IUCN Conservation Outlook Assessment 2014 **(archived)**
Finalised on 23 August 2014

Please note: this is an archived Conservation Outlook Assessment for Ha Long Bay. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Ha Long Bay

SITE INFORMATION

Country:
Viet Nam
Inscribed in: 2000
Criteria:
(vii) (viii)

Site description:
Ha Long Bay, in the Gulf of Tonkin, includes some 1,600 islands and islets, forming a spectacular seascape of limestone pillars. Because of their precipitous nature, most of the islands are uninhabited and unaffected by a human presence. The site's outstanding scenic beauty is complemented by its great biological interest. © UNESCO

SUMMARY

2014 Conservation Outlook

Good with some concerns

The World Heritage values relate to the property's extraordinary karst features and exceptional scenic beauty (vii) as well as its extensive representation of karst formation processes (viii). These values remain largely intact due to their very nature and property's natural defenses. High levels of tourism and continued growth in visitor numbers represent the most significant threat to Ha Long Bay unless it is carefully planned and managed for in a way that is integrated with Provincial and Local development. Improvements to management and a willingness to address issues raised by the Committee in decisions and recommendations are noted. Management capacity has recently improved to keep better pace with the rapid growth in tourism numbers.

Current state and trend of VALUES

Good
Trend: Data Deficient

The values for which the property was inscribed in regards to the seascape of limestone pillars are reported to be in good condition and threats are considered manageable.

Overall THREATS

Low Threat

Whilst there continues to be a rapid increase in the number of tourists visiting the site, the development and implementation of a visitor management plan and enforcement of existing regulations in regards to numbers of boats and tourists would assist in addressing the need to manage the environmental impact of additional visitors. The establishment of research and monitoring programmes to track visitor numbers and their impacts, and assess and adapt to the impacts of climate change would also help to assist in alleviating potential threats from

increased tourism while also allowing for the detection of impacts from climatic changes.

Overall PROTECTION and MANAGEMENT

Some Concern

Improvements to management and a willingness to address issues raised by the Committee in decisions and recommendations are noted. In the past, management has been unable to keep pace with the rapid growth in tourism numbers, but more recently there has been marked improvement guided by a new tourism management plan. Management limitations have been characterized by funding constraints, poor law enforcement and poor cooperation and support from local authorities stemming from a lack of autonomy of the Management Department. Efforts are being undertaken to improve this situation.

FULL ASSESSMENT

Description of values

Values

World Heritage values

▶ **A spectacular seascape of limestone pillars**
Criterion:(vii)

The outstanding value of the property is centered around the drowned limestone karst landforms, displaying spectacular pillars with a variety of coastal erosional features such as arches and caves which form a majestic natural scenery and presenting picturesque, unspoiled nature in the form of a multitude of limestone islands and islets rising from the sea, in a variety of sizes and shapes. Outstanding features of the property include the magnificent towering limestone pillars and associated notches, arches and caves, which are exceptionally well-developed and among the best presented of their type in the world. (IUCN Evaluation, 1994; UNESCO Retrospective SoOUV, 2012).

▶ **Exceptional scenic beauty**
Criterion:(vii)

Repeated regression and transgression of the sea on the limestone karst over geological time has produced a mature landscape of clusters of conical peaks and isolated towers which were modified by sea invasion, adding an extra element to the process of lateral undercutting of the limstone towers and islands. (IUCN Evaluation, 1994; UNESCO Retrospective SoOUV, 2012).

▶

The most extensive and best known example of marine-invaded tower karst in the world
Criterion:(viii)

One of the world's most important areas of Fengcong (clusters of conical peaks) and Fenglin (isolated tower features) karst. Abundant lakes, occupying drowned dolines, are one of the distinctive features of the Fencong karst, with some appearing to be tidal. (WHC 24 COM.X.A.2; UNESCO Retrospective SoOUV, 2012).

► **Full range of karst formation processes**
Criterion:(viii)

The property possesses the most complete and extensive example of its type in the world and provides a unique and extensive reservoir of data for the future understanding of geoclimatic history and the nature of karst processes in a complex environment.
(WHC 24 COM.X.A.2; UNESCO Retrospective SoOUV, 2012).

Other important biodiversity values

► **Diverse flora**

Ha Long Bay harbors a diverse flora, and primary tropical forests are found, although mostly on larger islands outside the boundaries of the property (IUCN evaluation, 1993).

► **Fish**

Approximately 1000 fish species are found in Ha Long Bay (IUCN evaluation, 1993).

Assessment information

Threats

Current Threats

Low Threat

The values of the property are in relatively good condition. Any current threats, while considered significant are also considered manageable with the key impacts on the overall management of the site rather than the specific geological and scenic values for which it was inscribed. Tourism use has considerably increased and current planning and management responses need to be re-evaluated regularly to cope with this increase. Residential occupation of the property is relatively concentrated and is decreasing through planned re-settlement. The relevant authorities are making a genuine effort through better planning, regulation, education, promotion and direct management intervention to improve the aquaculture and fishing activities and reduce their impact on marine species and biodiversity in the property. Whilst mining and natural resource extraction continue in areas adjacent to the property initial impacts on water quality appear to be monitored and addressed sufficiently.

▶ Water Pollution

Low Threat
Inside site

Potential sources of water pollution previously noted by Committee decisions include the Coc Sau coal mine, the Cam Pha cement factor and the Cai Lan port. While all three developments are being run according to high environmental standards and monitored levels water pollution that are well below the limits required by national environmental standards (IUCN Mission report, 2013) on-going monitoring is required to ensure water quality is not affected by these developments.

► Commercial/ Industrial Areas

Low Threat
Inside site

See below in regards to Energy Production and Mining. Other commercial development projects and landfill activities in the areas surrounding the property have also previously raised concern in regards to threats to the values of the property (33COM 7B.20) including serious concern from the World Heritage Committee. Continued development in the area requires monitoring of impacts on the property, regulation of use and regulation of threats.

► Mining/ Quarrying

Low Threat
Inside site

Industrial developments outside the property, including the Coc Sau coal mine, Cam Pha cement factory, and Cai Lan port development have been identified previously as potentially significant threats. Impacts from these developments appear to be being managed sufficiently (IUCN Mission report, 2013). The Cam Pha cement factory is managed under a very robust environmental strategy and ethos, and is operating in accordance with required standards of environmental quality. Construction of the Cai Lan port is completed and measures are in place to minimise the environmental impact of its operation. (IUCN Mission, 2013).

► Housing/ Urban Areas

Low Threat
Inside site

The impacts from the number of people living inside the World Heritage Property area in boats has been noted in the recent past as a potential threat to the values of the property (27COM 7B.13; 33COM 7B.20). However, the 2013 IUCN reactive monitoring mission to Ha Long Bay found that the number of residents is decreasing as a result of planned re-settlement of houseboat owners to the mainland. Other improvements include limiting the number and improving the standard of houseboats, and improving waste

management (IUCN mission report, 2013).

► Marine/ Freshwater Aquaculture

Low Threat
Inside site

Aquaculture developments surrounding the property, and inside certain areas, affect the water quality of the property. A new provincial master plan for aquaculture provides for delimitation of legal and non-legal fishing zones, seasonal bans on fishing, and improvements in fishing methods such as reduction in the unsustainable use of cages and gill nets (IUCN Mission report, 2013). With increasing human population pressures, aquaculture is also likely to become a more significant threat and enforcement of the master plan will be important to limit any impacts.

► Fishing / Harvesting Aquatic Resources

Low Threat
Inside site

Low-level subsistence fishing is occurring within the boundaries of the property as well as non-sustainable fishing levels adjacent to the site. Dynamite fishing and other destructive fishing methods are banned and can be prosecuted under the 2010 Aquaculture Master Plan. No illegal dynamite fishing is occurring. Purse seining is restricted within the property to an area of 10 ha only. Since 2011 the property has been subdivided into three zones to regulate different levels of fishing activity (IUCN mission report, 2013). The property was not inscribed for biodiversity values, and therefore fishing activities are considered to be a low threat to its Outstanding Universal Value.

► Commercial/ Industrial Areas

Low Threat
Inside site

Tourism numbers are consistently high at the site with total annual visitor numbers reaching approx. 3 million (IUCN Mission report, 2013). Development of tourism facilities within the boundaries of the property has previously been noted to be causing pressure on the property and increasing tension between communities and park management (Ishwaran, 2003; World Heritage Committee Decisions, 2007-2013). Tourism is regulated under

strong national legislation and a host of national and provincial regulations, and guided by a new tourism management plan for the property. The 2013 IUCN reactive monitoring mission found that the development and implementation of a new tourism management plan has led to improvements in enforcement of regulations, visitor services, tour boat operations, safety and security and waste management. Diversification of activities and opening of new areas for tourists are beginning to reduce the pressure from overcrowding of the most popular sites. Enforcement of regulations is essential to avoid renewed/increasing impacts (see also "potential threats" below).

► Roads/ Railroads

Low Threat
Inside site

Concerns have been previously raised in regards to developments outside the property and in particular two inter-city coastal roads and the construction of Bai Chay Bridge (22COM; 23COM) have in the past raised concerns in regards to potential impacts and threats. The impacts of these two roads appear to have been addressed and managed (IUCN Mission, 2013).

► Shipping Lanes

Low Threat
Inside site

Construction of the Cai Lan port was initially noted as a potential threat to the property at the time of inscription (IUCN Evaluation, 1994; World Heritage Committee, 1995) and in Committee decisions since (20COM VII.D.41; 22COM). The port has now been completed and while measures are in place to minimise the environmental impact of its operation (IUCN Mission, 2013) it remains unclear if the completion of this port will lead to an increase in shipping related traffic through the property.

Potential Threats

High Threat

The most significant potential future threat relates to the continued rapid

increase in the number of tourists visiting the property. At present the related infrastructure is adequate, all be it overcrowded and with concentration of visitation, but there is a need to monitor these as the numbers of visitors continues to increase. Equally careful management of the surrounding areas is needed to maintain an appropriate setting for the core areas of the property. Climate change impacts on the ecological and geological values of the site are not fully understood and need further monitoring and research.

► Chemical changes in oceanic waters

Data Deficient
Inside site

In the longer term climate change may cause impacts on the vegetation on the karst islands and islets in addition to issues around ocean acidification. However, details of impacts on the biodiversity and geology of the property are limited and unavailable at the current time.

► Commercial/ Industrial Areas, Roads/ Railroads

Low Threat
Inside site

Developments outside the property as noted above have in the past raised concerns in regards to potential impacts and threats. While these appear to have been mitigated future similar developments may have similar impacts, and any proposed developments will require a thorough assessment of potential cumulative impacts prior to a decision being taken.

► Tourism/ visitors/ recreation

High Threat
Inside site

With tourism numbers continuing to increase, there remains a risk of renewed/increasing impacts as new areas are opened for tourists, and strict enforcement of regulations is essential to avoid inappropriate developments in unspoiled areas (eg. the proposed Bai Dong Island resort (Quang Ninh Province, 2013)).

Protection and management

Assessing Protection and Management

► Relationships with local people

Mostly Effective

Unclear level of consultation on related issues. However, given concerns in regards to the level of habitation within the property this is likely to have impacted on the relationships with local communities. However, this concern is now being addressed, and measures have been introduced that limit the impacts of the floating fishing villages, including improved waste management, better control of the numbers and standards of house boats, stricter accreditation of house boat owners and residents, and beneficial State-supported opportunities for fishermen to change career and re-locate to the mainland (IUCN Mission report, 2013).

► Legal framework and enforcement

Some Concern

The property is protected under strong legislations but there remain issues of enforcement of these regulations particularly as they relate to management of tourism impacts and activities within the property.

► Integration into regional and national planning systems

Some Concern

There does not appear to be integration into planning systems, in particular as related to tourism but also relevant to road and infrastructure development and commercial activities in areas immediately adjacent to the property.

► Management system

Some Concern

The current management system includes a wide range of management plans covering various issues, including a Heritage Management Plan 2011 – 2015, the Quang Ninh Province Aquaculture Master Plan 2015, the Ha Long Bay Tourist Management Plan 2013 – 2015, the Ha Long Bay Management

Plan 2011 – 2015, and the Ha Long Bay Preservation and Promotion Planning 2020. However, some concern remains over the absence of an integrated management approach, and the State Party has expressed its intention to undertake a Management Effectiveness Evaluation, and to adopt an integrated management approach.

► Management effectiveness

Some Concern

Ha Long Bay Management Department appears to have sufficient staff capacity for conducting its roles and responsibilities, but there is need for further financial support and for greater administrative autonomy (IUCN Mission report, 2013). Management is also constrained by budgetary levels.

► Implementation of Committee decisions and recommendations

Mostly Effective

The State Party has responded very constructively to the Committee’s requests and the relevant authorities are making genuine efforts to address any concerns raised through better planning, regulation, education, promotion and direct management intervention to improve management and address issues raised in Committee decisions and recommendations (IUCN Mission report, 2013). The relevant provincial authorities and the Ha Long Bay Management Department are making a concerted effort to improve the management of tourism in the property and to address the concerns of the World Heritage Committee.

► Boundaries

Mostly Effective

The park boundaries are appropriately drawn to largely contain and protect the landscape and the areas required to maintain the scenic qualities of the property. The inscription of the property acknowledges the changes to the boundaries to meet the initial requirements for inscription under natural heritage criterion (World Heritage Committee, 1994). The property includes all of the components that provide the framework for its aesthetic and geological values.

► Sustainable finance

Some Concern

Financing and revenue generation should be reformed to increase the income from purchase of tickets and access to facilities and activities, especially from foreign tourists. Commercial concessions should be established requiring tourism operators to contribute more to funding the costs of management in the property. More tourist revenue should be contributed directly toward enhancing the capacity and capability of the Ha Long Bay Management Department for managing tourism in the property.

► Staff training and development

Some Concern

The Ha Long Bay Management Department has wide-ranging roles and responsibilities for protecting and promoting the natural values of the World Heritage property. With a complement of almost 400 staff and an annual budget of approximately 2.15 million USD, the Department is relatively well resourced. However, the Department is hindered in enforcing regulations and conducting other management functions within the property by its dependence on other government agencies. (IUCN Mission report, 2013). Numerous decisions by the World Heritage Committee have previously noted the need for increased support and capacity building for staff of the Ha Long Bay Management Authority (28COM 15B.13; 30COM 7B.17).

► Sustainable use

Some Concern

The most significant threat comes from the continued rapid growth in tourism, but this threat is diminishing due to the implementation of a new tourism management plan, which will require regular revision to ensure a continued adequate response to tourism as it continues to grow and expand into new areas.

► Education and interpretation programs

Some Concern

A limited amount of visitor information is available and mostly relies on

individual tourism operators providing information. There is no standard information provided and no quality control on that provided by individual tourism operators.

▶ Tourism and interpretation

Mostly Effective

Tourism management has greatly improved under guidance from a new tourism management plan 2013 - 2015. Enforcement of regulations is better with significant improvements in visitor services, tour boat operations, safety and security and waste management, while diversification of activities and opening of new areas for tourists are beginning to reduce the pressure from overcrowding of the most popular sites. The need for monitoring of growing tourist numbers was highlighted at the time of inscription (World Heritage Committee, 1994) and remains an on-going requirement.

▶ Monitoring

Mostly Effective

Limited monitoring evident in regards to the values of the property or on-going impacts. Some monitoring of water quality issues resulting from recommendations from previous committee decisions and concern around industrial development.

▶ Research

Data Deficient

Effective monitoring programmes are in place in regards to water quality and potential impacts from development in surrounding areas. However no information is available in regards to current research.

Overall assessment of protection and management

Some Concern

Improvements to management and a willingness to address issues raised by the Committee in decisions and recommendations are noted. In the past, management has been unable to keep pace with the rapid growth in tourism numbers, but more recently there has been marked improvement guided by a

new tourism management plan. Management limitations have been characterized by funding constraints, poor law enforcement and poor cooperation and support from local authorities stemming from a lack of autonomy of the Management Department. Efforts are being undertaken to improve this situation.

▶ **Assessment of the effectiveness of protection and management in addressing threats outside the site**

Mostly Effective

Laws and regulations protecting the site are technically sound however, law enforcement is not fully effective. The Ha Long Bay Management Department appears to have sufficient staff capacity for conducting its roles and responsibilities, but there is need for further financial support and for greater administrative autonomy as the Department is hindered by its dependence on other agencies in exercising its jurisdictional responsibilities and management functions within the property. Law enforcement is patchy and staff capacity variable. Improvements have been made in regards to a number of key threats and management issues but many issues remain unresolved.

▶ **Best practice examples**

The State Party has responded constructively to the Committee’s requests to lower the population pressure and reduce the impacts from residents in the property. Measures introduced to improve waste management, better control of the numbers and standards of house boats, stricter accreditation of house boat owners and residents, and beneficial State-supported opportunities for fishermen to change career and re-locate to the mainland.

State and trend of values

Assessing the current state and trend of values

World Heritage values

► A spectacular seascape of limestone pillars

Good
Trend:Data Deficient

The values for which the property was inscribed in regards to the seascape of limestone pillars are reported to be in good condition and threats are considered manageable.

► Exceptional scenic beauty

Low Concern
Trend:Data Deficient

Up to date data information regarding a number of identified threats to the property is available through numerous State of Conservation and State Party reports. The values for which the property was inscribed are reported to be in good condition and threats are considered manageable. There is largely effective management in place which is working to ensure the property retains its aesthetic values, with a delicate balance being found between the provision of visitor access and the maintenance of the OUV of the property. (IUCN Mission report, 2013).

► The most extensive and best known example of marine-invaded tower karst in the world

Good
Trend:Data Deficient

The values for which the property was inscribed in regards to the seascape of limestone pillars are reported to be in good condition and threats are considered manageable.

► Full range of karst formation processes

Good
Trend:Data Deficient

The values for which the property was inscribed in regards to the seascape of limestone pillars are reported to be in good condition and threats are considered manageable.

Other important biodiversity values

► Diverse flora

Ha Long Bay harbors a diverse flora, and primary tropical forests are found, although mostly on larger islands outside the boundaries of the property (IUCN evaluation, 1993).

► Fish

Approximately 1000 fish species are found in Ha Long Bay (IUCN evaluation, 1993).

Summary of the Values

► Assessment of the current state and trend of World Heritage values

Good

Trend: Data Deficient

The values for which the property was inscribed in regards to the seascape of limestone pillars are reported to be in good condition and threats are considered manageable.

► Assessment of the current state and trend of other important biodiversity values

Data Deficient

Trend: Data Deficient

Despite concerns raised regarding potential negative impacts from unsustainable fishing practices in the vicinity of the property, there is insufficient data available to be able to draw conclusions on the current state and trend of fish stocks. Similarly, insufficient data is available to assess the current state and trend of flora in the property.

Additional information

Key conservation issues

▶ Increase in tourism

Local

Ha Long Bay is a major national, regional and international tourist destination. The number of tourists visiting the property has increased steadily over the past decade from 1.2 million in 2002 to approximately 3.0 million today, about 50% of whom are foreigners. The primary activities are cave visits, sightseeing, swimming, trail walking and climbing, kayaking, and appreciation of nature and culture. Tourist access is normally by boat and visits focus on a limited number of popular sites, so there have been some signs of mass tourism development. (IUCN Mission report, 2013).
Tourism is regulated under a national Tourism Law (2005) and a number of national and provincial regulations. Management is guided principally by the Ha Long Bay Tourism Management Plan 2013-2015. The plan is well-structured and comprehensive in scope. However, measures should include controlling access and numbers; the development of appropriate visitor facilities and services as well as implementing visitor impact monitoring programmes which trigger management responses.

▶ Development and Infrastructure linked to increase in tourism and provincial economic growth

Local

Linked to the above is the issue of tourism infrastructure. This includes road access to the property as well as the increasing number of boats operating on the site and accommodation needed for longer term visitors in areas surrounding the property. There are currently large numbers of tourist boats operating both day and overnight visits to the property. This number should be closely regulated and monitored (IUCN Mission report, 2013). Equally important is the development of tourism infrastructure including transport systems within the buffer zone and the increasing pressure on resources and infrastructure with increasing accommodation development. Tourism development around

the property needs to be sensitively managed to avoid impact on the core values.
In addition to infrastructure directly linked to tourism, continued economic development in the provinces surrounding the property will also require close regulation and monitoring. While previously approved industrial development in and around the buffer zone have had no adverse environmental impacts and consideration of future development needs to be carefully considered.

Benefits

Understanding Benefits

► Outdoor recreation and tourism

The ongoing benefits of tourism development include revenue raising, which in turn is used for management, conservation and research and promotion of the values of the property.

► Does management of the site provide jobs (e.g. for managers or rangers)?

Levels of residency inside the property have been restricted and efforts have been made to provide livelihoods linked to the property for those who remain within its boundaries. (IUCN Mission report, 2013)

► Fishing areas and conservation of fish stocks

The property provides significant ecosystem services, most notably the provision of valuable aquaculture and fisheries to the surrounding communities as well as those living within the property.

Summary of benefits

The natural features of Ha Long Bay assume significant importance in Vietnamese culture and add to the broader values of the park. The natural phenomena encompassed in the property provide a significant drawcard to a huge and ever-increasing number of tourists to the site annually. With tourism come the benefits of income generation and investment in local communities

and the promotion of livelihoods linked directly to the property and indirectly through goods and service provision.
The property provides significant ecosystem services, most notably the provision of valuable aquaculture and fisheries to the surrounding communities as well as those living within the property. The property also delivers significant ongoing possibilities for research and education.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	.		.

Compilation of potential site needs

№	Site need title	Brief description of potential site needs	Support needed for following years
1	Management Effectiveness Evaluation	Would allow a more integrated approach to the management of the property and a detailed assessment of not only current management but capacity needs.	

REFERENCES

№	References
1	IUCN (1994). Evaluation Report. Ha Long Bay, Viet Nam. IUCN Gland, Switzerland
2	IUCN (2000). Evaluation Report. Ha Long Bay, Viet Nam. IUCN Gland, Switzerland
3	IUCN (2003). Mission to Hanoi and Ha Long Bay Report.
4	IUCN (2013). Monitoring Mission Report.
5	IUCN (Unknown). Stakeholder consultation.
6	IUCN and UNESCO World Heritage Centre (2004). State of Conservation Report Ha Long Bay. Submitted to 28COM.
7	IUCN and UNESCO World Heritage Centre (2006). State of Conservation Report Ha Long Bay. Submitted to 30COM.
8	IUCN and UNESCO World Heritage Centre (2007). State of Conservation Report Ha Long Bay. Submitted to 31COM
9	IUCN and UNESCO World Heritage Centre (2009). State of Conservation Report Ha Long Bay. Submitted to 33COM
10	IUCN and UNESCO World Heritage Centre (2011). State of Conservation Report Ha Long Bay. Submitted to 35COM.
11	IUCN and UNESCO World Heritage Centre (2013). State of Conservation Report Ha Long Bay. Submitted to 37COM.
12	Quang Ninh Province (2013). Report on Detailed Construction Planning of Bai Dong Island.
13	State Party Periodic Report of Ha Long Bay, Viet Nam (2003). Ha Long Bay Management Department
14	State Party Report on the Implementation of Recommendations by the World Heritage Committee (2009). Ha Long Bay Management Department.

№	References
15	State Party Report on the Implementation of Recommendations by the World Heritage Committee (2013). Ha Long Bay Management Department.
16	State Party Report on the Implementation of Recommendations by the World Heritage Committee (2014). Ha Long Bay Management Department.
17	UNESCO (2013). Retrospective Statement of Outstanding Universal Value. UNESCO World Heritage Centre, Paris, France
18	World Heritage Committee (1994). Decision 18 COM XI.
19	World Heritage Committee (1995). Decision 19 COM VII.A.2.23
20	World Heritage Committee (1996). Decision 20 COM VII.D.41
21	World Heritage Committee (1998). Decision 22 COM
22	World Heritage Committee (1999). Decision 23 COM
23	World Heritage Committee (2000). Decision 24 COM.X.A.2
24	World Heritage Committee (2003). Decision 27 COM 7B.13. Paris, France
25	World Heritage Committee (2004). Decision 28 COM 15B.13. Suzhou, China
26	World Heritage Committee (2006). Decision 30 COM 7B.17. Vilnius, Lithuania
27	World Heritage Committee (2007). Decision 31 COM 7B.23. Christchurch, New Zealand
28	World Heritage Committee (2009). Decision 33 COM 7B.20. Sevilla, Spain
29	World Heritage Committee (2013). Decision 37 COM 7B.16. Phnom Penh, Cambodia