IUCN Conservation Outlook Assessment 2017 **(archived)**
Finalised on 09 November 2017

Please note: this is an archived Conservation Outlook Assessment for Huanglong Scenic and Historic Interest Area. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Huanglong Scenic and Historic Interest Area

SITE INFORMATION

Country:
China
Inscribed in: 1992
Criteria:
(vii)

Site description:
Situated in the north-west of Sichaun Province, the Huanglong valley is made up of snow-capped peaks and the easternmost of all the Chinese glaciers. In addition to its mountain landscape, diverse forest ecosystems can be found, as well as spectacular limestone formations, waterfalls and hot springs. The area also has a population of endangered animals, including the giant panda and the Sichuan golden snub-nosed monkey. © UNESCO

SUMMARY

2017 Conservation Outlook

Good with some concerns

The conservation outlook of the property can be assessed in general as good, based on the overall effective management regime established by the authorities during the time since the property was inscribed on the World Heritage list. The threat from undesirable impacts of mass tourism development remains of some concern. The authorities need to be vigilant against continuing and growing pressure from increasing numbers of visitors and development of more facilities and services infrastructure. Judicious intervention is required to combat over-development in excess of the environmental and social carrying capacity of the property. The site is located in a global hotspot area of earthquake and landslides and threats from natural disasters need to be more fully incorporated into the management of the site, and capacity on biodiversity conservation and disaster risk management need to be enhanced.

Current state and trend of VALUES

Low Concern
Trend: Stable

The outstanding scenic and aesthetic values and attributes of the property and the overall state of the natural landscape and ecosystems remain essentially intact and of low concern. There are no significant threats to the integrity of the property and the natural values remain in a stable state. Careful monitoring and judicious management intervention are required, however, especially with regard to tourism development and water pollution which, if unchecked, could have serious consequences for the many sensitive and vulnerable natural elements in the outstanding landscapes and wetlands of the property.

Overall THREATS

Low Threat

Threats to the values of the property are assessed overall as being very low. Most concern relates to the rapidly increasing number of visitors and the burgeoning development of tourism facilities and services, and the resultant water pollution. Also of concern are the impacts on the culture and society of the indigenous people accompanying the fundamental change from a traditional subsistence lifestyle to a modern service economy based on tourism. The site is located in a global hotspot area of earthquake and landslides and threats from natural disasters have not been fully incorporated into the management in the past and disaster risk management capacity is yet to be enhanced. Threats of less concern relate to water pollution, land and resource uses and, poaching of wildlife, and landslides and floods. Protection of the biodiversity values of the property needs to be improved.

Overall PROTECTION and MANAGEMENT

Some Concern

In general, the protection and management are assessed as mostly effective. The greatest challenge requiring vigilance and active intervention is that relating to on-going tourism development and the rising concern of natural disaster risks. More professional training and employment of technically qualified staff are required for this and other management operations. Consideration should be given to revising the management plan and to strengthening the capability to enforce legal and regulatory provisions. The authorities have still not sufficiently addressed the WH Committee recommendations regarding unification of the property with Jiuzhaigou. Protection and management of biodiversity is still relatively weak compared to other protected areas in the region.

FULL ASSESSMENT

Description of values

Values

World Heritage values

- **Outstanding mountainous scenery combined with spectacular karst formations**
  Criterion:(vii)

  Huanglong is renowned for its beautiful mountainous scenery, with relatively undisturbed and highly diverse forest ecosystems, combined with the more spectacular localised karst formations, such as travertine pools, waterfalls and limestone shoals. Its travertine terraces and lakes are certainly unique in all of Asia, and rate among the three most outstanding examples in the world (SoOUV, 2013). The highly attractive pool waters vary in colour according to their algal and bacterial content. Several mineral-rich warm geothermal springs occur, and the steep-sided valleys contain many beautiful waterfalls and lakes (MOC 1991; SP China 2010; WCMC 2011).

Other important biodiversity values

- **Extensive and diverse forest ecosystems with special plant species and several threatened and endangered animals**

  The property, which is partly designated as a UNESCO/MAB Biosphere Reserve, combines four floral regions – E. Asia, Himalaya, NH sub-tropical and NH tropical. With increasing altitude, the vegetation changes from mixed forest to sub-alpine coniferous forest, giving way to alpine meadows of shrubs and grasses. Some 100 species of higher plants are of interest for

their rarity, endemism or ornamental and medicinal value. There are 59 mammals, 155 birds, 5 reptiles, five amphibians and two fish recorded. Notable among the many threatened mammals are the giant panda, golden snub-nosed monkey, Sichuan takin, mainland serow, common goral, argali, and three species of deer (MOC 1991; SP China 2010; WCMC 2011).

Assessment information

Threats

Current Threats

Low Threat

Overall the threat level to the values of the property is low. The more significant threats are from rapidly increasing visitor numbers and burgeoning tourism facility development (particularly as it relates to water pollution and garbage management), and from the social impacts on the indigenous people accompanying the change from traditional subsistence lifestyles to a service economy based on tourism. Thus tourism remains the principal and an increasing challenge for the management authorities. Biodiversity management is weaker than tourism management in Huanglong. Based on recent interviews, grazing in the property is wide spread, unmanaged and perhaps increasing; small scaled logging and poaching especially on musk deer still occur (IUCN consultation, 2017). The forest cover has a slight decline between 2000 and 2014 (Wang, 2017). Other threats, such as landslides and flooding, are mostly under control (IUCN consultation, 2017).

▶ **Other**

Very Low Threat

Weapons and hunting are banned but some poaching of furs and pelts occurs. Some plants are taken, mainly for traditional medicinal purposes (SP China 2003).

► Changes in traditional ways of life and knowledge systems

Low Threat

The influx of both domestic and foreign tourists has resulted in substantial loss of traditional values and practices, though there is opportunity to convey local customs to visitors and derive benefit from the sale of locally manufactured handicrafts and souvenirs (WHC/IUCN 1998; SP China 2003; WCMC 2011).

► Avalanches/ Landslides, Storms/Flooding

Low Threat
Inside site, widespread(15-50%)

High magnitude/low frequency hazard events such as flooding and land slides occur naturally, but risks to people and buildings have been reduced by installation of control structures (SP China 2003). However, capacity of the management body on disaster risk management is yet to be enhanced (IUCN Consultation, 2014).

► Tourism/ visitors/ recreation

High Threat
Inside site, scattered(5-15%)
Outside site

Visitor numbers have increased dramatically especially since inscription of the property from 70,000 per year in 1990 to more than 800,000 in 2001, and to 2,090,000 in 2011 (latest available records). In the peak season in summer, tourist numbers can reach more than 20,000/day (Huanglong official website, 2017). Garbage and water pollution, and damage of calicified ponds by treading are the main pressures (Zhang, 2011). Some mitigation of impacts has occurred through limiting hotel and other facility development inside the property, improved visitor management and mitigation of impacts from sewage and garbage disposal. In 2017, the management body decided to close down certain areas from tourists (IUCN consultation, 2017). Tourism management remains the greatest challenge for the authorities (MOC 1991; IUCN 1992; WHC/IUCN 1998; SP China 2003).

► Forestry/ Wood production

Very Low Threat
Inside site, localised(<5%)

Mining and commercial logging are banned and former subsistence agriculture and livestock grazing have been largely replaced by the tourist industry. There are still some low- level activities such as firewood collection and summer grazing on high-altitude pastures MOC 1991; IUCN 1992; WHC/IUCN 1998; SP China 2003). Grazing is unmanaged and may be increasing (IUCN consultation, 2017).

► Water Pollution

High Threat
Inside site, widespread(15-50%)

Previously, untreated waste disposal from residences in particular led to pollution of rivers and lakes. Improved waste disposal and toilet facilities were considered to have lowered the level of threat (WHC/IUCN 1998; SP China 2003), but recent findings (Zhang et al. 2011) on increasing phosphate concentration and algae growth indicate that pollution is still a major threat to the waterways and travertine system.

Potential Threats

Low Threat

Earthquakes, should they happen near the site, could severely affect or even substantially damage the values of the site. The capacity of the site to cope with earthquake risks needs to be enhanced.

► Earthquakes/ Tsunamis

Low Threat
Inside site, extent of threat not known
Outside site

The site is located in the Minshan Fault Zone, a joint area of three geotectonic units with several faults. Major earthquakes have happened in recent history, including the 1976 Songpan-Pingwu earthquake at M 7.2. While tectonic activities are the ultimate driving forces behind the landscape

and OUV of the site, new earthquakes, if close enough to the site, could severely affect its values. Earthquake risk management capacity at the site still needs to be substantially enhanced. The August 8 2017 earthquake in nearby Jiuzhaigou did not cause damage to this site (IUCN consultation, 2017).

Protection and management

Assessing Protection and Management

► Relationships with local people

Mostly Effective

Local population is utilized in the staffing of the property (MOC 1991; SP China 2003). Between 2002-2009, the property provided about $20 million funding to support community development and education and in return raised awareness of local communities on conservation. A network of community participation in conservation has been established (MAB 2010).

► Legal framework

Mostly Effective

The legal and regulatory framework is considered to be adequate, though there are some concerns regarding the adequacy of enforcement (SP China 2003).

► Enforcement

Some Concern

While there is limited data available about the effectiveness of enforcement, reports about continued poaching, as well as water pollution remaining a major threat to the waterways and travertine system (IUCN consultation, 2017; Zhang et al., 2011) suggest that the effectiveness of enforcement is of some concern.

► Integration into regional and national planning systems

Data Deficient

Some level of integration exists, especially in regional tourism development. The Sichuan WH Mangement Bureau is also working on communication of WH sites in the province. Effectiveness is still yet to be objectively assessed.

► Management system

Mostly Effective

Management plan exists but is probably due for revision (SP China 2003). The rising concern after the 2008 earthquake relates to natural disasters and the need for capacity building in Disaster Risk Management.

► Management effectiveness

Some Concern

Overall the management is reported as being effective, but there are reports of the need for staff capacity building (SP China 2003). During the 2010 MAB ten-year evaluation, the following issues regarding management were raised: 1) adjust zonation to meet conservation needs; 2) improve monitoring and research on main conservation targets; 3) design wildlife over- and underpasses across roads; 4) enhance law enforcement on illegal mining, logging etc.; 5) reinforce collaboration with local communities; 6) strengthening international collaborations. (MAB 2010). The property has both status of a scenic park and a nature reserve, the latter being promoted at the national level only since 2016 (IUCN consultation, 2017).

► Implementation of Committee decisions and recommendations

Some Concern

The WH Committee has recommended that the Huanglong and Jiuzhaigou properties be merged into a single Min Shan Mountain property. Although expressing interest in this, the authorities have not made any progress because of the difficulties of linking two administrations and the lack of a scientific basis for the merger. Nor has any attempt been made to implement the Committee’s recommendation that a species conservation status report be prepared and consideration be given to inscribing the property on biodiversity grounds (IUCN 1992; WHC/IUCN 1998 UNESCO 2003; SP China 2003). The situation remains unchanged in 2017.

▶ Boundaries

Mostly Effective

The State Party considers the existing boundaries to be adequate (SP China 2003).

▶ Sustainable finance

Mostly Effective

The budget is regarded as adequate (SP China 2003).

▶ Staff training and development

Some Concern

More professional and technical training is required, especially in disaster risk management (WHC/IUCN 1998; SWP China 2003).

▶ Sustainable use

Some Concern

There is limited data available about the sustainable use of natural resources in the property. However, concerns have been raised about some continued poaching, and grazing being unmanaged and potentially increasing (IUCN consultation, 2017).

▶ Education and interpretation programs

Data Deficient

NA

▶ Tourism and visitation management

Some Concern

Tourism remains a major challenge for management WHC/IUCN 1998; WCMC 2011).

▶ Monitoring

Mostly Effective

Water quality, and weather records are regularly measured and the status of wildlife populations is monitored over long term intervals. The monitoring program needs expanding (WHC/IUCN 1998; SP China 2003). Camera traps are being applied since 2013, but biodiversity monitoring needs to be more systematic.

▶ Research

Mostly Effective

Research facilities exist in the property and there is good collaborative research with national and international collaborators (WHC/IUCN 1998; SP China 2003).

Overall assessment of protection and management

Some Concern

In general, the protection and management are assessed as mostly effective. The greatest challenge requiring vigilance and active intervention is that relating to on-going tourism development and the rising concern of natural disaster risks. More professional training and employment of technically qualified staff are required for this and other management operations. Consideration should be given to revising the management plan and to strengthening the capability to enforce legal and regulatory provisions. The authorities have still not sufficiently addressed the WH Committee recommendations regarding unification of the property with Jiuzhaigou. Protection and management of biodiversity is still relatively weak compared to other protected areas in the region.

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

Some Concern

There is little information on the effectiveness of protection in addressing threats in the buffer zone and surrounding land. It appears that there is only low-level involvement or collaboration by the management authorities beyond the property (SP China 2003).

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **Outstanding mountainous scenery combined with spectacular karst formations**

Low Concern
Trend:Stable

The outstanding scenic and aesthetic values and attributes of the property and the overall state of the natural landscape and ecosystems remain essentially intact and of low concern. The riverine and lacustrine environments and their associated karst formations have so far been well preserved, but are vulnerable to damage and are highly sensitive to any human disturbance, so require constant monitoring and effective management intervention to avoid undesirable modification or loss (MOC 1991; IUCN 1992; WHC/IUCN 1998; SP China 2003; WCMC 2011).

Summary of the Values

▶ **Assessment of the current state and trend of World Heritage values**

Low Concern

Trend: Stable

The outstanding scenic and aesthetic values and attributes of the property and the overall state of the natural landscape and ecosystems remain essentially intact and of low concern. There are no significant threats to the integrity of the property and the natural values remain in a stable state. Careful monitoring and judicious management intervention are required, however, especially with regard to tourism development and water pollution which, if unchecked, could have serious consequences for the many sensitive and vulnerable natural elements in the outstanding landscapes and wetlands of the property.

▶ **Assessment of the current state and trend of other important biodiversity values**

Low Concern

Trend: Stable

Forest ecosystems appear largely intact and continue to provide excellent habitat for the numerous species of threatened and endangered biota. However, biodiversity values and attributes of the property remain insufficiently assessed, and management of the property has been focusing on tourism rather than biodiversity protection.

Additional information

Benefits

Understanding Benefits

▶ **Outdoor recreation and tourism**

Tourism development has transformed the local and regional economy.

Tourist numbers have been continuously increasing in Huanglong. As of August 2017, the number already reached over 1 million. Water pollution and solid waste littering is the biggest pressure, which has reduced the value to tourist resources (IUCN consultation, 2017).

Summary of benefits

Existence of the World Heritage property has been extremely beneficial to the local community through employment, cash income, and the opportunity to promote and maintain the local culture and traditional practices. This has improved the socio-economic well-being of the local people and provided an outlet for expression of their culture. The regional economy has flourished in response to tourism development. Outstanding natural values and attributes of

the property have benefitted from improved protection, conservation and management based on high standards of the World Heritage Convention.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	Huanglong Nature Reserve, Chengdu Institute of Biology and Harvard University, collaboration on conservation of plants in China and North America	From: 2015	Research, capacity building and education on plant diversity conservation
2	Huanglong Nature Reserve	From: 2013	Mammal monitoring using infrared camera traps
3	Huanglong Nature Reserve	From: 2016	Ecotourism
4	Huanglong Nature Reserve and Sichuan Forest Academy	From: 2016	Forest pest survey
5	Huanglong Nature Reserve and research institutions	From: 2017	Plant species survey

Compilation of potential site needs

№	Site need title	Brief description of potential site needs	Support needed for following years
1	NA	NA	

REFERENCES

№	References
1	Huanglong official website http://www.huanglong.com/index.php/news/. Accessed August 2017.
2	IUCN 1992. IUCN summary and technical evaluation of the World Heritage nomination of Huanglong Scenic and Historic Interest Area (China), No. 638.
3	MOC (Ministry of Culture) 1991. World Heritage nomination of Huanglong Valley, People’s Republic of China.
4	Man and Biosphere, 2010. Ten Year Evaluation of Huaglong Man and Biosphere Reserve. Man and Biosphere News Letter. (in Chinese)
5	SP (State Party) of China 2003. Periodic report on the state of conservation of the Huanglong Valley World Heritage property, 28pp.
6	SP China 2010. Huanglong Scenic and Historic Interest Area, China: Statement of Outstanding Universal Value.
7	UNESCO 1998. State of Conservation of Huanglong Valley Scenic and Historic Interest Area, China.
8	UNESCO 2003. Huanglong National Scenic Area, Sichuan, China, 7pp.
9	WCMC 2011. Huanglong Scenic and Historic Interest Area, China. WCMC Datasheet, 6pp.
10	WHC/IUCN 1998. Huanglong Scenic and Historic Interest Area, Sichuan Province, China. Report of a UNESCO Systematic Monitoring Mission to the mixed and natural World Heritage sites in China, 1-21 September 1998, pp. 18-22.
11	Wang Hao, et al., 2017. China Forest Watch (based on Global Forest Watch). China Nature Watch Report 2016 by Shanshui Conservation Center
12	Zhang et al. 2011. The Impact of Tourist Activities on Phosphate Concentrations and Aquatic Algae Growth at the Huanglong Scenic Spot, Sichuan Province. Acta Geoscientica Sinica, 32(4): 463-468
13	Zhu, HY et. Al., 2010. Sichuan Huanglong Mammal Survey. Sichuan Forest Science and Technology, 31(05):83-87