator Principles Association. Described as “a financial industry benchmark for determining, assessing and managing social and environmental risk in project financing”, the Principles commit lenders not to finance projects that fail to meet certain conditions for responsible environmental and social assessment and management, largely within the framework of the International Finance Corporation’s Performance Standards on Environmental and Social Sustainability (IFC, 2012). The Principles require compliance with the IFC Standards, except in high income OECD countries (Equator Principles, 2006: 3). IFC Performance Standard 6 sets out stringent procedures with regard to areas of high biodiversity value and “legally protected and internationally recognised areas”, including natural World Heritage Sites. In the latter, clients must, in addition to the standard requirements, “demonstrate that the proposed development in such areas is legally permitted”, comply with management plans, consult all stakeholders and “implement additional programs, as appropriate, to promote and enhance the conservation aims and effective management of the area” (IFC, 2012: 44). This effectively precludes operations within natural World Heritage properties. BankTrack (2010) provides an overview of banks’ environmental and other policies, but does not list those with specific commitments regarding World Heritage Sites.

Partly because the Equator Principles and the IFC Standards do not formally cover all possible modes of lending and investment in extractive industry operations, some banks (including JP Morgan Chase, Credit Suisse⁶, HSBC⁷, Société Générale and Standard Chartered), have broader policies that include specific commitments to respect the values and principles of the World Heritage Convention and/or not to provide financial services for activities inside natural World Heritage Sites. These commitments are extended, in some cases, to other formally recognised categories of protected area, such as Ramsar sites. It is important to note that some aspects of extractive industry financing may be channelled through export credit agencies, which have less well co-ordinated standards in this regard – although the agencies of the OECD have been tightening and harmonising their approaches. The Export-Import Bank of the United States, for example, includes projects in, or likely to have a perceptible impact on, World Heritage Sites in its ‘Category A’, requiring an environmental impact assessment (EIA) enabling it “to evaluate whether and to what degree, the project meets relevant host-country and applicable international environmental guidelines” (Export-Import Bank of the United States, 2012).

Export credit agencies and their policies are a significant interface between the state and the private sector. State pension funds and their investment policies are another. The Norwegian government pension fund’s Council on Ethics, for example, has consulted the World Heritage Centre about potential negative impacts on World Heritage Sites. Most significant, however, are state-owned companies in the mineral and hydrocarbon sectors. These may not necessarily be accountable to shareholders or to financial institutions, and their environmental behaviour may not be rigorously scrutinised or regulated by the governments that own them.

Despite the commitments and procedures outlined above, many banks and companies have not made an explicit commitment not to operate in natural World Heritage Sites. In the case of what might loosely be

⁶ Credit Suisse will not finance or provide advice on mining operations undertaken by mining or oil and gas companies in World Heritage Sites unless the activities predate the UNESCO designation (Credit Suisse, 2012).

⁷ HSBC will not provide financial services to hydrocarbon exploration or extraction, power generation or electricity and gas transmission and distribution in World Heritage Sites (HSBC, 2012a) or to mining in World Heritage Sites “unless the activities pre-date the UNESCO designation” (HSBC, 2012b).

considered ICMM's oil and gas counterpart, IPIECA, this is because the Association considers itself a forum for the exchange of knowledge and best practice among its members, and does not engage in advocacy or policy commitments. The motives of banks, mining and energy companies will be discussed further in chapter 3. But most of the larger companies have well-structured systems for appraising the environmental sensitivity and risk of prospective developments, and escalating decision-making to higher levels when that risk is high. Typically, these systems make explicit reference to the various categories of highly significant and sensitive protected areas, such as World Heritage and Ramsar Sites, IUCN protected area categories I – IV and, in some cases, Natura 2000 sites. This means that a project involving a World Heritage Site would in most cases be ruled out at the early to middle stages of such procedures. If still deemed worth pursuing, it would require approval at the highest levels in the company – which it might not obtain.

The principles and policies adopted by many financial institutions represent important progress. But it is important to note that exploration for minerals, oil and gas is often not funded through lending by banks, but by capital markets. This mode of funding has so far been less subject to environmental regulation, voluntary or otherwise. Furthermore, increases in the availability of funding for extractive industry operations from some non-traditional sources have not always been accompanied by the adoption of the Equator Principles, or any corresponding approach. Smaller exploration companies, in particular, can still secure funds without any such regulation.

2.3.2. Governments

Very few countries have formally legislated to incorporate the World Heritage Convention into their domestic law. Nevertheless, all natural World Heritage Sites are protected areas in terms of domestic nature conservation legislation. No attempt has been made during this exercise to review the provisions or effectiveness of the thousands of nature conservation laws enacted by the State Parties. But the central issue for this review is the effectiveness of national regulatory systems. It should be reasonable to assume that domestic legislation would be enforced to exclude extractive industries from operating in natural World Heritage Sites and to prevent their activities outside such properties from harming their biodiversity, ecosystems, integrity or OUV. While this is emphatically the case in some countries, it is plainly not achieved in others. Especially in poorer nations, there has been little development of nature conservation laws in recent decades, and the resources to enforce such legislation are lacking.

2.3.3. International agencies

IUCN worked with UNESCO to draft the 1972 World Heritage Convention and has worked closely with it ever since as technical Advisory Body with regard to natural World Heritage Sites. The history of these agencies' concern and approaches to the impact of extractive industries on such sites is intertwined with the development of policy and procedures for the world's protected areas in general. Following the discussion of the issue at the 23rd meeting of the World Heritage Committee in Marrakesh, Morocco in 1999, the two organisations joined with ICME to convene a technical workshop on World Heritage and mining in Gland, Switzerland, in September, 2000 (UNESCO *et al.*, 2000). Two months later, the 24th meeting of the World Heritage Committee endorsed the conclusions and recommendations of the workshop. Meanwhile, the World Conservation Congress held in Amman, Jordan, in October 2000, called on all State members "to prohibit by law, all exploration and extraction of mineral resources in protected areas corresponding to IUCN Protected Areas Management Categories I to IV" (IUCN, 2000: 89).

There was further interaction around the issue of mining in protected areas over the following years leading up to the World Parks Congress in Durban, South Africa in September 2003. It led, *inter alia*, to ICMM's position statement of that year (section 2.3.1). Participants in the Congress cross-cutting theme on

World Heritage welcomed the ICMM statement, calling “on all other members of the mining, oil and gas industries to make the same commitment” (IUCN, 2005: 188).

By 2007, the World Heritage Committee and the World Heritage Centre clearly recognised the growing significance of extractive industry impacts on natural World Heritage Sites. UNESCO’s 2007 publication on *World Heritage Challenges for the Millennium* noted the problem, the previous years’ interactions and ICMM’s commitment, although it did not identify further ways to address this particular challenge (UNESCO, 2007: 181 – 183).

The following year, an international expert meeting on World Heritage and buffer zones was convened at Davos, Switzerland by the World Heritage Centre in recognition of the importance of enhancing the conservation of World Heritage Sites’ OUV through appropriate measures beyond their boundaries. It made a series of detailed recommendations, *inter alia* that “States Parties prepare nominations that include both the World Heritage property **and** any necessary World Heritage buffer zone(s) for consideration by the World Heritage Committee at the time of inscription” (UNESCO, 2009: 167). The recommendations from Davos were presented to the 32nd meeting of the World Heritage Committee in Quebec City, Canada⁸. The Committee’s response focused on the appropriate use of terms: ‘property’ rather than ‘core zone’. The Davos recommendations were presented to the World Heritage Committee again in 2011⁹. The Committee’s decision that year encouraged State Parties, the World Heritage Centre and Advisory Bodies to take them into account. It also encouraged State Parties “to refine and put in place relevant legal tools or management plans concerning the conservation of properties and management of buffer zones”¹⁰.

Also in 2008, the World Heritage Centre and IUCN held their first working meeting on the extractives issue since 2000, “in response to ICMM’s interest in further exploring with the UNESCO World Heritage... Centre how inscription processes could take into consideration various stakeholder interests” (ICMM, UNESCO and IUCN, 2008: np). Representatives of Shell and IPIECA also attended. The meeting made 29 recommendations, ranging from ensuring full stakeholder participation in the preparation of nominations of new properties to ensuring accurate mapping of property boundaries. Proposed next steps included preparation and agreement of “a work plan focusing on implementing recommendations considered as higher priority” (*ibid.*: np). Largely due to lack of resources, little progress has been made.

Since 2010, the World Heritage Centre has been preparing reports on trends in the state of conservation of World Heritage Properties for submission to the World Heritage Committee. As noted in section 2.2 above, these reports have identified the growing significance of extractive industry impacts on natural World Heritage Sites. A major evaluation by the UNESCO External Auditor in 2011 of the Global Strategy for the Credible, Balanced and Representative World Heritage List also noted the growing importance of the issue, although its assertion that the Committee had decided in 2003 that “World Heritage properties were forbidden areas for prospecting and mining exploitation of gas and petroleum”¹¹ appears to have been incorrect.

In April 2011, an expert meeting on the global state of conservation challenges to World Heritage properties was held in Dakar, Senegal, with a focus on Africa. The meeting report¹² makes no specific reference to the extractive industries, but makes a number of pertinent observations and recommendations regarding responsibilities for maintaining the OUV of properties; the advisability of

⁸ WHC-08/32.COM/7.1

⁹ WHC-11/35.COM/7.1

¹⁰ WHC-11/35.COM/20 p 7

¹¹ WHC-11/35.COM/INF.9A p 46

¹² WHC-11/35.COM/INF.7C

strategic environmental assessments (SEAs) at the time of nomination “to anticipate the impact of any potential development on the OUV of properties”; and consideration, “in addition to the presentation of state of conservation reports on individual properties, [of] a thematic report on significant factor[s] negatively affecting the OUV of the properties”. The current assignment could arguably be a contribution to the latter objective.

2011 also saw the publication of the second edition of the manual on preparing World Heritage nominations. This notes the need to itemise the types of development pressures affecting the property, which may include mining: “accurate and frank information about ...threats must be provided. A growing problem is the inscription of properties which are shortly afterwards reporting threats which were not documented in the nomination” (UNESCO, 2011b: 87). Detailed advice is provided on the meaning, role and definition of buffer zones. “Consideration needs to be given as to whether the immediate setting of the property is understood and can be readily defined, or whether more work is needed to define it” (*ibid.*: 83). The manual goes on to note that “in addition to the property and its buffer zone, it can be very important to consider a further area outside of these – the wider setting for the property... the wider setting might... play an essential role in protecting the authenticity and integrity of the property” (*ibid.*: 85). However, it does not recommend systematic SEAs or other procedures to define the ecological relationships between a natural property and its broader environment.

2.4. Case studies

2.4.1. Introduction

A wealth of information is available about each World Heritage Site – although, as noted in section 1.3 above, it has not been possible to consult informants about each of the seven that were identified as case studies for this exercise. The sections below focus on the issues at each case study site arising from potential or actual extractive industry operations, and the broader insights that these issues may offer. Most of the background information is drawn from the websites of the World Heritage Centre and of UNEP-WCMC.

2.4.2. Alejandro de Humboldt National Park, Cuba

Inscribed in 2001, this property of 69,341 ha (including 2,641 ha marine) contains the most important and significant natural habitats for in-situ conservation of terrestrial biological diversity in the entire insular Caribbean and is one of the most biologically diverse terrestrial tropical ecosystems in an island setting anywhere on earth.

There is a long history of mining (much of it open-cast) in areas near the property. The difficult terrain of the park meant that most extractive operations took place outside its boundaries at lower altitudes. All but one of the old mines was closed when the area received protected area status. However, the government then confirmed eight nickel mining concessions to a Cuban company. A foreign mining company with rights to one of these concessions later withdrew, recognising (in line with the ICMM commitment) that it would be inappropriate to operate within a World Heritage Site. IUCN and the World Heritage Centre became aware of the plan to reactivate the concessions in 2005¹³, and requested information on the matter from the State Party. In a series of inconclusive communications since then, the State Party has assured the World Heritage Committee that mining will not be permitted to proceed within the property, but has not confirmed that the concessions have been officially withdrawn. The Ministry of the Environment has proposed Environmental Impact Statements to mitigate the effects of these concessions, but according to

¹³ WHC-07/31.COM/7B, p 91

IUCN they remain potentially disastrous to the integrity of the site (IUCN, 2008, quoted in UNEP-WCMC, 2011a). Some concessions were within the property, while others, although outside the boundary, would be likely to have significant negative impacts inside it.

In 2009, the World Heritage Committee called on the State Party “to make a clear and unequivocal commitment to close down the mining concessions granted within the boundaries of the property, or those in its periphery that could affect the property”¹⁴. In 2010, the World Heritage Committee requested the State Party “to submit to the World Heritage Centre, by 1 February 2012, a report on the inactivity of all mining concessions with a view to their upcoming cancellation, and updating the World Heritage Committee on any other factors significantly affecting the Outstanding Universal Value, including the conditions of integrity, of the property”¹⁵. The report was submitted, and stated that the boundaries of the concessions had been redrawn so that they did not include any land within the property. However, assurances on cancellation of concessions have not been received, despite the

State Party’s repeated commitment not to allow mining in the property. This may be an instance of the differences between ministries of environment, mining, energy and industry that affect the relationship between the extractive industries and World Heritage Sites in many countries. Even if a Ministry of Environment is opposed to the retention of mining concessions in or near a natural World Heritage Property, it may be overruled by more powerful interests in these other ministries.

Two issues are exemplified by this case.

- It shows the common problem of poor, slow or incomplete communications that the World Heritage Centre (on behalf of the World Heritage Committee) may face when it seeks information or commitments from a State Party. Mining concessions may not have been taken up and may effectively be dormant. There may be little or no actual damage to the OUV of the property. But the State Party is unable or unwilling to cancel the concessions completely and report this to the World Heritage Committee. Uncertainty therefore persists. It would appear that there is currently no imminent threat, but the potential of one cannot be excluded.
- The case also shows that a large international mining company may prefer to withdraw from involvement on the grounds of a property’s World Heritage status; while in this instance it would



Alejandro de Humboldt National Park

Parc national Alejandro de Humboldt

Country: Cuba

Criteria: (ix)(x)

Year inscribed: 2001



Figure 2. Alejandro de Humboldt National Park

Source: IUCN and UNEP-WCMC, 2012.

¹⁴ WHC-08/32.COM/24Rev, p 73

¹⁵ WHC-10/34.COM/20, p 86

appear that the State Party is not willing to terminate the concessions – conceivably because future mineral price increases could make them more economically attractive than they are now.

2.4.3. Arabian Oryx Sanctuary, Oman

This property of 2.75m ha was inscribed in 1994. The 1992 technical evaluation by the Advisory Body had considered the nomination “premature”, “due to the lack of requisite protective legislation and that there is no administrative structure in place to manage the area... Additional work on fine-tuning boundaries to exclude oil exploration sites also needs to be done.” It recommended that “a decision on this site should be deferred. The Government of Oman should be urged to enact legislation, implement a management regime for the area and define more precisely what the boundaries of a potential World Heritage site would be” (IUCN, 1992: 63). These recommendations had been only partly implemented when the World Heritage Committee inscribed the property two years later, stating that it was “satisfied with the new information provided and the political will of the Omani Government to implement a management regime”¹⁶.

The property was delisted in 2007. It is the only natural property to have been removed from the World Heritage List. (One cultural property has also been delisted.) Comprising an area within the Central Desert and Coastal Hills biogeographical regions of Oman, the sanctuary displayed a unique desert ecosystem whose rare fauna included the first free-ranging herd of Arabian oryx since the global extinction of the species in the wild in 1972 and its reintroduction there in 1982. It also contained the only wild breeding sites in Arabia of the endangered houbara bustard, as well as Nubian ibex, Arabian wolves, honey badgers, caracals and the largest wild population of Arabian gazelle.

It was not possible to secure interviews with any informants on this case.

As early as 1996, IUCN expressed concern about delays in completion of a management plan for the property, and definition of its boundaries. Failure to complete these tasks was noted again in 1998 and again in 1999, when

The Delegate of Thailand noted the serious concerns raised by the Bureau regarding the management of this site, given the decline in numbers of the Arabian Oryx and the fact that the boundary marking and management planning is long overdue for completion. He recalled that the Committee inscribed the site without legislation and management plan in December 1994.

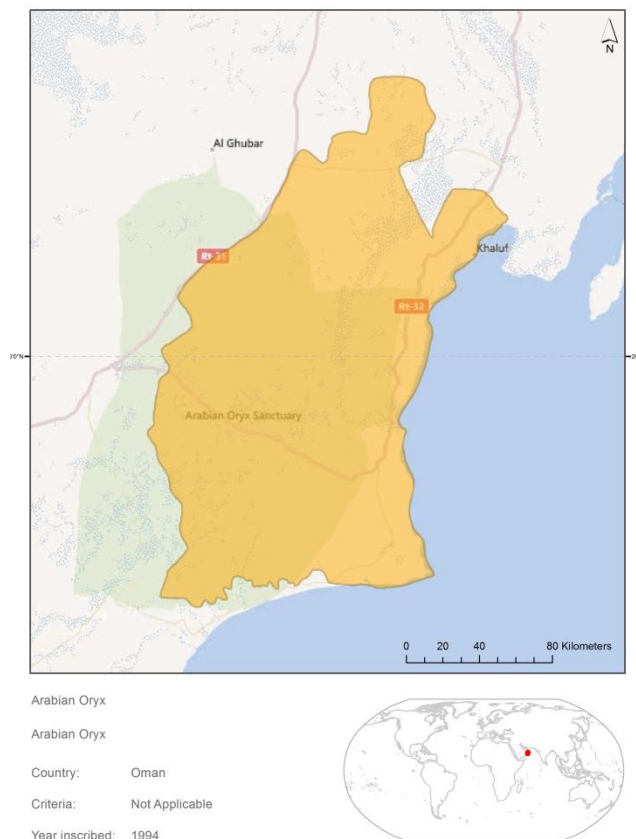


Figure 3. Arabian Oryx Sanctuary

Source: IUCN and UNEP-WCMC, 2012.

¹⁶ WHC-94/CONF.003/16, p 46

*He highlighted the Operational Guidelines in relation to the deletion of properties. The Delegate of Benin noted that rigour was not always applied in the past years and that a number of sites would not have been accepted if they were presented today.*¹⁷

It was also noted in 1999 that an oil company holding a concession in part of the property was carrying out exploration work.

By 2004, the World Heritage Committee was again requesting the State Party to submit “the new management plan for the property”. The following year, although the plan had been submitted, the Committee noted “the slow progress in establishing an effective management regime for the property and that the positive intent of the management plan is not being fulfilled due to lack of funding”. It expressed concern about poaching and illegal trade in endangered species¹⁸. IUCN argued that “the current provisions within the plan which conditionally permit mining activity (exploration and production of oil, gas and minerals) in all zones of the property cannot be supported”¹⁹.

In 2006, the World Heritage Committee expressed concern about the slowness of the process of reviewing the 2006 management plan for the property, and “reiterated that the provisions within the current management plan which conditionally permit mining activity (exploration and production of oil, gas and minerals) in the World Heritage Property are not supported and should be excluded from the Management Plan”²⁰.

In December 2006, the State Party submitted draft new boundaries for the Arabian Oryx Sanctuary, which would reduce its area from 27.5m ha to 2.8m ha. Hydrocarbon extraction would not be permitted in the Sanctuary itself, but would be allowed in a 10.5m ha buffer zone. The formal Royal Decree of March 2007, announced three days after the departure of a joint IUCN/World Heritage Centre monitoring mission and not shown to that mission, reduced the area of the Sanctuary as proposed. It did not refer to the buffer zone, leaving this larger area – still officially part of the World Heritage Site, whose boundaries could only be modified by the World Heritage Committee – unprotected and available for hydrocarbon operations. In any event, the new delineation was considered unacceptable by IUCN and the World Heritage Centre, which noted that “the new boundaries for the AOS closely reflect the boundaries of surrounding hydrocarbon concession blocks”²¹. Concern was also expressed about a general declining trend in the status of key species, including the Arabian oryx itself (down to 65 wild animals from 450 at the time of inscription).

Having been informed that oil and gas exploration would begin soon in the proposed new buffer zone, the World Heritage Centre/IUCN mission of January 2007 (and subsequently the World Heritage Centre, by formal letter) informed the State Party that the World Heritage Committee had not yet recognised any new boundaries for the property and that such activities would violate the World Heritage Convention and its Operational Guidelines. The State Party then invited the World Heritage Committee to delete the property from the World Heritage List, while committing itself to conserving the Arabian oryx and ensuring the viability of the sanctuary. The World Heritage Committee consequently delisted the property at its 31st session in 2007²².

¹⁷ WHC-99/CONF.209/22, p 31

¹⁸ WHC-05/29.COM/22, p 43

¹⁹ WHC-05/29.COM/7B.Rev, p 13

²⁰ WHC-06/30.COM/7B, p 24

²¹ WHC-07/31.COM/7B, p 33

²² WHC-07/31.COM/24, p 51

Three lessons emerge from this case.

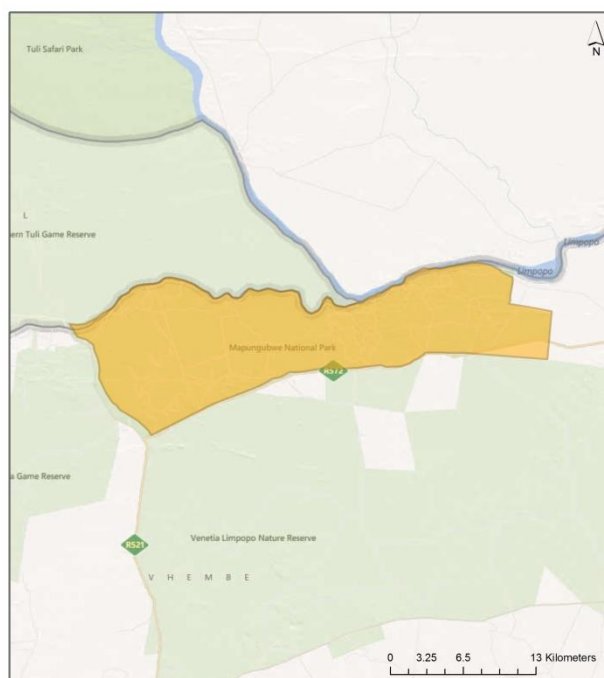
- It is not in the best interests of the Convention to inscribe a property if recommendations made by the Advisory Bodies during their evaluation of the nomination have not been fully implemented.
- In at least a few instances, there may be little or no ambiguity about a State Party's ranking of priorities with regard to extractive industry operations and maintenance of the integrity and OUV of a World Heritage Site. It is not helpful to speculate as to the factors underlying the decisions reached in 2007; but the clear outcome was that attempts at effective governance of the property for nature conservation purposes were overwhelmed by stronger economic forces.
- Oil and gas companies may be willing at least to take up exploration concessions within what is considered internationally to be a World Heritage property, although the governing motives and decisions affecting the outcome of this case were those of the State Party.

2.4.4. Mapungubwe Cultural Landscape, South Africa

This cultural property of 28,169 ha was inscribed in 2003. The savannah landscape includes the palace sites and dependent settlement areas of the kingdom that flourished there between the 10th and 14th centuries AD, and is of great archaeological and cultural importance. Various rich mineral deposits exist to the east and south of the property, including diamonds that are currently being mined and coal reserves that are the subject of recent controversy.

Although a buffer zone was identified for the property at the time of nomination, no formal mapping or definition of its boundaries were submitted. As Advisory Body to the World Heritage Committee on cultural properties, the International Council on Monuments and Sites (ICOMOS) evaluated the proposal and recommended that it be deferred in order to allow the State Party, *inter alia*, to provide an updated management plan that would adequately define and map the buffer zone (ICOMOS, 2003). However, the World Heritage Committee inscribed the property in the same year, making recommendations that repeated those of ICOMOS but excluded the reference to a management plan²³.

In 2010 the World Heritage Centre and the Advisory Bodies learned from the press that a mining permit had been awarded in February of that year to a coal mining company, for an area



Mapungubwe Cultural Landscape
 Mapungubwe Cultural Landscape
 Country: South Africa
 Criteria: Not Applicable
 Year inscribed: 1995



Figure 4. Mapungubwe Cultural Landscape

Source: IUCN and UNEP-WCMC, 2012.

²³ WHC-03/27.COM/24, p 114

immediately east of the Mapungubwe property not covered by the buffer zone as originally identified. The coal was to be extracted by opencast and underground mining and used for a power station in the area, for which a proposal had also been prepared. According to the reports, the mining permit was issued by the Department of Minerals and Energy against the recommendation of the Department of Environmental Affairs. The mine and power station would lie within a planned transfrontier conservation area (TFCA), including land in Botswana and Zimbabwe, that was intended to serve as a buffer zone entirely surrounding the property.

Although the proposed mine was the subject of an EIA, this reportedly did not consider the impact on the World Heritage property, and the Advisory Bodies were not consulted²⁴. At its 2010 meeting in Brasilia, Brazil, the World Heritage Committee expressed concern to the State Party about these developments. Also in 2010, the Association of Southern African Professional Archaeologists lodged an appeal against the decision to grant the mining right, on the grounds that the EIA was insufficient and that the link between the study area and the World Heritage property was not fully considered. As the World Heritage Centre stated to the Committee,

*The proposed development highlights the lack of clarity over responsibilities for the protection of the property, as set out at the time of inscription, and the lack of clarity over the buffer zone, as described at the time of inscription.*²⁵

The World Heritage Committee then urged the State Party to halt the mining project until a mission by the World Heritage Centre and the Advisory Bodies had assessed the situation, and to submit further details on the mining licence, the appeal against it and related issues²⁶.

The monitoring mission took place in November 2010 and found that, before issuing the coal mining permit, the Department of Minerals and Energy had not conducted the consultations with other government departments that legislation required. Nor had the EIA considered any potential impacts on the OUV of the World Heritage property. The mission also learned that

*the mining company had been instructed by the State Party to cease all operations. A 'process of rectification as provided for by the National Environmental Management Act, Act 107 of 1998' (as amended) is underway. This entails the mining company revising the Environmental Management Plan as well as proposing alternative mining methods to be considered by the Department of Environmental Affairs.*²⁷

It was also reported to the World Heritage Committee in 2011 that a buffer zone had been 'proclaimed' but not submitted to it for approval, and that the zone did not fully surround the property. The 2011 report by the World Heritage Centre and the Advisory Bodies concluded that

*It is crucial that a revised EIA is undertaken on the basis of proper data on the value of the landscape area where the mining is proposed, on the landscape between the mining areas and the property and on the Outstanding Universal Value and attributes of the property itself and that the EIA acknowledges that the mining area is within what was envisaged as a buffer zone and is within what at the time of inscription was part of the proposed TFCA*²⁸.

²⁴ WHC-10/34.COM/7B.Add, p 90

²⁵ WHC-10/34.COM/7B.Add, p 91

²⁶ WHC-10/34.COM/20, p 103

²⁷ WHC-11/35.COM/7B, p 95

²⁸ WHC-11/35.COM/7B, p 97

In September 2011, the South African press reported that

The government has reversed its tough stance and agreed that [the mining company] can proceed with the Vele coal mine, seven kilometres from the Mapungubwe world heritage site. The company, the department of environmental affairs and South African National Parks (SANParks) signed an agreement this week stating that integrity of the heritage site would be maintained by “comprehensive biodiversity offset programmes, thereby optimising benefits to local communities”.

Groenewald, 2011.

The objectives of the 1 September Memorandum of Agreement include ensuring the conservation and integrity of the World Heritage Site; maintaining and strengthening co-operation between the three parties; and establishment of an Environmental Management Committee, chaired by South African National Parks and representing all stakeholders, including NGOs and local farming communities. Meeting quarterly (with sub committees that meet more often), this committee monitors and oversees the company’s compliance with the relevant legislation and management plans (although there is still no management plan for the buffer zone, which is to be extended to incorporate the area between the World Heritage Site and the Vele mine). An independent environmental control officer and environmental manager monitor the mine’s environmental compliance and report quarterly to the Department of Environmental Affairs. Through the Memorandum of Agreement, the parties are working on development of an offset programme to address impacts on cultural heritage, biodiversity, water resources and tourism that cannot otherwise be mitigated. These are not impacts on the World Heritage property.

On 24 November 2011, the mining company and the Save Mapungubwe Coalition (which had brought legal action to halt development of the Vele mine) signed a memorandum of understanding. The company “agreed to look at further research, monitoring and modeling into the potential impacts of mining at Vele” as well as “amendments and improvements to [the company’s] approved environmental management plan and water use licence” (Ryan, 2011). The two sides reported further progress in the following months. Production began at Vele in December 2011, following the coalition’s withdrawal of legal proceedings. The coalition was quoted as saying that it and the company were aiming to finalise a Memorandum of Agreement by mid April 2012 (Janse van Vuuren, 2012), although in late May this had not yet been achieved,

Recognising that there were shortcomings in interministerial consultation and co-ordination with regard to the nomination of the Mapungubwe property and the assessment and management of extractive industry impacts near the site, the government of South Africa has now established an interdepartmental task team, including the Department of Environmental Affairs and the Department of Mineral Resources, that is reported to be enhancing co-ordination and procedures. One result is an instruction from the latter department that all mining licenses in the Mapungubwe buffer zone be withdrawn.

This case has the following broader implications for the relationship between natural World Heritage Sites and the extractive industries.

- Significant and potentially damaging complications can arise if a property is inscribed against the advice of the Advisory Bodies, particularly if this advice reflects concerns about integrity issues regarding the property.
- It is important to achieve full clarity about buffer zones at the time a nomination is developed, and to ensure that the conservation provisions of legislation affecting buffer zones are enforced.

- State Parties should ensure that all the relevant national government agencies are appropriately co-ordinated in their regulation and management of extractive industry activities, nature and cultural conservation functions and the interfaces between them. In particular, authorities responsible for the mining and energy sectors should be fully aware of, and proactively comply with, policy and legislation regarding nature and heritage conservation.
- In societies and jurisdictions where conditions permit, organised civil society can play a significant role in addressing shortcomings in the co-ordination and execution of appropriate policy by international and national authorities.

2.4.5. Mount Nimba Strict Nature Reserve, Guinea and Côte d'Ivoire

This property spans the border between Guinea and Côte d'Ivoire, and a contiguous nature reserve is proposed in Liberia. Its current total area of 17,740 ha comprises 12,540 ha in Guinea and approximately 5,200 ha in Côte d'Ivoire. The latter portion was established as a strict nature reserve by the colonial authorities in 1943. The Guinean part became a strict nature reserve in 1944. It was inscribed on the World Heritage List in 1981. In 1982, the Ivorian strict nature reserve was inscribed on the World Heritage List, making the total area of the transboundary property 19,290 ha at that time. The property was added to the List of World Heritage in Danger in 1992 because of "invasion by refugees, proposed iron ore mining, subsistence pressures and inadequate management" (UNEP-WCMC, 2011b: np). It has remained on that list ever since, partly due to political turmoil over various periods in each of the three countries, and the continuing pressure of potential mining activities. The 'desired state of conservation for the removal of the property from the List of World Heritage in Danger' "has yet to be defined"²⁹.

In 1993, with the approval of the World Heritage Committee, the boundary of the property was revised on the Guinean side, creating an enclave of 1,550 ha within which iron ore exploration could take place and, according to the national authorities, rectifying an error in the original definition of the property's boundaries. This reduced the total area of the property to 17,740 ha.

Mount Nimba is rich in plant and animal biodiversity, and was designated a WWF/IUCN Centre of Plant Diversity "mostly for its forests, although its distinctiveness is mostly in the montane grassland zone... More than 500 new species of fauna were described from the Guineo-Ivorian Mount Nimba Reserve, and more than 200 presumed endemic species were described from the Liberian end of Mt Nimba" (UNEP-WCMC, 2011b: np).

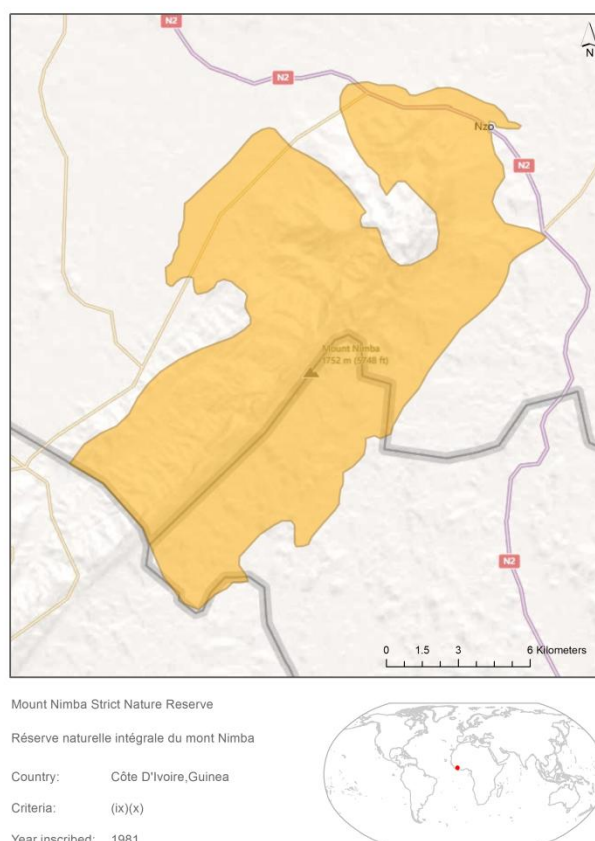


Figure 5. Mount Nimba Strict Nature Reserve

Source: IUCN and UNEP-WCMC, 2012.

²⁹ WHC-11/35.COM/7A, p 13

However, as noted above, many of these natural resources are under pressure from growing human populations in the area, and hunting is common in both the Guinean and Ivorian parts of the property³⁰.

In 1980, the Guinean strict nature reserve was declared a Biosphere Reserve under the UNESCO Man and the Biosphere Programme. The Biosphere Reserve was extended in 1993. It now comprises three strictly protected core areas totalling 21,780 ha, along with buffer zone and transition areas. Its total area is 145,200 ha, all in Guinea.

The Mount Nimba range is rich in high-grade iron ore. The Liberian part of these mountains was heavily mined for iron until 1992. The Liberian authorities designated the area a nature reserve in 2003. There has been longstanding interest in exploiting the iron ore on the Guinean side, where it was estimated in 2002 that 600 million tonnes could be mined over 30 years³¹. Some estimates of the reserves are now higher. Two major international mining companies, after several years of involvement, are now part of a joint venture that has extensive exploratory operations in the enclave within the World Heritage property. Although excised from the property, this area – now reported to be significantly affected by the exploratory activities and related infrastructure – remains within the strict nature reserve.

Despite the decades of interest in the ore reserves in the Guinean part of the property, years of further investigation, including a detailed EIA, will be required before a final investment decision is made. Government and local communities remain impatient for the economic opportunities that the project might bring; conservation interests remain deeply concerned about the threats to the OUV of the World Heritage property. In 2011, the World Heritage Committee was informed that

*the implementation of the Environmental and Sociological Impact Assessment (ESIA) has been delayed because of the presidential elections. At the request of [the joint venture], the World Heritage Centre and IUCN have submitted detailed comments on the draft terms of reference for the ESIA, and indicated that the project could not continue should the ESIA conclude that the negative impacts could not be mitigated. The World Heritage Centre has not yet received the final version of these terms of reference.*³²

There has been similar interest in the iron ore reserves in and around the Ivorian part of the property. A major international steel firm signed a joint venture agreement with a local company in 2007 to exploit these reserves. Following protests from the World Heritage Committee and IUCN, however, it suspended operations in 2010, recognising that they would affect a World Heritage Site. Nevertheless, the World Heritage Committee noted in that year that the State Party had not responded to its urgent request for confirmation that “all the mining concessions in the property have actually been revoked”³³. The 2011 report of the State Party to the World Heritage Committee did state that “no other mining concession has been granted in the Ivorian part of the property”³⁴.

There are widely diverging views about the impact of the extractive industries on this property, currently focused on the Guinean sector. As noted, many Guineans are keen to see the project move ahead and create the substantial economic growth that activities on this scale would achieve. Conservation interests, however, are already concerned about the environmental impacts of the exploratory activities and associated infrastructure on the strict nature reserve, and view the original decision to excise an enclave

³⁰ WHC-11/35.COM/7A, pp 14, 16

³¹ WHC-03/27.COM/7A, p 8

³² WHC-11/35.COM/7A, p 17

³³ WHC-10/34.COM/7A p 7

³⁴ WHC-11/35.COM/7A, p 17

where mining might proceed as having been inappropriate. Mining interests point out that no final decision is imminent, and that it will in any event be subject to thorough environmental and social review – as well as extraneous economic and political factors, such as commodity prices and the level of political stability in the region. Pragmatists might suggest that the exceptional wealth of the Mount Nimba resources makes it unlikely that they will not somehow be exploited in the coming decades, while asking what capacity the State Party and the Advisory Body will have to review the probably complex and voluminous ESIA.

Overall, this case suggests the following insights about the relationship between natural World Heritage Sites and the extractive industries.

- As is now clearly recognised, thorough investigation and the utmost care are necessary in determining the boundaries of a property that is being nominated for inscription. Furthermore, as paragraph 165 of the Operational Guidelines now states, any proposal for significant modification of a property's boundaries – such as the change made in the Guinean sector of the Mount Nimba property in 1993 (before paragraph 165 existed) – should be submitted and appraised as if it were a new nomination.
- Thorough and effective national and local governance procedures – based on adequate levels of capacity – are needed to ensure appropriate relationships between the management of World Heritage properties and other, potentially adjacent, categories of protected area. In the case of Mount Nimba in Guinea, there have been adjustments to the World Heritage property to facilitate mining in an area that may have been wrongly included in it. This, in the view of some observers, has permitted inappropriate land uses in the excised area, which remains a strict nature reserve. There should be an integrated approach to nature conservation within a World Heritage property and related protected areas.
- ICMM members that operate in the Guinean enclave are not violating that organisation's no-go commitment and may be ready to invest substantial resources in a series of conservation and management measures that might have significant benefits for the World Heritage property and adjacent protected areas. ICMM members could also conclude from the ESIA that the risks of engagement with this mining opportunity are too high – and be replaced by operators with lower levels of environmental commitment. Given that previous decisions about the enclave cannot realistically be reversed, the Mount Nimba case may be an important test of the concept of positive net environmental benefit that some extractive industries are starting to explore and espouse.
- Experience in the Ivorian part of the property shows that international mining companies may be willing to withdraw from promising ventures when they realise that these involve exploitation in a World Heritage Site.

2.4.6. Virunga National Park, Democratic Republic of Congo

Originally established in 1929 as an extension of the Albert National Park and now managed by the Institut Congolais pour la Conservation de la Nature (ICCN), the Virunga National Park covers 790,000 ha and was inscribed as a natural World Heritage Site in 1979. The Lake Edward part of the property was designated a Ramsar site in 1996. The property "contained... the greatest biological diversity of any park in Africa: from steppes, savannas and lava plains, swamps, lowland and montane forests to volcanoes and the unique giant herbs and snowfields of Rwenzori over 5,000m high. Thousands of hippopotamuses lived in its rivers, its mountains are a critical area for the survival of mountain and lowland gorillas, and birds from Siberia overwinter there" (UNEP-WCMC, 2011c: np).

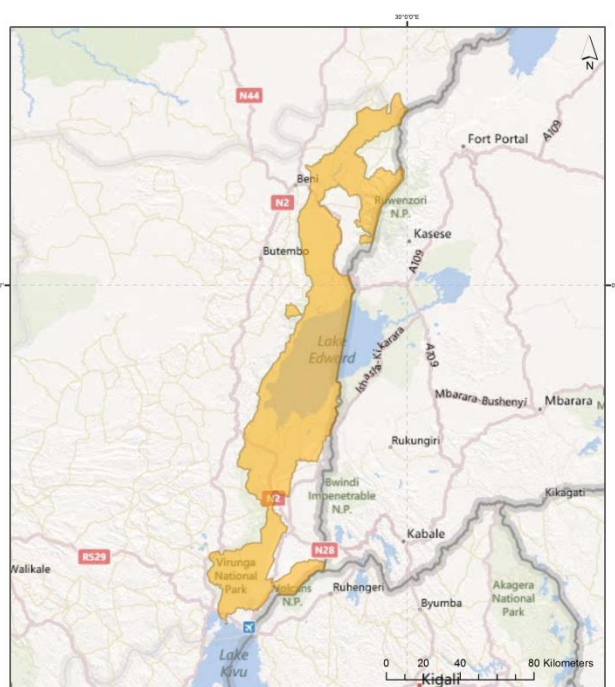
Due to the turmoil in the Great Lakes region of central Africa, the property has been on the List of World Heritage in Danger since 1994. (“The desired state of conservation [for the removal of the property from the List of World Heritage in Danger] has not yet been specified”³⁵.) The Rwanda civil war led to an influx of 1.5 – 2 million refugees into the Kivu province of the Democratic Republic of Congo, and multiple pressures on the natural resources in the property. Wildlife was killed, vegetation was destroyed and many national park staff lost their lives. Fishing villages were established; poaching became rampant; and the 2002 eruption of the Mount Nyiragongo volcano exacerbated the situation. Some mountain gorillas survive on the slopes of the Virunga Mountains and support a tourist industry that is currently growing.

Efforts to support the local authority and sustain at least some of the original OUV of the property have been under way since 1996.

Between 2000 and 2004 the UNESCO/ICCN project ‘Biodiversity Conservation in Regions of Armed Conflict’ was funded by the UNF and the Belgian government; Since 2002 the Great Apes Survival Project (GRASP) has focussed international attention and funding towards the survival of all these apes: in 2004 Virunga benefited from funds for the wall delineating the Park from encroachment by Rwandan farmers... Dialogue with the locals about conservation has had some success... but nothing can replace effective patrolling. Phase II of the UNESCO/ICCN project continued in 2006 focussing on Emergency Action plans to reinforce the management of the Park.

UNEP-WCMC, 2011c: np.

While recounting the multiple adversities confronting the property, UNEP-WCMC’s account states that “fortunately the Park contains few valuable mineral resources”. However, in 2009 the World Heritage Centre and IUCN as Advisory Body informed the World Heritage Committee that two oil exploration and exploitation permits had been issued for areas overlapping the property, even though national legislation forbids any kind of mineral exploitation in national parks. The permits were awaiting validation by Presidential decree³⁶. A year later, it was reported that the permits remained in place but had not been validated by the President³⁷. In 2011, as in the previous two years, the World Heritage Committee expressed its deep concern about the award of oil exploration permits and reiterated that petroleum exploration and exploitation are incompatible with World Heritage status³⁸. This was in response to the findings of a mission fielded by the World Heritage Centre and IUCN in December 2010. The mission found that



Virunga National Park
 Parc national des Virunga
 Country: Democratic Republic of the Congo
 Criteria: (vii)(viii)(x)
 Year inscribed: 1979

Figure 6. Virunga National Park

Source: IUCN and UNEP-WCMC, 2012.

³⁵ WHC-11/35.COM/7A.Add, p 2

³⁶ WHC-09/33.COM/7A, p 12

³⁷ WHC-10/34.COM/7A, p 13

³⁸ WHC-11/35.COM/20, p 11

“several petroleum exploration blocks cover almost the entire Virunga National Park” and noted a new exploration permit granted in June 2010 for “Block V, covering a significant portion of the property”³⁹. The Directors-General of UNESCO and IUCN wrote separately to the President of the Democratic Republic of Congo expressing concern about this matter, which was also raised in a high level meeting that led to the Kinshasa Declaration, in which the Prime Minister “committed the government to respect the national laws as well as the provisions of the [World Heritage] *Convention*”⁴⁰.

In March 2011, the Minister of Environment, Nature Conservation and Tourism announced that government had decided to suspend oil exploration in the property, pending the outcome of a strategic environmental assessment (SEA)⁴¹. It is anticipated that the SEA will be completed by the end of 2012, and that decisions will then be taken on whether and how to proceed with oil exploitation near, or even in, the property.

The land use pressures have become so intense in many peripheral areas on both sides of the property’s boundary that it would be virtually impossible at present to institute and manage a conventional buffer zone. In such circumstances, a broader SEA can at least lay a useful foundation for assessment and management of the land and resources of the region within which the property is embedded, while focusing on the specific implications of the proposed hydrocarbon developments.

The suspension of exploration activity and the commissioning of the SEA have brought some respite with regard to this particular threat to the OUV of the Virunga National Park. It has been achieved through a combination of committed effort by the park and national nature conservation and environmental authorities; and co-ordinated advocacy by a number of international organisations and bodies, including the World Heritage Centre and IUCN.

The broader implications of this case are as follows.

- Although it may be well known that mineral and hydrocarbon exploitation are prohibited in a national park not only by domestic legislation but also by the park’s status as a World Heritage Site, some companies consider it appropriate to seek exploration and exploitation permits there.
- Even in conditions of extreme adversity, some citizens and officials remain committed to maintaining the OUV of World Heritage properties, despite the economic benefits that acquiescence with oil and gas or mining developments might bring.
- Despite multiple military, institutional, political and economic obstacles, domestic and international agencies committed to sustaining natural World Heritage Sites may be willing to strive together to reach their conservation objectives. Their collaboration has the potential to succeed.

2.4.7. Wadden Sea, Germany and the Netherlands

This seven-part transboundary serial property of 968,393 ha was inscribed in 2009. The World Heritage Committee has urged Denmark to add its neighbouring section of the Wadden Sea to it⁴². It comprises “the largest unbroken system of intertidal sand and mud flats in the world... and is rich in species specially adapted to the demanding environmental conditions. It is considered one of the most important areas for migratory birds in the world” (UNEP-WCMC, 2011d: 1).

³⁹ WHC-11/35.COM/7A.Add, p 5

⁴⁰ WHC-11/35.COM/7A.Add, p 5

⁴¹ WHC-11/35.COM/7A.Add, p 5 - 6

⁴² WHC-09/33.COM/8B, p 7

Inscription of the property was the culmination of many years of consultation and collaboration between the German and Dutch authorities, in which Denmark has also been involved – notably through the trilateral Wadden Sea Plan that was adopted in 1997.

It is important to acknowledge that the WSP is a policy and management plan adopted by governments for a trans-boundary area and therefore has a wider perspective than a traditional management plan for a site in the sense that the WSP encompasses also the vision, principles, policies and measures and is a framework for the integrated protection and management of the Wadden Sea.

UNEP-WCMC, 2011d: 6.

Because the property is just one element in an integrated management system for a broader land- and seascape, the designation of a buffer zone was considered inappropriate. It is argued that such a zone would wrongly imply that the buffer zone is somehow less deserving of intensive conservation management than the property; whereas these countries' authorities take an equally committed approach to the management of the entire Wadden Sea and the ecosystems with which it is linked.

The whole Wadden Sea system has been intensively managed for several decades, during which all forms of resource use have been subject to detailed regulation. A number of oil and gas installations have been approved over the period, and continue to operate today. As the IUCN evaluation of the nomination noted,

The State of Niedersachsen in Germany established in 1994 a special fund, supported by oil and gas companies, which distributes c. Euro 1 million annually, to support scientific projects and activities to enhance the conservation status of the Wadden Sea. The Netherlands has also established a Wadden Fund, on the basis of income from gas production and from public funds, whose funding supports nature conservation and sustainable economic development. Overall management and conservation activities are well resourced...

There are oil and gas deposits in the Wadden Sea, a number of which are located outside the nominated property and have been under

exploitation for the last 20 years. Exploration and exploitation of oil and gas requires authorisation under national and European legislation and the Wadden Sea Plan.

Moreover, all international regulations for the protection of the sea and the coasts are also applied. Both the State Parties of The Netherlands and Germany have made a clear



Figure 7. The Wadden Sea

Source: IUCN and UNEP-WCMC, 2012.

commitment at the highest political level to not allow exploration or exploitation of oil and gas within the boundaries of the nominated property.

IUCN, 2009: 22, 23.

Following IUCN's review of the nomination, adjustments were made to the boundaries of the proposed property to exclude three existing oil and gas exploitation sites, as well as an area in which exploratory drillings had already been approved (Common Wadden Sea Secretariat, 2009: 32). All such activities are intensively regulated by national and European legislation and directives, including those pertaining to the Natura 2000 network of protected areas in which the Wadden Sea falls. The existing production sites had already been thoroughly monitored since their establishment, and this continues, with no significant negative effects identified. Future lateral drilling under the property, from sites outside it, is not excluded.

The commitments to prohibit oil and gas exploitation inside the property were made on the basis of consultations with the private sector. Regulation of oil and gas extraction in the Wadden Sea has long been a sensitive matter, as efforts were made to balance conservation, economic and energy priorities. Nomination of the property as a World Heritage Site reportedly galvanised all parties into a clear and straightforward consensus in a way that had never been possible before, bringing decades of debate to a quick and – from the conservation standpoint – satisfactory conclusion. The fact that – as the Operational Guidelines require – the Wadden Sea had been on the two countries' Tentative Lists for future inscription was of significant assistance in focusing all parties' minds towards this consensus.

The Wadden Sea experience has two important implications for the World Heritage process in general.

- The possibility or reality of World Heritage status can greatly simplify debates and negotiations about whether or how the extractive industries should operate in a protected area. Reluctantly or otherwise, all parties may then simply accept that such activity will not be permitted. This scenario is more likely to apply in well-resourced jurisdictions where natural resource use and management are intensively and effectively regulated.
- The second aspect of the Wadden Sea property that is of general interest with regard to the regulation of resource use is its approach to the buffer zone concept. The areas within which the property lies are subject to such comprehensive and effective conservation planning and management that all activities and impacts of possible relevance to the property are regulated, even if they are further from its boundaries than a conventional buffer zone would extend. The World Heritage property is thus just one element in an interlocking system of monitoring, regulation and management that largely achieves its conservation objectives. The need for a buffer zone thus falls away.

2.4.8. Waterton-Glacier International Peace Park, Canada and United States of America

In 1932, the Waterton Lakes National Park (Alberta, Canada) was combined with the Glacier National Park (Montana, United States) to form the world's first international Peace Park. It was inscribed on the World Heritage List in 1995 and has an area of 457,614 ha. The two governments' nomination referred to the property as an "outstanding example of earth's evolutionary history" and an "outstanding example of on-going ecological and biological processes". It said that Waterton-Glacier contained "superlative natural phenomena or areas of exceptional natural beauty" and contained "the most important and significant natural habitats for threatened species" (IUCN, 1995: 1).

In its review of the state of preservation/conservation, the 1995 evaluation did note logging and oil and gas developments near park boundaries as impacts. It also "identified external threats having the potential to

adversely affect park wildlife populations, air and water quality and aesthetic values. These included: logging and hydrocarbon exploration occurring along the periphery and an open pit coal mine proposed near the International Peace Park periphery” (Parks Canada, 2004). A coal strip mine had been proposed in British Columbia, close to the western boundary of the Glacier National Park, in the early 1980s. The two governments’ International Joint Commission advised against it in 1989, and it did not go ahead. This experience helped to promote ecosystem-based planning and associated institutional developments on both sides of the border. But the 2004 report by Parks Canada warned that “rapid changes in land use and development pressures on private lands remain a concern to the Waterton-Glacier International Peace Park World Heritage Site.”

The 33rd meeting of the World Heritage Committee in 2009 expressed concern about potential mining and energy developments in the Flathead Valley (upstream of the property) and the impacts that these might have on the World Heritage Site, especially on water quality and ecosystem connectivity. It urged Canada not to allow any mining or development in the upper Flathead basin until relevant environmental assessment processes had been completed. It urged that the United States should be allowed to participate in these processes, and called for a joint Canada-US State of Conservation report by February 2010⁴³.

These actions were in response to NGO communications, supported by a petition, calling attention to proposed mining developments in the Elk and Flathead valleys of south east British Columbia⁴⁴. The World Heritage Centre and IUCN encouraged the State Parties “to increase consultation and collaboration to ensure that the property is protected from development threats”⁴⁵.

Looking beyond the property, a World Heritage Centre/IUCN mission in September 2010 “noted that the entire Flathead basin, in Canada and the United States of America is important for protecting, maintaining and buffering the Outstanding Universal Value of the World Heritage property, and recommended a single conservation and wildlife management plan be developed for the transboundary Flathead”. It also called for “permanent prohibition of mining and energy development in the Canadian Flathead”⁴⁶. The State Parties informed the World Heritage Committee at its 34th meeting in 2010 that measures had already been taken by the British Columbia administration to prohibit mining permits in its part of the basin; to ensure that oil and gas and mineral rights would not be offered in the

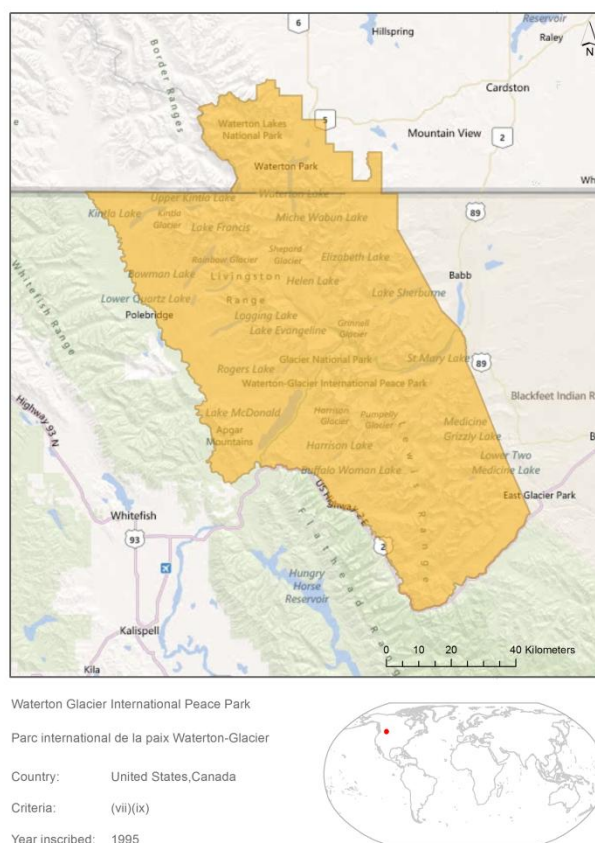


Figure 8. Waterton-Glacier International Peace Park

Source: IUCN and UNEP-WCMC, 2012.

⁴³ WHC-09/33.COM/20, pp 71 - 72

⁴⁴ WHC-09/33.COM/7B, p 62

⁴⁵ WHC-09/33.COM/7B, p 64

⁴⁶ WHC-10/34.COM/7B.Add, p 30

Flathead. Two Montana Senators were reported to be acting to prohibit any future oil and gas leases or mineral developments in the United States portion of the basin, and to withdraw existing leases.

The 2010 mission also noted the importance of connectivity, and the State Parties acknowledged this.

The mission recommended a long-term moratorium be placed on any further mining developments in south eastern British Columbia in a corridor providing vital habitat connectivity and to the Rocky Mountains World Heritage property in Alberta. Other measures should include minimising future infrastructure development and removal of unnecessary structures, maintenance of core natural areas and rehabilitation of degraded areas, and development of a pro-active plan for enhancing connectivity in the area⁴⁷.

In November 2011, it was reported that

British Columbia has passed a law that bans mining and drilling in nearly 400,000 acres [about 160,000 hectares] upstream of Glacier National Park, fulfilling a trans-border agreement to protect the Canadian portion of the Flathead River Basin.

The law approved Monday by the Canadian province's government comes more than a year after Montana Gov. Brian Schweitzer and then-British Columbia premier Gordon Campbell signed an agreement to halt exploration work and development in the remote valley north of Glacier park.

"It's the final stamp of approval to the (agreement)," Schweitzer said Wednesday. "This has been a long process, five years of intensive negotiations..."

On the U.S. side, about 80 percent of the oil and gas leases along the river basin have been retired. Legislation to retire the rest is pending in Congress...

Part of the Montana-British Columbia agreement was to compensate companies with existing mineral rights. In February, The Nature Conservancy Canada and the agency's U.S. organization agreed to split the cost after the possibility of federal funding began to look doubtful.

The British Columbia's law's passage should boost The Nature Conservancy's efforts to raise the \$9.4 million needed to pay two Canadian mining companies for what they've spent in exploration.

Associated Press, 2011.

The Waterton-Glacier case is instructive from three perspectives.

- It is an instance of pressure from civil society accelerating action to address the potential impacts of extractive industries on natural World Heritage sites. In this case, the potential impacts were already the subject of action by authorities on both sides of the border and the imminence of any threat was debatable. The assessments and decisions outlined above occurred in the context of strong efforts by environmental interests to extinguish any possibility of a threat from mining to the property, and appear to have achieved their intention – although the conservation commitment of local communities may have suffered as they saw their hopes of mining-induced economic growth extinguished.

⁴⁷ WHC-10/34.COM/7B.Add, p 31

- This case shows that strong legislative and regulatory systems driven by committed public authorities can effectively address threats to World Heritage properties from potential extractive industry operations.
- At the technical level, this case is important because it demonstrates the growing realisation that the management of World Heritage properties, and of the potential impacts of the extractive industries on them, can only be fully effective in the broader context of land-use planning for catchments, ecosystems and other relevant ecological units. How broad that context should be is a matter for technical judgement and depends on the character of the property and its ecological setting. The Waterton-Glacier property does not have a buffer zone. Arguably, if the property is embedded in a broader spatial system of effective land use planning and controls, a buffer zone is not strictly necessary – although, if the site were nominated now, it would be expected to have one.

3. Perspectives and concerns

3.1. Introduction

The relationship between the extractive industries and natural World Heritage Sites is a sensitive and sometimes controversial issue. Achieving feasible ways forward requires an understanding of the various parties' perspectives and concerns. This chapter attempts to summarise – without necessarily endorsing – the views of the private sector, of governments, and of IUCN as Advisory Body to the World Heritage Convention on natural World Heritage Sites.

3.2. The private sector

3.2.1. Risks and reputation

Beyond their obvious commitment to profitable operations, mining and energy companies structure much of their strategy in terms of risk management. They give increasing recognition to environmental and social harm as a key area of risk that must be identified, assessed and addressed. A related and increasingly significant area of risk for many firms is reputational. This factor varies with the domicile of the company, the jurisdictions in which it operates and its own management attitude. But many of the extractive industries that might affect World Heritage properties are genuinely concerned about the reputational risk that negative impact on these properties might pose. Conversely, some ICMM members believe that they enjoy reputational advantage because of the no-go commitment to which they subscribe. They see the organisation's 2003 position statement as a watershed in the overall profile of the mining industry.

3.2.2. Internal debate

As obvious as the commitment to profit, but less well understood by outsiders, is the diversity of views that may exist within a company. The aggregate environmental behaviour of a mining or hydrocarbons firm is the result of internal consultations, debates or even conflicts between individual perspectives and standpoints that may differ substantially. There is no doubting the genuine personal commitment of many in the private sector to sustainable operations. At the same time, sustainability departments in extractive industry firms typically have to persuade cautious or sceptical colleagues and management that a commitment to conservation can enhance profit, improve reputation and reduce risk.

3.2.3. Financial institutions

The banks that help to finance the extractive industries naturally have an especially strong focus on the assessment and management of risk. As explained in section 2.3.1, some lenders have a no-go commitment with regard to financing activities in natural World Heritage Sites. The majority simply incorporate World Heritage status into their criteria for ranking risk. For the banks, World Heritage or other protected area status is a welcome tool in the systematisation and simplification of lending procedures (along with statements of standards like the Equator Principles and the IFC Standards). It helps to make the process less subjective. A project involving a natural World Heritage site automatically has such a high risk status, and generates such a correspondingly low lending 'appetite' in the bank, that it is not likely to be supported. (For further discussion of banks' approach to biodiversity risks, see PricewaterhouseCoopers (2010).)

3.2.4. Self-regulation by extractive industries

Those mining and energy companies that do make more overt commitments to sustainable operations – for example, by agreeing not to work in World Heritage Sites – are naturally concerned that their competitors should do the same. There are many calls for a level playing field, although this brief study has not been

able to document clear cases where one company stayed away from a World Heritage property or its buffer zone and a less scrupulous competitor exploited the opportunity instead.

It is in the nature of the private sector that self-regulation is unlikely to be an adequate means of controlling its impact on the environment. Firms that comply will fear that others may not. Civil society may be distrustful of the motives or effectiveness of such measures. They are not necessary if governance by local, state or international authorities regulates the private sector efficiently and effectively. Business informants have been among those in the present exercise who have argued that effective official regulation is what matters most, while self-regulation by no-go commitments or related private sector measures are an interim and inevitably inadequate measure.

The extractive industries accept that, wherever they operate, they must adapt to the regulatory environment. From their perspective, clear, efficient and timely regulation is highly desirable. Uncertain, ambiguous and protracted bureaucratic processes frustrate them. This is why, for example, the inscription of an area as a World Heritage property may be considered a welcome simplification by some companies. Even if it has not made a no-go commitment, a firm can then clearly see – at least in most jurisdictions – that operating in that area is out of the question. For the same reasons, companies may be frustrated by uncertainty as to whether a site will indeed be inscribed on the World Heritage List. The Tentative Lists of potential sites that State Parties are required to develop serve important preparatory purposes (section 4.3). But if a company cannot see (and potentially participate in) a structured, targeted and time-bound process of decision-making about whether to nominate the site for inscription, it cannot optimise its own investment decisions.

Those companies that have adopted a more committed stance towards natural World Heritage Sites have been influenced by their perception that these properties are selected on strictly neutral, technical grounds, and that the World Heritage Committee takes its decisions on this basis. They sometimes gain the impression that this is not fully the case, and that these decisions are less consistently based on technical criteria, and more influenced by other (sometimes apparently political) considerations, than they had expected. Furthermore, they sometimes sense that State Parties themselves are not fully scrupulous in respecting the OUV of their World Heritage properties.

Reputation is obviously a subjective quality. Companies that feel they are making sincere efforts to enhance their environmental performance may find that their public reputation apparently fails to reflect this. Similarly, the World Heritage Committee and State Parties, despite their best efforts and those of the supporting technical agencies, may face a reputational risk with regard to the private sector. Some firms may feel that their trust in the neutral scientific excellence of natural World Heritage Site selection has been misplaced, and that some governments may not consider their World Heritage properties to be sacrosanct in the face of economic opportunity. They may conclude that a no-go commitment is not only commercially disadvantageous, but also fails – in the context outlined above – to enhance the conservation of World Heritage Sites.

3.2.5. Established and emerging firms showing less commitment

While many extractive industry operators can be seen to have at least some genuine commitment to environmentally responsible operations, experience with natural World Heritage Sites shows that this commitment is not universal. Smaller, national companies may be less aware of, or feel less compelled to comply with, the growing concern and peer pressure about protecting the OUV of these properties that influences many international operators. But, as has been seen in the case of Virunga, for example, some international companies also appear unconcerned about potential negative impacts on World Heritage

properties, or even about the reputational risks they may run. Even a few such instances prove that there is no substitute for effective regulation by state authorities.

There is a widespread impression, particularly in Africa, that the rapidly expanding operations of some mining and oil and gas companies from emerging economies show little regard for environmental impact or the preservation of World Heritage properties' OUV. It has not been possible to investigate this issue in detail during the current brief exercise. Informants suggest that while such operators are rarely in the forefront with regard to environmentally responsible performance, there are some signs of emerging awareness and commitment to limit negative impacts. Again what ultimately matters even more than these firms' attitude is the ability and will of local jurisdictions to regulate them effectively.

3.2.6. Attitudes to 'no go' commitments

It is notable that, while ICMM and one energy company made no-go commitments in 2003 with regard to natural World Heritage Sites, no other extractive industries have joined them since. Oil and gas companies, in particular, are reluctant to take this step. There are two overlapping rationales in this regard.

First, for a variety of reasons, company management may consider it an unacceptable restriction of their future opportunities to make an absolute commitment of this nature – despite the sympathy that their sustainability departments may have for such a step. Apart from a fundamental reluctance to accept any resource as off limits, management may be influenced by fears that the playing field is uneven or that local regulation is ineffective. They may be concerned that the management of World Heritage nominations and inscriptions, and decisions about the application of the Convention, are not entirely neutral or based wholly on technical considerations.

Secondly, a firm may argue that, even if it does cause negative impacts on a World Heritage property, it can make such a committed, comprehensive and effective suite of other environmental and social contributions that the net outcome is positive. On this argument, which could conceivably emerge around the Mount Nimba property, it is better for a well-resourced and competent operator with a convincing environmental programme to achieve multiple positive results, more than compensating for its negative impacts, than for such an operator to stay away and potentially be replaced by a firm that just causes damage. Rather than concentrate on the mitigation of negative impacts, according to this rationale, it is better to include such mitigation in broader programmes of environmental initiatives that ensure a net positive result.

3.2.7. Artisanal miners

Before concluding this section, it is worth recalling another dimension of the private sector – artisanal miners. As explained above, this study does not focus on them, and their perspectives and concerns are not assessed here. Nevertheless, they are the cause of significant impacts on some natural World Heritage properties, especially in Africa.

3.3. Governments

3.3.1. Internal co-ordination

Like companies, governments are certainly not homogenous in their perspectives and concerns regarding the extractive industries and World Heritage Sites. The clearest dichotomy is between ministries responsible for minerals and energy, and ministries responsible for environment and conservation. The former are typically most concerned to expand extractive industry operations; the latter, to contain them in the interests of environmental sustainability and the proper management of protected areas like World

Heritage properties. The initial institutional priority is for these different agencies to consult and inform each other as they pursue their respective policies. The next challenge is to reconcile their priorities through national strategies that promote economic growth while also preserving national and world heritage. Ultimately, it is vital that ministries responsible for mining and energy sign off on decisions to nominate World Heritage properties.

3.3.2. Understanding economic priorities

In developing countries, the imperative to create employment and generate income is strong, and it is not easy for governments to extinguish economic opportunity because it conflicts with conservation objectives. The opportunity costs can be significant. The challenge – which can often be successfully met – is to achieve both sets of targets, through appropriate planning and investment (sections 4.3.1, 4.4.2, 4.4.3). Some governments are also recognising that properly protected and managed natural World Heritage properties can themselves generate some employment and income through the tourism that they can attract – although these economic benefits are unlikely to be on the same scale as those from the extractive industries, and tourism too can have negative environmental impacts. Like the private sector, most governments need a deeper understanding of the broader economic value of natural capital and ecosystem services, and of ways to measure it.

3.3.3. An achievement and a responsibility

Some governments perceive World Heritage inscriptions as a prestigious achievement, and are active in their efforts to add more properties to their national portfolios on the World Heritage List. But, as one informant put it, they do not always fully recognise that inscription is the end of the beginning rather than the other way round, and that the prestige of natural World Heritage properties is accompanied by complex new responsibilities – especially if a country is equally active in developing its mineral and hydrocarbon resources. There are other conservation options for important natural resource assets. A natural World Heritage Site imposes onerous and globally monitored obligations.

Conversely, political considerations of prestige and sovereignty can also complicate relations with the World Heritage Committee and with other international bodies and organisations, if they begin to voice concern about the impact of mines and wells on World Heritage properties. This concern may be resented as interference, leading to complications and delay in efforts to chart a constructive way forward. The obvious lesson, well understood by the World Heritage Centre and its Advisory Bodies, is that all engagements with State Parties on such matters must be sensitive and balanced.

3.3.4. Resources for environmental regulation and management

Most governments, of course, are committed to operating and enforcing their resource management plans and regulatory regimes as effectively as possible, thus ensuring that their World Heritage properties and other protected areas are appropriately conserved. Depending as they do on public funding, one of their strongest principles must be cost efficiency. Especially in developing countries, the challenge of effective conservation management is daunting, given the limited resources that are available.

3.4. IUCN

IUCN, as Advisory Body to the World Heritage Committee with regard to natural World Heritage Sites, recently gave a clear summary of its position on the relationship between mining and oil and gas projects and these properties (IUCN, 2011c). Referring to the resolution of the 2000 World Conservation Congress that exploration and extraction of mineral resources in its protected area categories I – IV should be prohibited by law (section 2.3.3), it states:

IUCN's position is that mineral and oil/gas exploration and exploitation (including associated infrastructure and activities) is incompatible with the Outstanding Universal Value of World Heritage Sites and should not be permitted within these sites. Mineral and oil/gas exploration and exploitation outside world Heritage Sites should not, under any circumstances, have negative impacts on their Outstanding Universal Value.

IUCN, 2011c: 1.

4. Constraints, challenges and opportunities

4.1. Introduction

The issues, experience and perspectives outlined in chapters 2 and 3 above are summarised in this chapter under the headings of constraints, challenges and opportunities. This is intended to help identify actions that could enhance the relationship between the extractive industries and natural World Heritage Sites

4.2. Constraints

4.2.1. Private sector commitment

An evident constraint for the World Heritage Convention is that not all operators in the extractive industries are as committed as they should be to environmental sustainability and, specifically, to the maintenance of the OUV of natural World Heritage Sites. A significant number of firms (and some lenders) have committed not to operate in these properties, and a larger number have criteria and procedures in place to address the risks associated with working in or near them – often meaning that they would not, in practice, proceed. But others, including some large international companies, still judge the environmental, financial and reputational risks to be worth taking, and are willing to undertake operations in or near World Heritage Sites that can clearly harm these properties.

4.2.2. Government capacity and performance

An even more central constraint is the inability of some governments to regulate the operations of the private sector appropriately and to achieve effective governance of natural resources and protected areas. It is never wise to assume that self-regulation can be the foundation of governance. Monitoring and enforcement of private behaviour by public authorities are indispensable. But these are complex and demanding institutional and fiscal challenges. The commonest problem is the lack of budgetary resources for such purposes. Another constraint is inadequate awareness in all the relevant agencies of government about the importance of environmental sustainability in general and of the proper protection and management of natural World Heritage Sites in particular. A third problem for some governments is to achieve high, rigorous and consistent standards of due process in applying agreed principles and legislation uniformly to all instances of extractive industry operation in and near these properties.

A more basic but significant constraint for governments is internal communication: ensuring that all ministries and agencies inform and consult each other about their strategies and actions. The commonest problem in this regard, as has been noted, is that a mining ministry may proceed with new developments without checking on impacts or relevant policy with the environment ministry; or the latter may fail to keep the former adequately informed about the precautions it should take when promoting new extractive industries in the country. In some states, World Heritage Sites are the responsibility of ministries of culture, meaning that the environmental and nature conservation issues arising mainly in natural properties are inadequately understood, monitored and addressed.

Although it may seem counter-intuitive, State Parties' enthusiasm for the World Heritage concept can sometimes impede appropriate implementation of the Convention. Because they consider new inscriptions on the World Heritage List to be prestigious achievements, governments may press ahead with nomination processes without the exhaustive research and consultation that are necessary, or seek to press ahead in the World Heritage Committee even when the World Heritage Centre and IUCN have expressed reservations. This may mean, for example, that the status of existing mineral and energy concessions in or near proposed new properties is not adequately clarified; that arrangements for buffer zones are not fully

concluded; that alternative conservation options are not fully considered; or that private sector interests are not sufficiently consulted.

4.2.3. Lack of World Heritage Committee policy guidelines

The World Heritage Committee's lack of policy guidelines for the implementation of the World Heritage Convention is a further constraint. Although the Operational Guidelines play a vital role, the Committee would be able to operate more clearly and consistently with regard to extractive industry operations if it could refer to its own policy statement on these matters. Since 2003, it has often had to refer instead to the position statement of ICMM. While that is an important statement, it should not be necessary for the World Heritage Committee to have to refer to it in support of its decisions. However, as noted in section 1.1 above, the Committee did decide in 2011 that a set of policy guidelines should be prepared. There is therefore a good prospect of this constraint being lifted.

4.2.4. Lack of resources for World Heritage Centre and Advisory Bodies

A constant constraint on the entire World Heritage process, including its ability to address extractive industry issues effectively, is the lack of operating resources for the World Heritage Centre and the Convention's Advisory Bodies. These agencies play vital roles, but lack the funds and consequently the personnel to fulfil them adequately. There are inevitable delays – which can frustrate the private sector – and significant constraints on how thoroughly some issues can be addressed. For example, the EIA on a major mining development that might affect a World Heritage property could be thousands of pages long. Even if reviewing such documentation is contracted out to consultants, managing these processes is a major challenge for the Centre and for IUCN with their limited resources.

4.2.5. Incomplete understanding of others' perspectives and priorities

Chapter 3 above outlined the perspectives and concerns of the private sector and of governments with regard to the extractive industries and World Heritage Sites. The need to do this reflected another constraint: the inadequate awareness and common misunderstandings among the various parties about each other's attitudes, motives and strategies. Various consultative relationships do exist – such as the one between ICMM and IUCN – and these have made a significant contribution to the clarification of issues and the determination of mutually acceptable ways forward. But the three sets of players – State Parties, the international agencies and the private sector – still need much clearer insights into each other's behaviour. Rather than mistrust or surprise at what emerges from the black box of the other parties' decision-making, they should be able to predict and explain the steps and procedures that each of them follow, and the outcomes that result.

4.3. Challenges

4.3.1. Balancing and blending economic and conservation imperatives

In addressing the relationship between the extractive industries and World Heritage Sites, the challenge for any State Party is to balance its economic and conservation imperatives. This challenge is not restricted to low income countries. Even OECD members are confronted with these issues: mindful of their conservation obligations and their commitments under the World Heritage Convention, but equally aware of their need for mineral and energy resources as well as the employment that the extractive industries create. In some African countries, there is a significant current of opinion arguing that the conservation of World Heritage sites cannot be allowed to obstruct economic development and poverty alleviation. This is a variant of the view, periodically expressed around the world throughout the history of the Convention, that the

responsibility to maintain World Heritage properties is somehow an unfair or undemocratic imposition by an external, United Nations agency on domestic jurisdiction and priorities (Affolder, 2007).

From some perspectives, it may seem important to assess the onerous management implications and economic opportunity costs of nominating a natural World Heritage Site, and to consider whether alternative conservation and development options might achieve a better aggregate outcome. From the perspective of the World Heritage Convention, signatory governments have a commitment to humanity to conserve the Outstanding Universal Value of natural assets within their jurisdictions.

Part of the challenge is to recognise that it is not necessary to choose one strategy or the other. There are ways in which conservation of natural World Heritage Sites can be economically significant. Furthermore, there are ways in which governments can engage with the private sector to combine mineral and hydrocarbons extraction with environmentally responsible initiatives that maintain the OUV of World Heritage properties and contribute to broader conservation objectives - without permitting mineral or hydrocarbon exploration or exploitation within the properties or allowing negative impacts on them from any such activities outside their boundaries.

4.3.2. Building government capacity

The central challenge for many State Parties, supported by international agencies and the private sector, is to build the capacity they need for effective governance of resource use and regulation of the extractive industries. This is a multifaceted institutional task, involving – *inter alia* - the building of awareness, the adjustment of attitudes, the training of personnel at many levels, the development of criteria, procedures and legislation and the installation and maintenance of systems and procedures. The challenge has long been recognised and addressed, but – as the experience summarised in this report shows – much more needs to be done.

4.3.3. Ensuring consistent regulation

A related challenge for State Parties is to ensure the comprehensive and consistent application of regulatory procedures to all private sector operators in their jurisdictions. If some (typically larger, better-resourced) operators avoid operations in or near World Heritage properties in accordance with their own policies, it is doubly unfortunate if other (typically smaller) firms with less stringent environmental systems and procedures are allowed to proceed.

4.3.4. Tentative Lists

Paragraphs 62 – 76 of the Operational Guidelines set out the procedure, format and roles of Tentative Lists. Paragraph 70 states that

Tentative Lists are a useful and important planning tool for States Parties, the World Heritage Committee, the Secretariat, and the Advisory Bodies, as they provide an indication of future nominations.

UNESCO, 2011a: 19.

However, Tentative Lists are not serving their purpose if the sites identified on them are not clearly subject to a specified and publicly understood process of consultation, review and decision-making. At present, this is not the case for some countries' Tentative Lists. There may be legitimate reasons for the apparent stagnation of some Tentative Lists, including lack of government resources to advance to the nomination process. Setting a fixed number of years within which a property must either be dropped from the Tentative List or nominated for inscription is not helpful. But companies wishing to explore or exploit

mineral and hydrocarbon resources may face years of uncertainty as to the future conservation status of the areas on Tentative Lists where these resources are located. From their perspective, it is not helpful if a property stays on the list for more than one or two years. The Lofoten Islands, on the Tentative List of Norway as a mixed cultural and natural site since 2002, are an example. Potential hydrocarbon activity there is controversial (Hølleland, 2010), but after years of studies a formal Norwegian government decision to nominate the property has yet to be announced.

The international agencies supporting the World Heritage process also face difficulties when Tentative Lists appear to be stagnant. These lists may prove to be poor predictors of actual nominations by State Parties. The challenge to State Parties is therefore to ensure that their Tentative Lists are part of a dynamic, transparent process of participatory review and consultation (as was the case for Canada's Tentative List⁴⁸), so that all parties can see the steps being taken, anticipate roughly when a conclusion might be reached and be informed promptly whether the conclusion is indeed to nominate the site for inscription on the World Heritage List.

4.3.5. Preparing nominations

Related challenges arise during the preparation of a nomination for the inscription of a property.

- First, experience with extractive industry issues arising in and near World Heritage Sites emphasises the importance of ensuring comprehensive participation and consultation as nominations are prepared. Private sector interests are among those that should be informed and invited to participate in public debate about the implications that inscription of a property would have.
- Secondly, it is vital to identify all existing interests in mineral and hydrocarbon resources that could be affected by creation of a World Heritage Site (and for which compensation might be due) – a task that should be launched as soon as a potential site is placed on the Tentative List. This may be a significant challenge, as some concessions for exploration and/or exploitation may have been issued years earlier; some may appear dormant; some may be hard to trace or of uncertain legal validity. But it is essential to develop a comprehensive and accurate database of all such interests, and to reach final determination of how each will be treated, before nomination.
- Thirdly, a vital part of the participatory consultations that should take place during the nomination process concerns the ministries or other government agencies responsible for mining and energy: ensuring that they are fully aware of, concur with and sign off on the nomination. In this way, a State Party can achieve an institutionally robust nomination.

4.3.6. Buffer zones and broader planning

An evolving management challenge for natural World Heritage properties affects the way in which potential and current extractive industry operations are addressed in and near them. The established approach is to emphasise the OUV of the property itself, and to recommend the identification and management of buffer zones around the property to ensure that no negative impacts can reach it. This is the intention of paragraphs 103 – 107 of the Operational Guidelines (UNESCO, 2011a: 26 – 27). In current usage, reference is often made to a 'core' and a 'buffer', with the former term referring to the World Heritage property itself. This is inaccurate, as the buffer zone is not part of the property and the latter has no core or periphery. Calls have been made⁴⁹ for clearer policy and guidelines regarding buffer zones, in the

⁴⁸ Parks Canada, 2012.

⁴⁹ For example, at a May 2012 African World Heritage Fund workshop on development activities and resource extraction in and around African World Heritage sites.

context of the World Heritage Committee's retrospective inventory of properties and its request to State Parties to clarify the legal status and land use plans of these zones.

The buffer zone approach is increasingly criticised as inadequate in some cases. First, as was argued for the Waterton-Glacier property, activities beyond a buffer zone can still have an impact on the property it is supposed to be protecting. A broader perspective is needed. Secondly, the buffer approach may be seen to imply that the World Heritage property is an island of special conservation effort and that what happens beyond its buffer zone is of no conservation significance. Instead, it is argued, conservation monitoring and management should apply to all areas, integrating the various threats, opportunities and special circumstances of each in a comprehensive spatial system. A World Heritage property then takes its place within this overall management system, which conserves its OUV while ensuring the responsible management of all resources and human activities that could affect it. It can then be argued, as in the case of the Wadden Sea property, that a buffer zone is superfluous.

A consequent planning challenge is that, when extractive industry activity with potential impact on a World Heritage property is identified, it may be more effective – but also more complex and costly – to undertake a strategic environmental assessment of the activity in its broader spatial and ecosystem context – also taking into account the cumulative impacts of all other such activities – than to do a narrower EIA of the new project only. Even commissioning and co-ordinating basic, project-specific environmental (and social) impact assessment procedures may be beyond the capacity of regulatory agencies in some countries, however (section 3.3.4). And whenever EIAs or SEAs refer to World Heritage Sites, they are likely to add to the already excessive work load of the World Heritage Centre and the Advisory Bodies (section 5.2).

A related challenge is to ensure that the EIA or SEA of a proposed extractive industry activity in the buffer zone of a World Heritage property, or elsewhere with potential impact on such a property, adequately and systematically addresses that impact. One way to address this would be to draw up clear and specific technical guidelines for what is sometimes called heritage impact assessment, and to ensure that regulatory authorities require their use whenever there is the potential for impact on a World Heritage Site. This mode of assessment would include identification of potential impact on the property's Outstanding Universal Value and integrity.

4.3.7. Boundary modifications

When a natural World Heritage Site has been defined and inscribed (together, where relevant, with its buffer zone), an important challenge for state regulatory agencies and for the private sector is the rigorous preservation of the integrity of the property. There have been instances in the past – Mount Nimba is arguably one – where the boundaries of properties may have been too readily adjusted to accommodate mining or hydrocarbon extraction. On the other hand, there may be cases where errors were made in the original boundary delineation and thorough investigation shows that the OUV and integrity of the property would not be diminished by their rectification.

Paragraph 165 of the Operational Guidelines does state that, if a State Party wishes significantly to modify the boundaries of the property, it should submit this proposal as if it were a new nomination. In practice, there is a real possibility that (after the inevitable period of years during which such a new nomination is prepared and reviewed) the proposal is unsuccessful because the new boundaries would unacceptably diminish the OUV of the property.

In some cases of potential boundary modification so that extractive industries can operate outside the revised boundary of a property, the challenge for a nation and its society may therefore be to judge

whether it is worth exchanging a World Heritage Site for the income and impacts that an extractive industry would generate.

4.4. Opportunities

While the constraints are significant and the challenges daunting, this examination of the relationship between World Heritage Sites and the extractive industries can identify significant opportunities too.

4.4.1. Achieving more clarity

The first opportunity for State Parties and the World Heritage Committee is to promote clarity by working to remove the misunderstandings and uncertainties identified above. Mining and oil and gas companies might regret losing the opportunity to exploit resources if they are clearly unavailable because of location in a World Heritage property or, perhaps, its buffer zone. Conversely, they are likely to find it a real benefit if the restrictions are clearly and promptly known (and, of course, equally applied to all firms in the sector). Uncertainty costs them money. Knowing that an area falls into a protected area category is often a welcome simplification, because then firms and their funders can apply agreed criteria and risk assessment procedures. The work of UNEP-WCMC in making accurate mapping of World Heritage properties and other protected areas more readily available is an important asset in this regard⁵⁰.

Part of this opportunity for clarification lies in the proposal to prepare policy guidelines for the World Heritage Committee. This should simplify the Committee's decision-making and make it clearer to State Parties and the private sector how extractive industry issues will be treated.

4.4.2. Reviewing the economics

As indicated above, State Parties do not have to make an either-or decision between conservation and economic objectives as they consider the impact of the extractive industries on current or potential World Heritage Sites. Although the overall economic benefits of World Heritage tourism may not match those of the extractive industries, governments do have the opportunity to create a significant economic stimulus by maintaining the OUV of their natural World Heritage properties – and should do more to understand and acknowledge the economic value of the ecosystem services they may provide.

4.4.3. Working with the private sector

A related opportunity arises from the resources of the private sector. Companies' ability to fund substantial environmental programmes in the vicinity of their operations should not be viewed as adequate recompense for negative impacts on natural World Heritage properties. There are increasingly frequent references to offsets as a 'win-win' strategy whereby the private sector can add positive environmental value in exchange for negative environmental impacts that it cannot mitigate. This strategy is not acceptable with regard to potential impacts on World Heritage Sites.

Nevertheless, the extractive industries should not automatically be seen as a threat to these properties. Instead, there may be opportunities to identify mutually beneficial strategies for company support to environmental initiatives and capacity development that directly or indirectly benefit them. If the opportunity is taken for a broader, strategic approach to environmental assessment and management, the negative impacts and positive contributions of the extractive industries can be similarly integrated across regions that may include World Heritage Sites – even if none of the negative impacts directly affect those properties. If companies' strategy is to achieve net environmental benefit, State Parties should see this as

⁵⁰ See http://www.unep-wcmc.org/kml-file-of-world-heritage-sites_812.html

an opportunity for realistic negotiation about protecting the OUV of World Heritage Sites while achieving broader conservation progress.

In broader spatial and environmental planning frameworks (such as a region or river basin), there may thus be an opportunity to:

- a) confirm and ensure that no extractive industry activity will cause direct or indirect negative impacts on any World Heritage Site;
- b) apply standard assessment and mitigation procedures with regard to the environmental impacts of extractive industry activity;
- c) apply offset strategies with regard to any such impacts that cannot realistically be mitigated, potentially combined with other interventions not directly linked to the offsets, in order to ensure net positive environmental impact of the activity;
- d) design these offsets and other interventions so that some of the benefits achieved apply to the World Heritage Site(s) included in the planning framework, for example by strengthening their management resources or buffer zones.

4.4.4. Enhancing companies' environmental profile

Responsible behaviour with regard to World Heritage Sites creates a significant opportunity for the private sector. Some ICMM members feel that the 2003 no-go commitment was a significant step in building a more positive environmental image for their companies and their industry. While public criticism of their performance may in some instances still be harsh and, from the companies' perspective, costly, a more committed stance on issues like the preservation of natural World Heritage properties' OUV creates the opportunity for firms to build a better profile. In the 21st century, a positive environmental profile is an increasingly valuable asset for the private sector.

5. Recommendations

5.1. Introduction

At the April 2011 Dakar meeting on the global state of conservation challenges to World Heritage properties,

*Experts noted that while particularly acute in Africa, development pressures are increasing globally. The tension between development and conservation poses particular problems for World Heritage properties, which the global community seeks to preserve for future generations. Case-studies provided by participants illustrated the fact that there are no easy solutions.*⁵¹

While there is no denying the extent of the challenges faced with regard to the current and potential impact of the extractive industries on natural World Heritage Sites, this report can conclude with a number of recommendations directed at the various stakeholders. These proposals must be viewed in the context of the many earlier recommendations made on the subject, including those of the 2000 technical workshop on World Heritage and mining (see Annex 2 and UNESCO *et al.*, 2000) and those of the 2008 meeting on World Heritage and the extractive industries (see Annex 3 and ICMM *et al.*, 2008).

5.2. State Parties

State Parties should:

- withdraw all active or inactive mineral and hydrocarbon exploration and exploitation concessions that may still be in force within the boundaries of natural World Heritage properties under their jurisdiction, with appropriate compensation to concession holders where applicable;
- make no new mineral or hydrocarbon exploration or exploitation concession within any natural World Heritage property under their jurisdiction;
- before nominating a property for inscription on the World Heritage List, withdraw all active or inactive mineral and hydrocarbon exploration and exploitation concessions that may be in force within its boundaries, with appropriate compensation to concession holders where applicable;
- strive to retain potential World Heritage Sites on their Tentative Lists for the shortest practicable period, during which existing

Participants reaffirmed that the World Heritage Convention clearly assigns prime responsibility for the maintenance of the OUV to States Parties and to the international community. They underlined the need for States Parties to be aware of their responsibilities as signatories to the Convention, including the need to follow the directives contained in the Operational Guidelines and the need to allocate adequate funding to the ongoing conservation of inscribed World Heritage properties. Participants noted the desirability of adequate legislative protection and the need for cooperative efforts by all relevant agencies within the States Parties.

Extract from report of April 2011 Dakar meeting on the global state of conservation challenges to World Heritage properties.

It should be acknowledged that many countries have a legitimate need to diversify their economies and fight poverty, while maintaining the natural areas on which communities depend. Reconciling economic and social development with the conservation of the 211 natural World Heritage Sites can and should be addressed through better integrated planning and dialogue.

Ali, 2011: 79.

⁵¹ WHC-11/35.COM/INF.7C, p 3

extractive industry concessions should be identified and the implications of terminating them should be assessed;

- ensure intensive and comprehensive consultation between government ministries and agencies and with the general public, including the relevant extractive industries (those with existing legitimate interests), before and during the nomination process for a new World Heritage property – ensuring that all parties are fully aware of the implications of nomination, that this consultation is documented, and that ministries responsible for mining and energy record their concurrence with the intention to nominate;
- ensure that buffer zones are fully defined, mapped and understood by all stakeholders (see section 5.4 below), with appropriate conservation measures in place and enforced by legislation, before a natural World Heritage property is nominated – or, if a buffer zone is not considered necessary, ensure and demonstrate the full protection of the property’s OUV through the integration of the property into broader frameworks of conservation monitoring and management;
- ensure (by enhancements to domestic legislation, if necessary) that all proposed extractive industry activity with potential for negative impact on the integrity or OUV of a natural World Heritage property, however far it may be from the property’s boundary, is subjected to thorough environmental, social and heritage impact assessment, including, where necessary, strategic assessment that takes cumulative impacts into account and analyses potential impact on broader ecosystem processes that may indirectly affect the property (see box and Annexes 2, 3);
- ensure the use of strict and specific guidelines for the assessment of potential extractive industry impact on the Outstanding Universal Value and integrity of natural World Heritage properties

All proposals for mineral and oil/gas exploration and exploitation (including associated infrastructure) which may affect a World Heritage Site, but are located outside its boundaries, should be subject to an appropriate and rigorous appraisal process, such as an Environmental and Social Impact Assessment (ESIA), prior to considering whether to grant consents and licences. These appraisal processes should respect the highest international best-practice standards, including, but not limited to:

- *specifically assessing the likely effects of the proposal(s) on the site’s Outstanding Universal Value, including direct, indirect and cumulate effects;*
- *identifying and evaluating alternatives, to determine least damaging options;*
- *being publicly disclosed and subject to thorough public consultation; and*
- *proposing an environmental management plan detailing operating, monitoring and restoration conditions.*

IUCN, 2011c: 2.

Participants noted that many conservation issues raised in the state of conservation process are a result of the conflict between protection and development. Seeking a proactive approach, they agreed on the need to integrate World Heritage better into national and local planning processes. The importance of anticipatory planning was emphasised as a means of addressing potential developments with a negative impact on OUV.

Extract from report of April 2011 Dakar meeting on the global state of conservation challenges to World Heritage properties.

World Heritage management agencies should... endeavour to link protected areas planning with broader regional land use planning, so that protected areas are seen as an integral element of their region.

UNESCO et al., 2000: 5.

- not propose modifications to the boundary of a natural World Heritage property in order to facilitate any extractive industry operation;
- take steps to incorporate the commitments they have made under the World Heritage Convention in their national legislation⁵²;
- ensure adequate resourcing for the World Heritage Centre and the Advisory Bodies to the Convention so that they can adequately fulfil the growing technical requirements of ensuring that the extractive industries have no negative impact on World Heritage Sites;
- recognising the benefits to the credibility of national and international commitments that this will achieve, rigorously apply all the provisions of the Operational Guidelines with respect to the impacts of potential or current extractive industry activity on natural World Heritage properties, notably paragraphs:
 - 12, concerning the participation of a wide variety of stakeholders in the identification, nomination and protection of World Heritage properties;
 - 39, concerning the benefits of a partnership approach to the nomination, management and monitoring of properties;
 - 65, concerning re-examination and resubmission of their Tentative Lists at least every ten years;
 - 107, concerning the modification of buffer zones (see also section 5.4 below);
 - 111, concerning the dependence of effective management of properties on a thorough shared understanding by all stakeholders and the involvement of partners and stakeholders;
 - 123, concerning broad participation in the nomination process;
 - 165, concerning significant modifications to the boundaries of a property;
 - 172, concerning notification to the World Heritage Committee of any proposed activity that may affect the OUV of a property;
- recognise and promote the integration of conservation and economic opportunities that may arise in and near natural World Heritage properties through:
 - environmentally sustainable tourism development;
 - the maintenance of ecosystem services;
 - proactive engagement between public authorities, civil society and the private sector in mutually beneficial conservation initiatives;
- where relevant, ensure that state-owned mining and energy companies implement the recommendations set out in section 5.3 below.

⁵² Australia has done this through its Environment Protection and Biodiversity Conservation Act, 1999. South Africa enacted the World Heritage Convention Act, no. 49 of 1999.

5.3. The private sector

If they have not already done so, private and state-owned national and international mining and energy companies should confirm to the relevant state authorities, to their shareholders and to the international community that:

- they will not take up any exploration or exploitation concessions already awarded to them within the boundaries of natural World Heritage Sites;
- they will not seek any exploration or exploitation concessions within the boundaries of natural World Heritage Sites;
- they will prevent any negative impact on any natural World Heritage property from exploration or exploitation activities that they undertake outside the boundaries of the property.

If they have not already done so, banks and other institutions providing finance for the extractive industries should confirm to their shareholders and to the international community that:

- they will not finance any exploration or extraction activity by these industries within the boundaries of natural World Heritage Sites;
- they will not finance any exploration or extraction activity by these industries with the apparent potential for negative impact on natural World Heritage Sites unless appropriate environmental, heritage and social assessments have conclusively proved that there will be no such impact.

In jurisdictions where public funding for the governance of natural resource use is restricted and the coverage and effectiveness of natural resource controls may be incomplete, the private sector should be proactive in working with State Parties and local institutions to enhance capacity and procedures and, specifically, to ensure that:

- any proposed extractive industry activity is subject to thorough and impartial environmental, heritage and social assessment at appropriate scales;
- legislation regarding the conservation and use of natural resources is scrupulously respected;
- the OUV and integrity of natural World Heritage Sites are not impaired, if necessary by controlling or mitigating for extractive industry activity beyond the boundaries of these properties as well as by avoiding all such activity within them.

The private sector should work with State Parties to identify means of applying appropriate environmental principles and procedures – including a commitment not to operate in or negatively affect natural World Heritage Sites - to the funding of extractive industry operations (notably exploration) by the capital markets.

The private sector should support the World Heritage Centre and IUCN with resources, expertise and data so that they can undertake a global survey of all mining and hydrocarbon concessions and extraction in natural World Heritage Sites and their buffer zones, and develop and operate a related monitoring system.

5.4. The World Heritage Committee

The World Heritage Committee should adopt the following **policy guidelines**.

- Carrying out any of the following activities within the boundary of a natural World Heritage property is incompatible with its status as a World Heritage Site:
 - exploration for minerals, oil or gas;
 - the extraction of minerals, oil or gas;
 - the construction or operation of infrastructure in support of the above exploration or extraction activities;
 - the transport of minerals, oil or gas above or below the ground.
- The World Heritage Committee will not inscribe a natural property of which any part is subject to active or inactive mineral or hydrocarbon exploration or exploitation concessions or permits.
- The World Heritage Committee will take all necessary steps to encourage and assist State Parties to:
 - withdraw any existing mineral or hydrocarbon exploration or exploitation concessions in natural World Heritage properties and terminate any such activity that may be taking place;
 - take legislative and planning measures to prevent negative impacts on natural World Heritage properties by extractive industry operations beyond their boundaries.

The World Heritage Committee should amend the **Operational Guidelines** as follows.

- **Paragraph 107** should be amended to read:

Although buffer zones are not part of the nominated property, any modifications to or creation of buffer zones subsequent to inscription of a property on the World Heritage List should be approved by the World Heritage Committee. Modification of buffer zones to facilitate exploration for or exploitation of mineral or hydrocarbon resources will not be approved unless thorough environmental, heritage and social assessments show that this will not impair the integrity or Outstanding Universal Value of the property. The creation of buffer zones subsequent to inscription is normally considered to be a minor boundary modification (see paragraph 164 and Annex 11).

**Current text of Operational Guidelines,
paragraph 107**

Although buffer zones are not part of the nominated property, any modifications to or creation of buffer zones subsequent to inscription of a property on the World Heritage List should be approved by the World Heritage Committee using the procedure for a minor boundary modification (see paragraph 164 and Annex 11). The creation of buffer zones subsequent to inscription is normally considered to be a minor boundary modification.

- **Paragraph 172** should be amended to read:

The World Heritage Committee invites the States Parties to the Convention to inform the Committee, through the Secretariat, of their intention to undertake or to authorize major restorations, new constructions or other new activities which may affect the Outstanding Universal Value of the property. Comprehensive and thorough environmental, heritage and social assessments of the proposed changes, identifying and analysing all potential impacts on the property and including a specific chapter on potential direct, indirect and cumulative impacts on Outstanding Universal Value, should be submitted to the Committee. Notice should be given as soon as possible (for instance, before drafting basic documents for specific projects) and before making any decisions that would be difficult to reverse, so that the Committee, after due investigation by and advice from its Advisory Bodies, may assist in seeking appropriate solutions to ensure that the Outstanding Universal Value of the property is fully preserved.

Current text of Operational Guidelines, paragraph 172

The World Heritage Committee invites the States Parties to the Convention to inform the Committee, through the Secretariat, of their intention to undertake or to authorize in an area protected under the Convention major restorations or new constructions which may affect the Outstanding Universal Value of the property. Notice should be given as soon as possible (for instance, before drafting basic documents for specific projects) and before making any decisions that would be difficult to reverse, so that the Committee may assist in seeking appropriate solutions to ensure that the Outstanding Universal Value of the property is fully preserved.

- **Section IIIB on the format and content of nominations** should be amended to include the requirement that nominations should specify what stakeholder participation and consultation have occurred during preparation of the nomination (including specification of the government ministries and agencies that have been consulted and that have concurred with the proposal) and what the outcome has been in terms of consensus, support, opposition and/or the need for legal action. (See also Annex 3, recommendation 1.3.)
- **Annex 2A on the format for Tentative List submissions** should be amended to include the requirement for a map of the property.

The existing paragraph 107 of the Operational Guidelines states clearly that buffer zones are not part of World Heritage properties. Nevertheless, management terminology for some properties does imply that there are buffer zones within the boundaries of properties. All parties should promote the correct interpretation of the Operational Guidelines in this regard.

The World Heritage Committee should amend the **manual on preparing World Heritage nominations** as follows.

- **Section 2.1 on existing information on the property**, in emphasising the importance of stakeholder analysis, should expand the discussion to refer to the types of private sector interest that should be kept informed and appropriately involved, including extractive industries with current or potential activities that could directly or indirectly affect the OUV of the property.
- **Section 2.2 on setting up a nomination team**, with reference to setting up a list of key stakeholders for potential inclusion in the team or access to its work, should specifically refer to mining and energy companies with current or potential interests in or possibly affecting the property.

- **Section 2.3 on the participation of local people and other stakeholders** should be expanded to place more comprehensive emphasis on the importance of such participation, with specific reference to informing and involving the private sector – including firms that have expressed interest in, or already have exploration or exploitation permits for, mineral or hydrocarbon resources in or near the proposed site, or whose exploration or exploitation activities further afield might negatively affect the OUV of the site. Reference should also be made to the participation of the tourism sector. (See also Annex 2, page 58, bullet 2 and Annex 3, recommendation 1.1.)
- **Chapter 4 on writing and preparing the nomination file** should be amended to reflect the changes to section IIIB of the Operational Guidelines proposed above.

5.5. The World Heritage Centre and IUCN

The World Heritage Centre and IUCN should support the State Parties and the World Heritage Committee in implementing the recommendations set out in sections 5.2 and 5.4 above. In addition, they should:

- work with UNEP-WCMC to develop comprehensive and publicly accessible mapping of the buffer zones of natural World Heritage properties, as well as the sites on State Parties' Tentative Lists;
- work with State Parties and the extractive industries to undertake a global survey of all mining and hydrocarbon concessions and extraction in natural World Heritage Sites and their buffer zones;
- building on this survey, work with State Parties and the extractive industries to enhance the monitoring of natural World Heritage properties, so that artisanal and formal sector extractive activities in or near these properties can be identified and addressed;
- work with State Parties and the private sector to develop clear and specific guidelines for the assessment of potential extractive industry impact on the Outstanding Universal Value and integrity of natural World Heritage Sites, within the framework of internationally accepted EIA and SEA procedures;
- work with affected State Parties to develop a fuller understanding of artisanal mining in and near natural World Heritage Sites and to design strategies to halt it without exacerbating the poverty of those who undertake it;
- work with the private sector and State Parties to fund and implement further analysis, measurement, monitoring and awareness raising among governments and companies with regard to the overall economic value of, and multiple monetary and non-monetary income streams currently or potentially generated by, natural World Heritage Sites.

5.6. The international community

Implementation of the recommendations made in sections 5.2 - 5.5 above depends on political will, on appropriate assessment of business risk and on adequate resourcing. Through participation in the World Heritage Committee and other United Nations procedures and institutions, and through a variety of sustainable development programmes and funding channels as well as the funding and governance of international business operations, the international community can help to fulfil these conditions. Specifically, it should:

- support consistent, efficient and effective decision-making by the World Heritage Committee in support of the recommendations made in sections 5.2 and 5.4;

- strengthen the resourcing of the World Heritage Centre and IUCN so that they can fulfil their multiple roles in support of the Committee to develop an appropriate relationship between the extractive industries and natural World Heritage Sites;
- provide funding and advisory support to State Parties seeking to enhance their governance of natural resource use and of the extractive industries in relation to natural World Heritage Sites, and to IUCN and other international organisations that promote and support such efforts (*inter alia* through strengthening regulatory capacity, systems and procedures) ;
- ensure that export credit agencies and related funding mechanisms for overseas business activity institute and enforce policies and safeguards to proscribe support for mineral or hydrocarbon exploration or extraction that could impair the OUV or integrity of natural World Heritage Sites;
- encourage and support State Parties in ensuring that state-owned mineral and hydrocarbon companies for which they are responsible operate responsibly with respect to current or potential negative impacts on natural World Heritage sites;
- proactively support the maintenance, enhancement and enforcement of global standards for prevention of extractive industry damage to natural World Heritage properties, for example through joint industry commitments and the provisions of the International Finance Corporation's Performance Standards on Environmental and Social Sustainability.

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Annex 1. Terms of reference

UNESCO World Heritage Sites and the Extractives Industry

In 2003, both Shell and the International Council on Mining and Metals (ICMM) formally recognized Natural World Heritage sites (WHS) as areas with significant conservation interests and undertook not to mine or explore in WHS. Several investment banks have also made commitments not to fund projects that explore or extract non-renewable natural resources within the boundaries of WHS. Many other oil and gas companies recognize the need to take special measures to avoid harm when working in or close to WHS.

The World Heritage community has welcomed this response from global private sector representatives, but recognizes that the desired conservation outcomes will not be achieved through individual corporate commitments. In 2008, the United Nations Educational, Scientific and Cultural Organization (UNESCO), IUCN, International Union for Conservation of Nature and Natural Resources (IUCN), and extractive industry representatives met to understand how to further the goals of the 1972 World Heritage Convention through wider stakeholder participation. Recommendations contained in the report of this event require further consideration and action. The above parties remain committed to working with the World Heritage Convention to strengthen the World Heritage process.

In this spirit, these Terms of Reference outline a project to provide input to the World Heritage Committee. The receptiveness to this type of input is likely to be good in light of the recent Resource Manual (final draft stages)... which – building on the findings of 2008 workshop - invites better communications between the extractives sector and World Heritage processes.

Goals

The overarching goal of this project is to evaluate the relationship between World Heritage and the extractive industries and to make recommendations to the World Heritage Committee designed to facilitate a more effective implementation of the Convention in relation to the extractive industries, thus enabling wider support for, and participation in, the WHS conservation objectives.

In addition, this process intends to improve understanding of the processes by which WHS are inscribed, including identification of strengths and weaknesses in the current processes and the roles of the respective parties so that the expectations (of both the private and state sectors) with regards to WHS, are clear and consistent. The expected outcome is the establishment of, or progress towards, a level playing field for all parties such that, notwithstanding national sovereignty issues, national and World Heritage Committee policies related to extractive industries are as uniform as possible, regardless of the country in which the WHS is located.

Through this project, it is expected that the World Heritage Convention will be more effectively implemented through a more active participation of industry stakeholders in the various convention processes, including the creation of new sites, and monitoring, development, and conservation processes afterwards. This in turn would support sustainable development in and around World Heritage sites.

Project Objectives

1. Critically evaluate the current World Heritage processes and practices covering:
 - a) the relationship between extractive industries and World Heritage, as seen by industry partners, IUCN, UNESCO, and States Parties;
 - b) the nature of commitments by stakeholders relating to extractive activity and WH, including State Parties to the World Heritage Convention and business;
 - c) through a series of case studies as provided for hereunder, examine current issues in the interactions between extractive industries and WHS. The case studies should reflect both positive experiences and on-going issues and critically evaluate the lessons learned in each case. The case studies should be used to explain how the various parties, both private (industry) and public (State Party and local authority) could improve their processes to more effectively address these issues before they arise; and
 - d) the effectiveness of World Heritage evaluation and monitoring processes in addressing conservation issues of World Heritage Sites related to extractives activity and in engaging effectively with extractive industries, and to consider the scope for improvement in these processes.
2. Propose ways to strengthen the World Heritage Convention, with specific consideration of, inter alia:
 - a) the scope to increase the effectiveness of World Heritage processes (and to develop additional guidance and/or processes if required). This may include consideration of means of increasing stakeholder participation of extractive industries in World Heritage processes; and
 - b) institutional arrangements that would enable consistent and improved cooperation between extractive industries and the World Heritage Convention, including the relationships with the World Heritage Centre, IUCN, and the other advisory bodies to the World Heritage Convention (International Council on Monuments and Sites and International Center for the Study of the Preservation and Restoration of Cultural Property). In this regard, the project should further strengthen and develop the relationships between the UNESCO World Heritage Centre, IUCN, ICMM, and other interested stakeholders.
3. Provide feedback from this project to the World Heritage Committee and signatory parties to the Convention in an appropriate and timely way so as to contribute positively to the implementation of that Convention.

Ultimately, this project seeks to have a positive influence in addressing the issues facing extractive activity and WH sites.

Tasks and Anticipated Outputs

Task	Anticipated Output	Timing
<p>1. Review Existing Material Review existing material on issues relating to extractives and World Heritage including:</p> <ul style="list-style-type: none"> • the 2008 workshop report and recommendations • a 2000 report of a workshop by ICMM, IUCN and the World Heritage Centre • An internal WH Centre report produced for the 2000 workshop which includes a number of case studies and an analysis of extractives and World Heritage issues 	Background for information document	November 2011
<p>2. Interviews Carry out (10-15) interviews with extractive industry stakeholders (industry and state parties, i.e., both government departments responsible for World Heritage and mineral and oil & gas departments), financing entities, communities, non-government stakeholders, site managers, IUCN, World Heritage Committee, etc. in order to obtain a general sense of the various issues related to extractives and WH.</p>	Background for information document	Completed January 2011
<p>3. Case Studies Assemble case study material and analyze for positive public-private interaction as well as critical ongoing issues and lessons learnt (six case studies, three positive and three with critical ongoing issues). Case studies should be succinct, and no longer than 4 pages.</p>	Background for information document	December 2011
<p>4. Prepare Summary Information Document With guidance from the Steering Committee, prepare a draft Summary Information Document presenting the results of the review, including the feedback from interviews with stakeholders, and the case studies. This will be reviewed by the Steering Committee.</p> <p>This includes:</p> <p>4.1 isolate contributing factors to overall conservation effectiveness, analyze available methods to further international cooperation, and collect recommendations for future action from stakeholders ;</p> <p>4.2 assemble complementary illustrations and associated contact information in order to facilitate a publication in a second stage of the process, following the submission to the Committee session ;</p> <p>4.3 A set of time-bound, practical and applicable recommendations aimed at States Parties, the WH Centre, extractive industries and the finance sector.</p>	<ul style="list-style-type: none"> • Draft Summary Information Document • Summary Document produced for WH Committee meeting 	March 2012

Task	Anticipated Output	Timing
<p>5. Participate in workshop Participate in teleconferences and a workshop with the Steering Committee to discuss the response to the Summary Information Document from the WH Committee and the next steps to be taken to progress the report conclusions</p>		May 2012
<p>6. Draft and Final report with recommendations Provide a draft final report based on feedback from the workshop Based on comments by the steering committee, finalize the report.</p>	<ul style="list-style-type: none"> • Draft report for review by steering committee • Final report 	June 2012

The consultant will be expected to participate in regular teleconferences with the Steering Committee – every 3-4 weeks – and also provide updates on progress.

Annex 2. Recommendations: technical workshop on World Heritage and mining, 2000

The meeting put forward the following recommendations to various key actors.

WORLD HERITAGE COMMITTEE AND STATE PARTIES are invited to note these findings:

- *Mining and conservation specialists are encouraged to work together, taking into account the unique aspects of mining (e.g. mineral potential, deposits) and the unique values and conditions of World Heritage sites; each case needs to be carefully considered, taking account of the conditions and integrity under the World Heritage Convention.*
- *Early in the nomination process, relevant national and local government ministries and agencies, all affected stakeholders and independent third parties should be identified and an open, transparent and effective communication mechanism established, including conflict resolution mechanisms.*
- *An open and transparent multi-disciplinary/science-based approach should be adopted for determining boundaries for World Heritage sites—one that protects World Heritage values and takes into account ecological, cultural and mineral and other economic values, as well as socio-economic factors.*
- *Tentative lists of potential World Heritage sites should be made public to all stakeholders to encourage input of views and information.*
- *An effective flow of information should be assured between the UNESCO World Heritage Centre, IUCN and ICOMOS regarding mining related activities and World Heritage sites prior to designation, in compiling state of conservation reports and during/after emergency situations.*
- *Regarding the evaluation of new nominations, the Advisory Bodies should ask State Parties to confirm that all affected stakeholders, including the mining industry, have been consulted.*
- *Given that World Heritage and mining issues are often polarized, there is a need to protect the process of World Heritage nomination and the state of conservation evaluations.*
- *If a mine is operating near a World Heritage site, facilities should be designed, operated and closed in consideration of World Heritage values and should contribute to the conservation of those values.*
- *Education and awareness programs are required so that local communities understand the importance and the values of World Heritage sites and can benefit from the presence of such areas.*

WORLD HERITAGE MANAGEMENT AGENCIES should

- *clarify and communicate roles and responsibilities regarding World Heritage sites*
- *put monitoring programs in place, as well as emergency preparedness and response plans, all with effective indicators, to ensure that the integrity of World Heritage values is not threatened by mining, agricultural, tourism or other activities, and to deal with incidents*

- *endeavour to link protected areas planning with broader regional land use planning, so that protected areas are seen as an integral element of their region*
- *increase awareness about mining and recognize that mining companies may be key stakeholders*
- *establish communication mechanisms with all affected stakeholders*
- *work with mining companies in order to integrate their environmental management and community development programs into the overall management objectives of World Heritage sites*

MINING INDUSTRY

The mining industry has the potential to make significant contributions as follows:

a) In respect of World Heritage Protection/Conservation, it can:

- *undertake assessments of unique biodiversity,*
- *increase scientific understanding of ecosystems and contribute to the conservation of flora and fauna affected by exploration, extraction and processing activities*
- *support research to expand scientific knowledge and develop improved technologies to protect the environment, and promote the international transfer of technologies that mitigate adverse environmental effects*
- *assist in the development of ecotourism*
- *contribute to government capacity in World Heritage management and support site management programs*
- *contribute to the promotion of the World Heritage Convention and sites through building awareness*

b) In respect of Environmental Management and Protection, it can:

- *encourage all those involved in the mining industry to better understand ecosystem management and adopt these principles*
- *work with governments and other relevant parties in developing sound, economic and equitable environmental standards and clear decision-making procedures, based on reliable and predictable criteria*
- *comply with all applicable environmental laws and regulations and, in jurisdictions where these are absent or inadequate, apply cost-effective technologies and management practices to ensure the protection of the environment and worker and community welfare*
- *conduct environmental assessments of exploration, infrastructure development, mining or processing activities, including secondary effects, and plan and conduct the design, development, operation, remediation and closure of any facility in a manner that optimizes the economic use of resources while reducing adverse environmental and community impacts to acceptable levels*

- *employ risk management strategies and best practices that take account of local cultures and economic and environmental circumstances in the design, construction, operation and decommissioning (of mines), including the handling and disposal of hazardous materials and waste*
- *ensure that adequate financial resources or surety instruments are in place to meet the requirements of remediation and closure plans*
- *implement effective management systems, conduct regular reviews and act on the results*
- *develop, maintain and test emergency plans and response procedures in conjunction with the provider of emergency services, relevant authorities and local authorities to deal adequately with any emergency*
- *at the initial phases of mining projects, develop closure concepts and/or plans that address environmental and community-related issues as well as World Heritage values, in consultation with appropriate stakeholders*
- *encourage governments to establish communication mechanisms that will promote dialogue among local communities and other affected organizations, facilitate the provision of expert advice and serve in a regular planning and/or oversight capacity and establish effective processes for conflict resolution*

c) In respect of Community Development, it can:

- *assess the social, cultural, environmental and economic impacts of proposed activities and engage with local communities and other affected organizations in the design of community development strategies, including such a strategy for mine closure*
- *contribute to, and participate in, the social, economic and institutional development of communities, and encourage the establishment of sustainable local and regional economic activities*
- *in cooperation with international agencies, public interest groups and national governments, contribute to the development of local government capacity as well as to plans to address secondary impacts created by mining activity*
- *mitigate, to the greatest practical extent, adverse effects on communities by activities related to exploration, extraction and closure of mining and processing facilities*
- *provide adequate resources and build requisite capabilities so that employees at all levels are able to fulfill their environmental and community responsibilities*
- *develop relevant sustainable development monitoring indicators on a site-by-site basis*
- *respect the authority of national and regional governments, take into account their development objectives and support the sharing of the economic benefits generated by operations*

Granting of Exploration Licenses

Finally, in respect of granting of exploration licenses, the mining industry should work with stakeholders to create clarity by defining the decision-making process, roles and responsibilities. It is expected that the

granting of permits would carry a reasonable assurance of the right to develop, subject to appropriate approval mechanisms based on a clear decision-making process set out in advance.

UNESCO, ICME and IUCN, 2000: 5-7.

Annex 3. Recommendations: meeting on World Heritage and extractive industries, 2008

1.1 Ensure that the manual on preparing WH nominations, currently being jointly developed between IUCN and ICOMOS provide detailed recommendations on stakeholder participation at both the tentative list and the nomination preparation stages.

1.2 Invite meeting participants to comment on the current draft version of the manual.

1.3 Look into how nomination dossiers might represent stakeholder consultation processes. For example, a new section could be added in which the State Party is asked to describe the stakeholder participation processes undertaken in the preparation of the dossier (e.g. changing section IIIB of the Operational Guidelines).

1.4 Consider recommending to States Parties that geological surveys be involved in tentative list processes to assist in identifying new sites and also to note potential conflicts. Communications with geological surveys could be requested via IUCN's cooperation with the International Union of Geological Surveys.

2.1 In cooperation with industry representatives, produce and distribute targeted materials explaining the work of the WH Convention and the systems in place to provide information on listing procedures and the location of listed sites (e.g. paper, electronic).

2.2 Invite IUCN / WH Centre to present the WH Convention at selected corporate events/fora.

3.1 Prioritize the establishment of accurate WH site boundary mapping within the World Database on Protected Areas.

3.2 Consider if and how Google Earth could be used as a platform for improving public access to WH site boundary maps.

3.3 Accelerate the retrospective inventory process being carried out at the WH Centre.

4.1 WH Convention signatory states should be encouraged to observe the no-go commitment and also clearly communicate to state enterprises, where relevant, obligations under the Convention in regards to engaging in activities that could prejudice the state of conservation of WH sites in other countries.

4.2 Develop and implement a strategy focused on engaging a greater number of companies to make a public commitment to supporting the conservation of WH sites; preparing a clear business case; engaging existing efforts such as the Equator Initiative, the UNEP Finance Initiative, IFC performance standards (#6), the Global Reporting Initiative, or the UN Global Compact

4.3 Establish a mechanism through which the business community having made the commitment to WH can help monitor the state of conservation of WH sites for which they may have useful information.

4.4 *Invite IUCN/WH Centre to make presentations to relevant potential groups in an effort to encourage further adherence to no-go commitments.*

5.1 *Assess why the UNESCO WH website was slow in some cases and provide necessary support to ensure it responds adequately when used.*

5.2 *Ensure that language used in IUCN/WH Centre documentation clearly differentiates between industrial vs. artisanal mining activities.*

5.3 *Carry out a more detailed analysis of the specific issues raised in the past in an attempt to categorize the nature, source and impacts of extractive activities on WH.*

5.4 *Recognize that some WH sites may have been inscribed in the past despite the existence of either active, or closed extractive operations which may have unforeseen potential impacts on the integrity and conservation of the site post-inscription. Develop a clear policy on how to deal with such legacy issues.*

5.5 *Document “best practices” case studies on positive relationships with extractive industry in relation to the conservation of WH sites (e.g. example of the observation of the no-go commitment, extractive industry in buffer zones, supporting local economic development, reducing dependency on illegal resources extraction from within the site). Link, if possible, to the ICMM Resource Endowment Initiative. Carry out similar initiative in regards to the work of the banks.*

5.6 *Develop and implement a communications campaign highlighting private sector support to the WH Convention.*

5.7 *Promote the use of industry best practices guides of potential interest to WH concern on an as-needed basis for WH sites.*

6.1 *Agree on if and how to leverage the June 2009 WH Committee meeting, and/or the October 2009 General Assembly of States Parties to the World Heritage Convention.*

6.2 *Invite meeting participants to comment on the “Future of the WH Convention” discussion currently taking place, and to participate in the February 2009 meeting.*

6.3 *Assess the feasibility of holding a follow-up to the September 2000 “World Heritage and Mining” workshop, focusing rather on “WH and the corporate sector”.*

7.1 *WH Centre and IUCN should develop language that encompasses the no-go and other commitments.*

7.2 *Develop a members’ framework for a standing association, within which the various private sector supporters could be suitably included.*

8.1 *Improve general WH/IUCN understanding of the mechanics of the financial sector involvement in processes that may affect WH sites.*

8.2 Explore, in further working meetings, how the financial sector (including responsible investment services companies) can be further leveraged to strengthen the protection of WH sites against incompatible investments.

9.1 WH Centre to forward the results of the Buffer Zone workshop to meeting participants.

9.2 Assess the interest / feasibility of organizing a working meeting focusing on WH buffer zones and extractives industry.

ICMM, UNESCO and IUCN, 2008: np.