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CONVENTION CONCERNING THE PROTECTION OF THE WORLD
CULTURAL AND NATURAL HERITAGE

CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE
MONDIAL, CULTUREL ET NATUREL

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

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Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger.

Point 7 de l'Ordre du jour provisoire: Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

Iguazu National Park (Argentina / Brazil) (303/355) Parc national de l'Iguazu (Argentine / Brésil) (303/355)

From 7 April to 14 April 2008 / Du 7 April au 14 April 2008

This mission report should be read in conjunction with Document:
Ce rapport de mission doit être lu conjointement avec le document suivant:
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Art Pedersen, World Heritage Centre, UNESCO

Allen Putney, Vice Chair for World Heritage, IUCN World Commission on Protected Areas

EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

Iguazú National Park (Argentina) (N 303)

Year of inscription on the World Heritage List

1984

Criteria

(vii) (x)

Year(s) of inscription on the List of World Heritage in Danger

N/A

Previous Committee Decisions

23 COM VIII.1; 31 COM 7B.38;

International Assistance

Total amount provided to the property: 2001: USD 20,000: Oil spill impact evaluation; 2003: USD 30,000: Joint integrated management workshop with Iguazu National Park authorities (Brazil)

UNESCO Extra-budgetary Fund

N/A

Previous monitoring missions

September 2006: UNESCO mission

Main threats identified in previous reports

Proposed development of hydropower dams;

Illegal logging and hunting;

Uncoordinated developments;

Lack of transboundary cooperation;

Lack of sustainable financing;

Problems associated with public use;
Lack of a comprehensive public use plan.

Current conservation issues

As requested by Decision **31 COM 7B.38**, the State Party of Argentina provided on 19 March 2008 an invitation in coordination with the State Party of Brazil for a joint World Heritage Centre / IUCN mission. From 7 April to 14 April 2008 the joint World Heritage Centre / IUCN monitoring mission visited the property. It met State Party representatives, a variety of stakeholders and protected area staff and was able to visit both properties. The mission report is available online at the following web address:
<http://whc.unesco.org/archive/2008/>

The Monitoring Mission found that the Outstanding Universal Values for which the property was inscribed on the World Heritage List are still present, though materially impaired, and facing severe threats. Scenic and biological values have been degraded by the marked weekly variations in water volumes of the Iguazú River and Waterfalls, caused by the Salto Caxias Dam in Brazil. The severity and extent of biological impacts has not yet been quantified. Scenic values have been compromised by public use infrastructure on both the Argentinean and Brazilian sides, and the visual integrity of the natural setting is impaired by regular visitor use activities that cater to thrill-seeking rather than appreciation of World Heritage Values. Of most immediate concern on the Argentinean side are the negative impacts of high visibility remains of a previous elevated walkway to the Garganta Overlook that have never been removed. Threats include the possibility of construction of new hydroelectric dams on the Iguazú and Paraná Rivers and agricultural development in the Argentine Peninsula, an area outside the properties in Argentina and Brazil, but which is a key biological corridor between them.

Trans-boundary cooperation

Management of both the Iguazú National Park (Argentina) and the Iguaçu National Park (Brazil) would greatly benefit from a permanent and efficient mechanism for trans-boundary co-operation, especially with respect to resource protection, research, and public use. While informal consultation and cooperation takes place at the level of the Parks, it has proven difficult to develop formal mechanisms.

Up-to-date Management and Public Use Plans

The management plan for Iguazú National Park is out-of-date and requires total revision. A public use plan drafted in 1988 and partially revived in 1996, has never been officially approved or put into effect. A similar situation exists for the property in Brazil. The Monitoring Mission was pleased to note that the two Parks will launch, coordinated but separate revisions of the two management plans, including public use issues, starting with a series of informal joint meetings. A first joint workshop will reportedly take place during the first week of August 2008

Public Use

The Mission observed that, while the current general level of visitor flows is managed efficiently, the Park faces occasional unmanageable peaks in visitation, and an upward trend in numbers. A strategy is required to smooth out these peaks in space and time, and deal with the ever-increasing numbers of visitors. It was further noted that there are yet no clear policies or standards on visual and audio impacts on the integrity of the property's aesthetic values from tourism infrastructure, or with respect to architecture styles, sighting of infrastructure, or the choice and location of tourism activities. Of particular concern are the visual and audio impacts from infrastructure and adventure sport water craft and infrastructure developments encroaching on the scenic quality of the overall Falls sector landscape. The tendency toward visitor experiences geared to thrill seeking rather than the appreciation of World Heritage values is of particular concern.

The Monitoring Mission was pleased to note that the hot air balloon concession has been firmly rejected and the issue is resolved. The property designated for the balloon concession is now overgrown with natural vegetation, and no visual impact exists.

Hydroelectric dams

The Monitoring Mission considers the greatest current degradation of the scenic qualities of the property to be the fluctuation of the volumes of water flowing over the Falls, changing their visual quality. A key factor is the hydroelectric dams on the Iguazu River, the closest of which is the Salto Caxias dam, in Brazil. The dam is closed on the weekend when there is less demand for energy, and results in a drop in the volume of water in the Falls. This action already degrades the visual qualities of the visitor experience during the first part of the week, and if combined with a dry season and the possible effects of climate change, could dramatically reduce the amount of water in the Falls in the future.

Evidence regarding the intention to move ahead with the construction of the proposed Corpus Christie Hydroelectric Project on the Paraná River of Argentina and Paraguay is mixed. It was learned from a newspaper article that the Bi-National Commission for the Paraná River of Argentina and Paraguay is issuing contracts for a feasibility study for the construction of the Corpus Christi Dam. However, the Mission Team was received by the Argentinean National Committee for World Heritage on the 11th of April and presented with a document stating again that no action would be taken on this project until the outstanding issues existing at the hydroelectric dam Yacireta were completed and that no studies had taken place for the execution of the project. If the project were to be undertaken, assessments would be needed to determine both economic and environmental impacts, particularly those which have the potential to affect the Outstanding Universal Value and integrity of the property. A letter to the World Heritage Centre from the Argentine Permanent Delegation, signed 7 May 2008, reiterated that all studies on the Project have been suspended and that to date there has been no decision by the governments on the project.

Biodiversity

There is a lack of data on many of the species for which the site was inscribed on the World Heritage list. Thus, there is a need for research and subsequent data sharing between the two properties to determine baseline data for assessing the status and trends of these populations. The Monitoring Mission took note of the importance of the "Argentine Peninsula Bottleneck" a stretch of private land in Argentina that serves as a biological corridor between the two properties.

Iguazu National Park (Brazil) (N 355)

Year of inscription on the World Heritage List

1986

Criteria

(vii) (x)

Year(s) of inscription on the List of World Heritage in Danger

1999- 2001

Previous Committee Decisions

29 COM 7B.28; 30 COM 7B.31; 31 COM 7B.39

International Assistance:

Total amount provided to the property: USD 30,000 for training.

UNESCO Extra-budgetary Funds:

Total amount provided to the property: Approximately. USD 50,000 under the Brazilian World Heritage Biodiversity Programme for fire fighting planning.

Previous monitoring missions:

UNESCO/IUCN mission March 1999 and March 2005.

Main threats identified in previous reports:

Proposed development of hydropower dams;

Pressure to re-open illegal road;

Illegal logging and hunting;

Uncoordinated developments;

Lack of transboundary cooperation;

Lack of sustainable financing.

Problems associated with public use

Lack of a comprehensive public use plan

Current conservation issues:

As requested in decision **31 COM 7B.39**, the State Party of Brazil provided on 25 March 2008 an invitation in coordination with the State Party of Argentina for a joint World Heritage Centre IUCN mission.

From 7 April to 14 April 2008 a joint World Heritage Centre / IUCN monitoring mission visited the property. The mission met State Party representatives, a variety of stakeholders and protected area staff and was able to visit both properties. The mission report is available online at the following web address: <http://whc.unesco.org/archive/2008/>

The Monitoring Mission found that the Outstanding Universal Value for which the property was inscribed on the World Heritage List is still present, though materially impaired, and facing severe threats. Scenic and biological values have been degraded by the marked weekly variations in water volumes of the Iguazu River and Waterfalls, caused by the Salto Caxias Dam in Brazil. The severity and extent of biological impacts has not yet been quantified. Scenic values have been compromised by public use infrastructure on both the Brazilian and Argentinean sides, and the visual and aural integrity of the natural setting is impaired by regular visitor use activities that cater to thrill-seeking rather than appreciation of World Heritage Values. Threats include the possibility of construction of new hydroelectric dams on the Iguazu and Paraná Rivers and agricultural development in the Argentine Peninsula, an area outside the properties, but which is a key biological corridor between them.

Trans-boundary cooperation

Management of both the Iguazu National Park (Brazil) and the Iguazú National Park (Argentina) would greatly benefit from a permanent and efficient mechanism for trans-boundary co-operation, especially with respect to resource protection, research, and public use. While informal consultation and cooperation takes place at the level of the Parks, it has proven difficult to develop formal mechanisms.

Up-to-date Management and Public Use Plans

The management plan for Iguazu National Park requires extensive revision. A public use plan drafted years ago has never been officially approved or put into effect. A similar situation exists for the property in Argentina. The Monitoring Mission was pleased to note that the two Parks will launch coordinated but separate revisions of the two management plans, including public use issues, starting with a series of informal joint meetings. A first joint workshop will reportedly take place during the first week of August 2008

Public Use

The Mission observed that, while the current general level of visitor flows is managed efficiently, the Park faces occasional unmanageable peaks in visitation, and an upward trend in numbers. A strategy is required to smooth out these peaks in space and time, and deal with the ever-increasing numbers of visitors. It was further noted that there are yet no clear policies or standards on visual and audio impacts on the integrity of the property's aesthetic values from tourism infrastructure, or with respect to architecture styles, sighting of infrastructure, or the choice and location of tourism activities. Of particular concern are the visual and audio impacts from infrastructure and adventure sport water craft and infrastructure developments encroaching on the scenic quality of the overall Falls sector landscape. The tendency toward visitor experiences geared to thrill seeking rather than the appreciation of World Heritage values is of particular concern.

Hydroelectric dams

The Monitoring Mission considers the greatest current degradation of the scenic qualities of the property to be the fluctuation of the volumes of water flowing over the Falls, changing their visual quality. A key factor is the hydroelectric dams on the Iguazu River, the closest of which is the Salto Caxias dam. The dam is closed on the weekend when there is less demand for energy, and results in a drop in the volume of water in the Falls. This action already degrades the visual qualities of the visitor experience during the first part of the week, and if combined with a dry season and the possible effects of climate change, could dramatically reduce the amount of water in the Falls in the future.

The mission team was informed that programmed within the National Development Plan of Brazil is the construction of a hydroelectric dam project somewhere within the 25 kilometer stretch of river from the Falls area upstream to the Salto Caxias dam on the Iguazu River.

Biodiversity

There is a lack of data on many of the species for which the site was inscribed on the World Heritage list. Thus, there is a need for research and subsequent data sharing between the two properties to determine the status and trends of these populations. The Monitoring Mission took note of the importance of the "Argentine Peninsula Bottleneck" a stretch of private land in Argentina that serves as a biological corridor between the two properties.

In addition, agreements between the Federal Police of Brazil and IBAMA, Brazil's Environmental Ministry, for patrolling of Iguazu National Park have been suspended. Patrols are carried out by State Police not specifically trained in addressing issues of law enforcement in relation to the property's biological values.

Estrada do Colono

The World Heritage Centre and IUCN note the regional court decision on the continued closure of the Estrada do Colono in the Brazilian property and that this has been appealed by the local government to the Supreme Court.

1. BACKGROUND TO THE MISSION

The terms of reference for the mission concentrated on issues of tourism and generating updated information on hydroelectric dam activities on the Parana and Iguazú/Iguazu River. The two properties are separately inscribed and managed national parks sharing a significant common boundary.

1.1 Inscription history

Iguazú National Park, Argentina is presented first in this report based on the date of inscription, 1984; Iguazu National Park, Brazil was inscribed in 1986.

Iguazú National Park, Argentina

The Iguazú National Park, Argentina World Heritage property was inscribed on the World Heritage (WH) during the World Heritage Committee meeting in Buenos Aires, Argentina, 29 October-2 November 1984. It was inscribed under natural criteria (iii) and (iv), now currently (vii) and (X). The original inscription listed the following:

- Criterion (iii): The park contains superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance as it has part of one of the world's largest and most impressive waterfalls, which extends over 2,700 m. with falls that split into a number of drops and rapids;
- Criterion (iv): The surrounding subtropical rainforest has over 2,000 species of vascular plants and habitats of rare and endangered species. The park contains at least seven species which are listed as threatened on a world scale by IUCN, among which the broad-nosed caiman, of which small populations can still be found in Iguazú.

Iguaçu National Park, Brazil

Iguaçu National Park, Brazil World Heritage property was inscribed at the Tenth Session of the World Heritage Committee at UNESCO Headquarters, 24-28 November 1986. It was inscribed under natural criteria (iii) and (iv), now currently (vii) and (X). The original inscription listed the following:

- Criterion (iii): Exceptional natural beauty. The park shares with the Iguazú National Park in Argentina one of the World's largest and most impressive waterfalls extending over 2.700m with falls that split into a number of drops and rapids. Clouds of spray soak the surrounding area and islands in the river are consequently covered by luxuriant vegetation.
- Criterion (iv): Habitat of rare and endangered species. The Iguazu park contains nine species which are listed as threatened on a world scale by IUCN. These include two species of otter, giant anteater and harpy eagle.

1.1 Integrity issues raised in the IUCN evaluation report at time of inscription

Iguazú National Park, Argentina

At the time of inscription, the Committee noted that the Argentine authorities intended to expand the area of the Park and to complete the management plan in conformity with IUCN's recommendations. The Committee was informed that the contiguous Iguazu National Park on the Brazilian side of the river would be nominated by the end of 1984 so that both parks could constitute a trans-frontier World Heritage Property. The presence of hydroelectric dams and a robust tourism industry was mentioned.

Iguaçu National Park, Brazil

At the time of inscription Brazil indicated its wish to list the property independently without links to the trans-frontier concept. The State Party mentioned that legislation did not allow for any commitment regarding joint national park management.

The World Heritage Committee, noted IUCN's position regarding the technical desirability of listing this as one property along with the Iguazú National Park of Argentina, but listed the property as a separate property. The Committee endorsed the concerns of Brazil in maintaining the property separately and welcomed its willingness to cooperate with Argentina in the conservation and preservation of the two national parks within their respective territories.

Brazil also informed the Committee that the road which passed through the wilderness zone of this National Park, the Estrada do Colono, brought to the notice of the Committee by IUCN, had been closed.

1.2 Examination of the State of Conservation by the World Heritage Committee and its Bureau

Iguazú National Park, Argentina

During the 30th Committee session at Vilnius Lithuania in July 2006 the Committee requested Argentina to submit a report on the status of plans for building the Corpus Christi Hydroelectric Dam. It was believed that the plants infrastructure could affect both the Iguazú National Park and Iguazu National Park properties.

In July 2006, the Park Administration rejected a project by private investors (Resolution 174), for the construction of a fixed hot-air balloon, a tourist attraction. Local authorities announced they would go ahead with the project, challenging the federal government's jurisdiction; the issue at that time was taken to the courts. In September 2006 a World Heritage Centre Programme Specialist carried out a mission to the Park to investigate the situation. The mission report backed the Park's decision. It mentioned that with a registration of Iguazú National Park as a World Heritage property under criterion (vii), the visual impacts of structures like hotels and the proposed balloon were becoming problematic. The report commented on the impacts of infrastructure development and pointed out those portions of the old concrete walkways that had fallen into the river bed near the principle viewing area was a visual impact as were two large hotels the Sheraton on the Argentine side and the Cataratas Hotel on the Brazil side. Also mentioned were the haphazard placement of large numbers of concession stands and the negative effects of helicopters over-flying the Falls from the Brazilian side.

In January 2007 Argentina submitted the report requested during the Vilnius Committee session on the status of the Corpus Christi Hydroelectric Dam. The report stated that the information on plans to divert 20% of the Iguazu River waters was unfounded and that there were no new works under imminent consideration, except for the completion of the Yacyretá complex which was expected to be completed in 2008. The report stated that once the Yacyretá complex was completed there are plans to enter bi-lateral discussion with Paraguay on moving forward with the Corpus Christi project.

At the 31th session of the Committee at Christ Church, in July 2007, the Committee commended Argentina for its decision to deny authorization for the operation of the fixed hot-air balloon. It urged a public use planning process in cooperation with Iguazu National Park.

It requested a monitoring mission to assess the State of Conservation of the two Properties. The mission focus was to analyze the potential for a framework to assess tourism carrying capacity in the two adjacent properties, solutions to public use problems and to attain information on the hydro-electric developments in the region.

Iguazu National Park, Brazil

In 1997, the World Heritage Centre received reports about the re-opening of the 18 km Estrada do Colon road crossing and dividing the core area of the Park. It learned that a local organization was campaigning for its reopening, closed in 1986. In May, 1997, 800 people had invaded the Park to re-open the road.

At the 21st session of the Bureau of the World Heritage Committee, in June 1997, the Bureau addressed the situation and requested the Centre to contact Brazilian authorities to encourage them to re-establish control over the section of the Park and to close the road and rehabilitate the damaged areas. During the 21st session of the Committee, in Naples, Italy, in December 1997, the Committee recommended that the road should be closed and all efforts undertaken to restore the damaged areas.

In March 1999 IUCN undertook a monitoring mission and their report confirmed the ongoing illegal opening. The monitoring mission also reported on the status of the Salto Caixas dam that had been recently built on the Iguazu River. The report stated that it was sufficiently upstream of the Park and that there was no evidence or suggestion of any impact on the Park's World Heritage values. In addition the IUCN report recommended that helicopter flights be immediately stopped pending a thorough evaluation of the impact on the fauna of the Park, particularly the avifauna. It mentioned that a study by the Environment Institute of Paraná concentrated largely on the impact of the helicopters on the experience of tourists and only

superficially investigated the impacts on fauna.

At the Committee meeting in **Marrakesh, Morocco, in 2000, due to** the absence of satisfactory progress on the closing of the Estrada do Colono road and the implementation of the recovery plan, **the Committee** decided to include Iguaçu National Park in the List of World Heritage in Danger. In 2000 and 2001 Brazil took steps to close the road and in June 2001 the road was closed. Brazil also undertook road rehabilitation and provided assistance to local communities affected by its closure. These included an inter-ministerial working group to promote sustainable development initiatives among local populations inhabiting the vicinity of the Park, including a project focusing on organic agriculture and artisan and ecotourism activities.

At the 25th Bureau session in Paris, June 2001, the Bureau recommended that if the positive developments were sustained, the Committee could remove the property from the List of World

Heritage in Danger. At the 25th Committee session in Helsinki, in (date) 2001, the Committee learned that the road had been closed and that the rehabilitation of the road and assistance to local communities affected by the closure of the road was taking place. The Committee concluding that Brazil had met the Committee conditions removed the property from the List of World Heritage in Danger. Based on the suggestions made by Argentina and Brazil, the Committee welcomed the idea of a permanent mechanism for trans-border co-operation between the two properties, in particular for sustainable tourism.

At the 27th session in Paris June 2003 the Committee encouraged Brazil to co-operate with Argentina towards the joint management of the two World Heritage properties.

In July 2004, at the Committee's 28th session in Suzhou the Committee noted the recurring problems with the forced opening of the Estrada do Colono Road. It urged Brazil to work with local communities to resolve the on-going concerns over the Road and requested a mission so the situation could be analyzed in time for the 29th Committee session in 2005.

In July 2005, at the 29th Committee meeting in Durban South Africa, the Committee expressed satisfaction with the progress made by Brazil on the Road and on inter-agency cooperation and international cooperation with the Argentinean authorities. It noted the need for sustained financing of the property especially relating to ongoing programmes with communities and encourages the State Party to seek international assistance of the World Heritage Fund and extra-budgetary funding in addressing these needs. Also noted were plans for hydroelectric dam development with significant potential impacts on the World Heritage property. It urged Brazil for a report on the situation and requested updated information and to submit a report to the World Heritage Centre by 1 February 2006 for examination by the Committee at its 30th session.

A report was received from the Park Director in time for the 30th Committee meeting in Vilnius Lithuania, July 2006. The Committee urged Brazil to ensure that the Estrada do Colono Road is not re-opened and urged the State Party to provide full support to the park authorities in carrying out their mandate and to ensure sustainable financing of the property especially relating to ongoing programmes with communities; It reiterated its concern about the Lower Iguaçu Hydroelectric Plant project, and about other hydroelectric dam proposals, some in Argentina, near the property. It requested Brazil to deny authorization for the dams.

It also requested both Argentina and Brazil to provide a report containing the full details on the nature and extent of existing and proposed hydroelectric projects, along with their potential impacts on both Iguazú and Iguaçu National Parks prior to taking any decision to proceed. This included indicators for those management issues raised so as to form the basis of ongoing monitoring programme. It also requested Brazil to provide the World Heritage Centre with a detailed report by 1 February 2007 on the state of conservation of the property, including an update on the Estrada do Colono Road and the issue of sustainable financing, for examination by the Committee at its 31st session in 2007.

The report on the hydroelectric dams stated that the results of the Environmental Impact Assessment, prepared by the State of Parana's Environmental Agency, along with the negative

comments of IBAMA, the Brazilian Institute of Environment, resulted in the project being rejected by the Parana State Authorities. The report noted the existence of five other hydroelectric dams on the Iguacu River, the closest being the Salto Caixias dam. It said the dams have modified the volumes and nature of the river's water flow through the property but that measuring the nature and extent of the effects would require extensive research and monitoring. The report noted that the Iguacu and Parana Rivers continue to attract significant interest for dam development and that it is difficult to assess, with current information, the degree any initiative might affect the Outstanding Universal Values of the two properties.

IUCN noted at this time that information was received on visual and sonic impacts of helicopter over-flights. IUCN reported a continued lack of cooperation between park administrations in particular in relation to tourism development.

At the 31st session of the Committee at Christchurch, in 2007, the Committee commended Brazil for its decision to deny authorization for the construction of the proposed Baixo Iguacu hydroelectric dam. It urged a public use planning process in cooperation with Iguazú national Park. At this session, the Committee requested a monitoring mission with Argentina to assess the State of Conservation of the Property with a particular focus on a development framework to assess tourism carrying capacity in the two adjacent properties, solutions to public use problems and to attain information on the hydro-electric developments in the region.

1.3 Justification of the mission

The decisions of the Committee relating to this mission (31COM7B.26 and 30COM7B.25) can be found in [Annex 1](#).

The Terms of reference of the mission can be found in [Annex 2](#).

The mission took place from April 7 to April 14, 2008. The mission team was composed of Art Pedersen, Programme Specialist at UNESCO World Heritage Centre and Allen Putney, Vice Chair for World Heritage of IUCN's World Commission on Protected Areas. The team visited the two national parks, met with federal authorities responsible for management, including field staff, scientists and various stakeholders including representatives of indigenous communities and environmental NGOs. Two separate debriefing meetings were held, one a joint meeting with the two Park staffs held in Puerto Iguazú, Argentina and a second meeting in Buenos Aires with the National World Heritage Committee at the Ministry of Education.

A detailed programme of the mission and list of people met can be found in [Annex 3](#).

2 NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

2.1 Protected area legislation

Iguazú National Park, Argentina

Established by Decree-Law 12.103 of 9 October, 1934.

Iguacu National Park, Brazil

Established by Federal Decree No. 1035 of 10 January, 1939.

2.2 Institutional framework

Iguazú National Park, Argentina

The property consists of a national park of 492 km² and a nature reserve of 63 km². Both the park and reserve are included in the nomination, and both are vested in the national government and managed by the *Administración de Parques Nacionales*. The park was officially established in 1934, but creation was initiated as early as 1909. The area of the National Reserve (between Port Iguazú [*sic*] and the waterfall) was removed from the park in 1970, and further modifications were made in 1971 (the village of Puerto Iguazú was removed from the park) and 1972 (which added a further 12,600 ha to the park). It has been suggested that the nature reserve be upgraded to national park status. Some adjacent land now owned by the military may also be added to the park

Iguaçu National Park, Brazil

The creation of the Park in 1939 was based on Forestry Code Law No. 4771 of 15 September, 1965, which outlines procedures for the creation of national parks, and Decree No. 84017 of 1 September, 1979, which provides regulations for the management of national parks. The 1939 decree was amended by Decree No. 6587 of 14 June, 1944 and Decree 86676 of 1 December 1981 to extend the area covered. Protection measures for Iguazu Falls have existed since 1916. The protected areas of the Property are governed by the national protected area legislation, in particular the federal law “On environmental protection” dating back to 1991 but updated in 2002 and federal law “On specially protected natural areas” of 1995. The first law defines standards for environmental quality,

2.3 Management structure

Iguazú National Park, Argentina

The two federal protected areas that make up the property, Iguazú National Park and Iguazú Natural Reserve are managed by the National Parks Administration, a semi-autonomous institution of Argentina’s National Tourism Secretariat. The administration of the Property has for many years been guided by a management plan developed in 1988 and revised in 1996. However, it is now badly out of date and will be revised later this year. The management programmes currently in place include resource protection, public use, infrastructure, administration and special projects. The Park is staffed mainly by graduates of the Park Guard School of Argentina and administrative personnel.

The Park receives over one million visitors per year, the vast majority of whom only visit the Iguazú Falls Viewing Area. The development, operation, and maintenance of public use activities and facilities is handled by concessionaires from the private sector. The largest concession is for the infrastructure and facilities of the Iguazú Falls Viewing Area, which includes numerous viewpoints that are connected by a system of trails. Ancillary services, such as an entrance station, visitor centre, restaurants, snack facilities, souvenir shops, and artisan market are set well back from the Falls Viewing Area. A small train service connects the ancillary services area to the various scenic overlook trailheads. This concession is supervised by a Monitoring Committee with several technical staff. The Committee also contracts specific research on important issues that arise. This concession attempts to adhere to international environmental standards and has received several ISO certifications. Smaller concessions exist for jetboat services on the lower Iguazú, ferry services to San Martín Island, and jungle tours. An international hotel is located in the Falls Viewing Area, but since it owns the land on which it is situated, is not a concession of the National Park. Numerous guides that serve visitors to the area are university trained and licensed by the Park Administration. A research facility is maintained within the Park to house guest researchers and students.

Iguaçu National Park, Brazil

The Property is managed by the newly created Chico Mendes Institute, a semi-autonomous body of the Environment Ministry. Park administration has been guided by a management plan developed in 1981 and revised in 1999. A new management plan is to be developed later this year.

Staffing of the Property is provided by technical staff from the Chico Mendes Institute; Green Rangers from Paraná State Police Force; and outsourced administrative, maintenance, and security personnel. A previous contract the National Forest Police has lapsed, thereby seriously undercutting the Property's resource protection efforts. Management programmes include resource protection, public use, environmental education, sustainable development in the buffer zone, and research.

The large majority of visitors to the Property only visit the Falls Viewing Area. Concessionaires provide bus transportation from the visitor centre to and within the Falls Viewing Area; a major hotel; restaurant and snack facilities; souvenir shops; jetboats and rafting on the lower Iguaçu and boat trips on the upper Iguaçu; climbing in the Iguaçu Canyon; and an elevator that moves visitors from the lip of the canyon to walkways in the canyon. A helicopter service takes visitors from outside the Park to an aerial view of the Iguaçu River, Falls, and Canyon within the Park.

The Park Administration has made significant efforts to work with the communities around the Park through environmental education programmes, and the promotion of ecotourism activities in the Park Buffer Zone.

Informal efforts to coordinate management of the two Parks have been taking place for many years with emphasis on public use, education, resource protection and research. The development of an official cooperation agreement through the countries' respective Foreign Ministries has proven more problematic. In 2003, the two Park Administrations developed a draft agreement outlining a series of coordinated management activities. These included research and monitoring activities, cooperation on sustainable development issues, coordinated action on public use, resource protection, management planning, interpretation and environmental education, and training and capacity building. However, the initiative did not receive the formal endorsement of the respective governments.

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2.4 Response to the recognition of values under international treaties and programmes (World Heritage Convention, Ramsar Convention, Biosphere Reserves, etc.)

While the managers of both properties are fully aware of their designation as World Heritage, the recognition of the associated values, and the implications for the planning and management of the sites are not clear. These values need to be more explicitly recognized as part of staff training, and in management planning and implementation.

3 IDENTIFICATION AND ASSESSMENT OF ISSUES / THREATS

The key findings of the mission are the following:

3.1 Management effectiveness

3.1.1. Evaluations of Management Effectiveness

A study of management effectiveness for the Iguazú National Park was carried out in 2006, but was not made available to the mission. A 2007 study on the management effectiveness of Brazilian protected areas presents aggregated information for the Brazilian Atlantic Forest Region, but does not present individual information on Iguazu National Park. Up-to-date evaluations of management effectiveness of both properties are required as the basis for the revision of outdated management plans.

3.1.2 Management of the critical Falls Viewing Area

Iguazú National Park handles visitor access through a well-organized system; visitors travel by a small train or via a series of foot paths to the best viewing areas. The walkways are well designed and wind through the forest providing an approach that is agreeable and exciting. The Park's visitor centre and ticket booths located at the Park entrance are also well-designed and sophisticated. Near the visitor centre, the Park has created an area for local indigenous people to sell artisan crafts. Seventy percent of tourists travel with guides and thirty percent as individuals, indicating a high level of active visitor management.

At the Iguazu National Park, tourism flows to the Falls are also well managed. Access is effectively managed through a transportation system that has cars and tour busses park outside the Park at the Visitor Centre. Visitors travel via a park shuttle bus that departs from the visitor centre to stops at various points where foot paths lead off to the best viewing areas. Access from the rim to the lower viewing areas is by walkway or with a large and visually prominent elevator system. From the standpoint of visitor management and control, the walkways are well designed for visitor safety.

3.1.3 Increasing Levels of Visitation

Both properties face increasing visitor numbers. Worldwide tourism is expected to double in the next fifteen years, and in both countries grow economically, visitation can be expected also to accelerate. Visitation to Iguazú National Park is currently over one million visitors per year, and is nearly double what it was only 5 years ago. On average, some 2,500 people per day visit the Falls area. During Holy Week celebrations, visitation increases to over 8000 people per day. Foreign visitors make up roughly 60% of the total. Park tourism revenues finance management activities at other less-visited Argentine national parks, adding pressure for Iguazú to continue to produce revenues from tourism.

Nationwide Brazil is seeking to raise the number of visitors to its Parks. Visitation at Iguazu National Park is also approximately one million people per year with on average 3000 people entering the park each day with an equivalent surge in visitation during Holy Week; the same case reported in Iguazú. With growth in the Brazilian and Argentine economies, increases in domestic tourism and the peaks in visitor numbers are most likely to continue and eclipse current levels. Visitation and tourism infrastructure are concentrated at the Falls Viewing Area, but standards for visitor limits have not been addressed. Mechanisms for shifting visitation in time and space exist, and should be considered as part of the abovementioned public use planning Process. Other properties in Latin America, such as Tikal National Park, face this peak Holy Week pressure and the sharing of experiences and policies could be an action facilitated by UNESCO and IUCN.

3.1.4 Trans-boundary Cooperation

Informal efforts to coordinate management of the two Parks have been taking place for many years with emphasis on public use, education, resource protection and research. The development of an official cooperation agreement through the countries' respective Foreign Ministries has proven more problematic. In 2003, the two Park Administrations developed a draft agreement outlining a series of coordinated

management activities. These included research and monitoring activities, cooperation on sustainable development issues, coordinated action on public use, resource protection, management planning, interpretation and environmental education, and training and capacity building. However, the initiative did not receive the formal endorsement of the respective governments.

A more modest proposal for cooperation on updating the management plans for the two Parks with a special focus on public use in the Falls Viewing Area was developed in 2006 with the participation of representatives from the respective Foreign Ministries. Consensus was reached on the text of a formal Cooperation Agreement that now lacks only one signature in order to become official. Assuming that the Cooperation Agreement will be signed and come into effect shortly, the two Parks agreed during the course of the mission to coordinate revision of their respective management plans. Iguazú National Park has funding available for this exercise from an Inter-American Bank loan project, and from a Spanish Aid Project being implemented by the Spanish NGO, Araucaria. Iguazu National Park also has funding available, which possibly might be supplemented with funding from a UN Foundation Project. It was agreed that an initial workshop would be held the first week of August, 2008, and focus on priorities for coordinated management that would be addressed in the respective management plan revisions. It was noted that it would be advantageous for a park planning specialist from the World Heritage Centre or IUCN to attend the meeting, provide inputs on planning methodologies, and perhaps lead a joint training exercise on management planning with special emphasis on public use. After the August meeting, the two Park Administrations will develop their own work plans and identify staff for the planning exercises. A larger, more inclusive meeting will then be held in November, 2008, to coordinate and finalize the respective work plans.

Recommendations

- Carry out formal studies of management effectiveness for each of the two properties using the methodologies and tools developed through the “Enhancing our Heritage” Project. Use these studies as key references for the revision of each property’s management plan.
- As part of the management planning process, define mechanisms for determining acceptable limits of change, and strategies for distributing visitation more evenly in time and space.
- Assure that the agreement between the governments of Argentina and Brazil on cooperation in revising the management plans of Iguazú and Iguazu National Parks is duly signed and enters into force.
- Develop a permanent mechanism for trans-boundary cooperation, perhaps as an outgrowth of the cooperation in the development of management plans, and based on the areas of cooperation outlined in the 2003 draft agreement.
- The mission recommends that the World Heritage Fund provide technical assistance to support the coordinated planning process for the two Properties. This assistance would include the provision of a specialist in protected area management planning, with particular expertise in public use planning. The Specialist would accompany the coordinated planning process, provide guidance on planning methodologies, and assist in the development and implementation of a training course for local staff.

3.2 Nature and extent of threats to the property, taking into consideration the natural values for which the property was inscribed and specific issues outlined by the World Heritage Committee

3.2.1 Integrity of scenic values

Both properties were nominated in part on the basis of their natural scenic qualities. Yet these qualities have suffered degradation through the modification of river flows by hydroelectric dams, and by the placement of infrastructure that intrudes upon the natural scenery.

3.2.1.1 Short-term changes in river flows

The hydroelectric dams on the Iguazú/Iguaçu River modify the volumes and nature of the river's water flow. The Salto Caixias dam, which is nearest to the Falls, is closed on the weekend because of reduced demand for electricity, and the volume of water in the Falls drops until after the dam is opened on Monday and the increased flow reaches the Falls on Wednesday. When the reduced flow caused by the dams combines with a dry season and the effects of climate change, the visitor experience is dramatically influenced.

Records have not been kept to track the pattern of change and how this affects visitor experiences. Water volumes are measured, but the relationship to the dams, annual flow variations, and natural causes have not been studied. A precise photographic record over time of the visual changes produced by the fluctuations would provide a record that would assist in the analysis of aesthetic qualities of the Falls and how they are affected by different natural and man-induced factors. They would also assist in the setting of standards.

3.2.1.2 Visual and audio impacts

The most prominent and direct intrusions of infrastructure on the visual integrity of the waterfalls themselves are:

- The remains of the Garganta Elevated Walkway that have not been demolished or removed from the River since construction of the replacement walkway, which is much less intrusive (Argentina)
- The Naipi Souvenir Shop and Elevator from the lip of the canyon to the elevated walkways at the Santa María Falls (Brazil)
- The Porto Canoas Restaurant and Souvenir Shop placed at the very edge of the Falls (Brazil)

These intrusions at the waterfalls themselves are the most egregious. However, there are additional large scale intrusions in the surrounding landscape. These include the Sheraton Hotel (Argentina) and the Cataratas Tropical Hotel (Brazil). While some vegetation has been allowed to grow around the Cataratas Tropical Hotel, thereby attenuating to some extent its visual impact from the different scenic overlooks in Argentina, this is not the case for the Sheraton Hotel, which is fully visible from major viewpoints on the Brazilian side. The light colours of both Hotels add to their intrusion on the landscape. There is also a steel structure jutting out from the lip of the canyon on the Brazilian side that offers visitors the opportunity to rappel to the banks of the river below, and a souvenir shop on the Cataratas Trail that intrudes on the view from overlooks on the Argentinean side.

Both visual and audio impacts are generated by adventure-related water transport activities, which originate on both sides of the River and by helicopter over flights on the Brazilian side. On busy days there can be more than 20 boats visible jetting up and down or running rapids on the lower Iguazú/Iguaçu River, and the continuous presence of helicopters overhead.

The cumulative effect of these multiple visual and audio impacts, the number of adventure oriented activities, and the large numbers of visitors on each of the trails is to provide the visitor with an experience similar to a visit to an amusement park. This poses several basic questions that have yet to be answered:

1. What are the limits of acceptable change to the scenic qualities of these two properties?
2. What are the criteria that can be used to identify when those limits have been passed, when the Outstanding Universal Values related to scenic qualities no longer exist, and who evaluates them?

3. Are the limits of acceptable change the same for a national park as they are for a World Heritage Property?
4. Are international standards required for World Heritage Properties, or should decisions on visual and audio impacts on scenic qualities be made on a site by site basis?

3.2.1.3 Thrill-seeking vs. Appreciation of World Heritage Values

The jet boats on both sides of the Falls, the running of rapids on both the upper and lower Iguazú/Iguaçu River, and rappelling activities on the Brazil side from a steel structure offer tourists opportunities for thrill-seeking activities. The mission team questions the tendency of the both properties to focus on and develop these amusement park- type experiences without clear policies and decision making processes that considers their impact on World Heritage values.

The mission team also questions whether these current activities even reflect the preferences of most foreign and domestic tourists. Alternative experiences based on emphasising the aesthetic and biodiversity World Heritage values, may be preferred, could also offer economic returns, and should be explored. Foreign tourists making up sixty percent of visitation and the growing number of national tourists may be interested in these activities more appropriate to the properties' values. These visitors may be willing to pay a premium price for experiences linked to guided nature and cultural activities.

3.2.1.4 Complexity of the issues

The issues related to the scenic values that form the basis for the Outstanding Universal Values of the properties are complex. A number of the constructions were in place before inscription, and the Sheraton Hotel is situated on privately owned land inside the Iguazú property, limiting options for Park management intervention. The issue of commercial helicopter flights also predates inscription. These flights began in 1972, originating from Brazil and Argentina. Flights continued on the Brazil side till stopped by a decision of the park manager in November 1997. Flights recommenced in October 1998 but are subject to the following flight conditions which had been agreed to in discussions with Argentina: flights only to be between 0900 and 1700 hours, at a minimum altitude of 1600 feet (approx 500 meters), flying only over Brazilian territory from a heliport located outside the National Park. Iguazu park staff do not believe the over flights provoke wildlife disturbance. They also noted that Park staff use the helicopters for management efforts. The helicopters are particularly appreciated for their role in enabling early attacks on forest fires, which are a new phenomenon for the Brazilian property.

There are yet no clear policies or standards regarding impacts on the integrity of the Park's aesthetic values such as visual and audio impacts from tourism infrastructure and transportation modes, or on architectural styles or paint colours. There are tendencies toward thrill seeking activities for visitors, but there are no clear policies as to the appropriateness of these activities or to define their limits.

3.2.1.5 Resolution of the hot air balloon concession.

The hot air balloon concession is no longer an issue. The proposal has been firmly rejected by the Iguazú Park Administration, and the property targeted for the balloon concession is now overgrown with vegetation, and little visual impact remains. In general, the Park director is encouraging, with great positive visual effect, the regeneration of trees and shrubs in the heavily visited Falls area. He is also using this technique to positively control visitor flows and it could also systematically be used to hide infrastructure from view.

Recommendations

- Develop a study to (1) understand the relationship between closures of dams on the Iguazu River upstream from the Falls, changes in the aesthetic qualities of the Falls, and visitor perceptions; and

(2) to provide guidance for decision-making.

- As part of the process of revising the management plans for the respective Parks, develop (1) compatible standards on the limits of acceptable change with respect to scenic values, criteria for determining when those limits have been reached, and time frames for mitigating situations where limits have already been surpassed; (2) criteria for determining when visitation numbers surpass the capacity to manage them effectively; and (3) mechanisms for distributing visitors more evenly in time and space.
- Carry out a study of the economic benefits of tourism to the local economies and develop a process to track this data. Complement this study with an inventory and market analysis of attractions in the Buffer Zone that could (1) aid in the diversification of visitation away from the Falls, and (2) contribute to building local constituencies linked to conservation of the two properties.

3.2.2 Integrity of Biodiversity Values

3.2.2.1 Indicators

Little is known about the biota of the two properties. The Iguazú National Park Management Plan contains a partial inventory of species, but little work has been done to determine the status and trends of the biota. There are a few hints, however. A joint census of caimans undertaken in both Parks seems to indicate a drop in numbers from 1996 to 2005, but since then an increase. This halt in the decline of the population and the slight increase in recent years coincides with stepped-up law enforcement efforts. The same pattern has been observed with respect to the jaguar sightings, though true census data are not available. Still, there are concerns that the continued conversion to agriculture of the little remaining forest outside of the properties is relentlessly reducing jaguar habitat and eliminating corridors between forest patches.

Brazilian Park officials report that illegal harvesting of palm heart is on the decline due to better law enforcement and education efforts, but note that forest fires present a new threat to biological values. Four major forest fires occurred in the Brazilian property last year, a phenomenon that has never previously occurred. Dry seasons are now reported to be longer raising the level of fire risk.

On the other hand, monitoring programs in Iguazú National Park have failed to detect any climate change. The Park has a small Research Centre (CIES) that provides facilities for visiting researchers and students. The Centre is currently working on a study to determine the impact of the Argentinean property on the health of surrounding human populations. The Center's Director sees indications that wildlife populations have declined as the properties have become islands in a sea of agriculture, but there are few studies to back up this impression. Although Iguazu National Park has biologists on staff, there is no research centre. Staff from the two Parks are beginning to share data, although informally.

Iguazu National Park staff mentioned an ongoing project, Project Aqua, launched in the Park's buffer zone with local communities, that is decreasing the level of contaminants reaching the River. The project seeks to teach farmers how to deal safely with agrochemicals and pesticides to decrease pollution of the rivers and streams on the Brazilian side feeding into the Iguazu River.

3.2.2.2 Suspected impacts from dams

It is suspected that the five dams on the Iguazu River upstream from the properties have had major impacts on riverine biota and associated food chains because of the weekly variations in water levels that they cause. In addition, the two properties now contain a major portion of the Iguazu River environments because upstream the dams have developed a series of reservoirs that have eliminated riverine habitats. However, no scientific studies have been undertaken to measure impacts.

3.2.2.3 Deforestation of the "Argentine Peninsula Bottleneck"

The staffs of both Parks are concerned about the threat to genetic flows between the two Parks caused by ongoing deforestation of an area just east of Iguazú National Park called the "Argentine Peninsula Bottleneck". Some have suggested that this area be declared a Resource Reserve where regulations would be put in place to maintain critical forest areas and associated corridors, while others have suggested that the land be purchased by one or more conservation organizations.

3.2.2.4 Estrada do Colono regenerating naturally

An over flight by the mission team of the area that was once the Estrada do Colono Road made it possible to verify first hand that the road transect is regenerating naturally and no human activity was noted. A December 2007 decision by a regional court ruled that the Estrada do Colono must remain closed, that anyone promoting its reopening will be fined, and that Parks/Brazil must carry out full ecological restoration. However, the case has been appealed to the Supreme Court, and Iguazu Park staff indicated that it would be beneficial for the World Heritage Committee to put on record a request to the Brazilian Government that the lower court decision be upheld.

Over the course of the past several years, the Iguazu Park's environmental education and tourism for rural communities programmes have helped to diminish illegal hunting activities and have improved Park-community relations considerably. The Park has five specialists working on environmental education who have now taught over 20,000 students and 200 teachers. This has in turn improved the relationships with respect to the issue of the Road. In the elections of 2004, it was reported that municipalities made no mention of the Estrada do Colono. Park personnel who had previously received threats are no longer threatened indicating changing community attitudes.

Recommendations

- Development of a study to be undertaken jointly by the two national parks in cooperation with qualified scientists to determine the impacts of weekly variations in the water levels on the Iguazú/Iguazu riverine biota and associated food chains.
- Establishment of an early warning system by the Argentine World Heritage Committee to gather timely information regarding hydro projects that would impact either World Heritage property.
- Synthesis of a coordinated research and monitoring strategy to determine the status and trends with respect to the biodiversity values of the two properties. This coordinated strategy should feed in to the process for revision of the Park's respective management plans.
- Undertake a joint study by the two national parks to determine the technical and economic feasibility of different alternatives for maintaining genetic flows between the two National Parks through the area known as the "Argentine Peninsula Bottleneck".
- The mission recommends that the World Heritage Committee urge the Supreme Court of Brazil to uphold the decision of a lower court to maintain closed the Estrada do Colono.

3.3 Positive or negative developments in the conservation of the property since the last report to the World Heritage Committee

3.3.1 Positive developments

A number of positive developments have occurred with respect to conservation of the two properties since

the last report to the World Heritage Committee. These can be summarized as follows:

- Creation of a semi-autonomous institution in Brazil, the Chico Mendes Institute, to manage national parks.
- Proposals for balloon flights over the Iguazú Falls, and diversion of waters from the Iguazú River to feed the Uruguay-i Dam in Argentina have both been firmly rejected.
- A Regional Court in Brazil has ruled that the Estrada do Colono must remain closed, and should undergo ecological restoration. In the absence of human interference, the road is regenerating naturally.
- With the assistance of the concessionaires from both properties, emergency preparedness plans have been developed for flooding and forest fires.

3.3.2 Negative developments

Unfortunately, a number of negative developments have occurred since the last report to the World Heritage Committee. These include the following:

- The proposed Baixo Iguaçú Dam in Brazil, which was previously rejected, has now been resurrected and included in the national development program of Brazil.
- The Bi-National Commission for the Paraná River of Argentina and Paraguay is letting contracts for a feasibility study for the construction of the Corpus Cristi Dam. However, the mission was informed that no action on the Dam would be undertaken until outstanding issues with respect to the Yacyretá Dam are settled with Paraguay, and potential environmental and social impacts have been determined.
- Four major forest fires occurred in the Brazilian property last year, which is a totally new phenomenon.
- Agreement between the Federal Police of Brazil and IBAMA (the institution that for many years manage Iguaçú National Park) for patrolling the Park have been terminated. Now patrols are only carried out by the less well trained State Police.
- The Regional Court decision on the continued closure of the Estrada do Colono in the Brazilian property has been appealed to the Supreme Court.

3.4 Information on any threat or damage to or loss of outstanding universal value, integrity and/or authenticity for which the property was inscribed.

Previous sections of the report have noted that both values for which the property is inscribed (scenic quality and biodiversity) have already been compromised, though the degree of degradation has not been documented. Scenic and biodiversity values have been impaired by the weekly fluctuations in river flows caused by five upstream dams. Scenic values have been degraded by the impacts of infrastructure and transport modes that intrude on the natural setting. The scenic and biodiversity values of both properties are threatened by the potential construction and operation of the proposed Baixo Iguaçú Dam on the Iguaçú River and the proposed Corpus Cristi Dam on the Paraná River. There are threats to the biodiversity of the Brazilian property because of the lack of a qualified ranger corps and forest fire potential. Finally, it is suspected that continuing deforestation of the “Argentine Peninsula Bottleneck” is increasingly limiting the genetic flows between the Argentine and Brazilian properties and this will eventually lead to the collapse of jaguar populations and resultant shifts in forest ecosystem dynamics.

4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

4.1 Maintenance of the values for which the property was inscribed

While a statement of Outstanding Universal Value has not yet been formally approved for the property by

the Committee, the justification for its inscription is fairly well documented. The mission concludes that the Outstanding Universal Value for which the Iguazú National Park Argentina and Iguazu National Park, Brazil was inscribed on the World Heritage List is still present, but materially degraded and under threat from a number of sources which have been outlined in previous sections of the report. However, the degree of degradation cannot be documented at present and in-depth studies will be required to provide reliable, actionable data for the design of remedial strategies. Further work is also required with respect to scenic values to define standards and criteria, long-term goals, and priorities.

4.2 Follow-up measures to previous decisions of the WHC

The Committee may wish to consider the following measures to follow-up on previous decisions:

- Recommend scientific research that is urgently needed to confirm and quantify the impacts on biodiversity of weekly water level changes on the Iguazu River, both in Argentina and Brazil.
- Request that the Argentine World Heritage Committee set up an early warning system to gather timely information on decisions that are made with respect to the proposed dams on the Iguazú and Paraná Rivers.
- Determine the technical and economic feasibility of purchasing the critical lands of the Argentine Peninsula Bottleneck, and annexing them to the Iguazú NP.

4.3 Measures the State Party plans to take to protect the OUV

The State Parties have both determined that the most important measure that can be taken is to develop coordinated management plans for the two properties, with the participation of the World Heritage Centre and/or IUCN, to seek common approaches to conserving the values for which the properties were listed. This is a crucial step that underlies the resolution of all other concerns pertaining to natural resource management, development, threats and use identified in this and previous missions.

5. CONCLUSIONS AND RECOMMENDATIONS

In order to address the above mentioned management and conservation issues and ensure the long term conservation of the OUV and underlying integrity of the property, the mission proposes the following recommendations:

5.1 Recommendation for additional actions by the State Party

- As a matter of priority, carry out a joint research project on the effects of weekly variations in the water levels of the Iguazu River on the biota and on the scenic beauty of the Falls.
- Renounce once and for all plans for the construction of the Baixo Iguazu (unless it mitigates the weekly oscillation in river levels) Dam in Brazil and the Corpus Cristi Dam of Argentina and Paraguay.
- In preparation for developing new management plans for both properties, develop studies of management effectiveness as baselines.
- Include participation of IUCN, the Advisory Body for natural heritage, in the coordinated management planning process for the properties, which is already programmed for late 2008, and have IUCN give special attention to maintenance of the OUV for which the properties are listed.
- Provide additional temporary personnel to the properties so that local staff can participate adequately in the development of the management plans.
- Develop a feasibility study for the formation of a Ranger Corps for the Brazilian property, possibly with the technical assistance of Argentina.

- Demolish immediately the remains of previous elevated walkways to the Garganta viewing Platform in Argentina, and restore the natural qualities of the river landscape.
- Develop a study to determine the technical and economical alternatives for maintaining genetic flows across Argentine Peninsula Bottleneck
- Request the Supreme Court of Brazil to uphold the decision of a lower court to retain closure of the Estrada do Colono in Iguazu National Park.

5.2 Recommended action, indicators of success, and time-frame

- 5.2.1 Develop a joint research program on the effects of weekly variations in the water levels of the Iguazu River on the biota and on the scenic beauty of the Falls.
- 5.2.1.1 Indicators of success
- 5.2.1.1.1 Impacts on biota and the food chain traced and quantified
- 5.2.1.1.2 Annual and comprehensive reports published
- 5.2.1.2 Time frame
- 5.2.1.2.1 Joint research design – 3 months
- 5.2.1.2.2 Progress reports – annually for 4 years
- 5.2.1.2.3 Comprehensive report – 5 years
- 5.2.2 Develop evaluations of management effectiveness for each property as a first step in developing management plans for both properties.
- 5.2.2.1 Indicators of success
- 5.2.2.1.1 Evaluations presented to Parks/Argentina and Parks/Brazil as inputs to the development of new management plans for both properties
- 5.2.2.2 Timeframe: 3 months
- 5.2.3 Develop coordinated management plans for the two properties that will determine how to mitigate current negative impacts on the OUVs of the properties, and eliminate threats. Include an IUCN Adviser to work with both Teams, and use the good offices of UNESCO to coordinate the work as needed.
- 5.2.3.1 Indicators of success:
- 5.2.3.1.1 Management Plans completed in coordinated fashion
- 5.2.3.1.2 Current negative impacts on OUV addressed and threats neutralized.
- 5.2.3.2 Timeframe: 1 year
- 5.2.4 Develop Ranger Corps for Brazilian property
- 5.2.4.1 Carry out a feasibility study to determine how a Ranger Corps can be developed and put in place for the Brazilian property in the shortest time possible.
- 5.2.4.1.1 Indicators of success:
- 5.2.4.1.1.1 Feasibility study completed and approved by the Chico Mendes Institute
- 5.2.4.1.2 Time-frame: 6 months
- 5.2.5 Demolish the remains of previous elevated walkways at the Garganta viewpoint in Argentina and restore the natural riverscape.
- 5.2.5.1 Indicators of success:
- 5.2.5.1.1 Natural riverscape, with no introduced human elements, seen from current elevated walkway
- 5.2.5.2 Timeframe: 3 months
- 5.2.6 Study feasibility of acquiring the lands of the Argentine Peninsula Bottleneck for annexation to the Iguazú NP
- 5.2.6.1** Indicators: presentation of study to Parks/Argentina and Parks/Brazil and to interested international organizations and NGOs
- 5.2.6.2 Timeframe: 3 months

5.3 Do the level of threats require placement on, or removal from, the List of WH in Danger?

The mission noted that the OUV of the properties have both been degraded and remain under threat. The mission considers that the degree of degradation of the scenic and biodiversity values of the two properties cannot be measured accurately enough to justify at present the placement of the two properties on the List of WH in Danger. The mission considers that timely action by the State Parties to implement the mission recommendations would attenuate the current degradation of values, and establish a path towards their final elimination. However it should be noted that lack of action and progress towards the resolution of current issues and the continued presence of threats would provide a measurable basis to justify inscription on the Danger List. The mission recommends that the possible case for inclusion on the List of World Heritage in Danger should be kept under review by the World Heritage Committee over the next 3-5 years. Progress should be reviewed by the Committee again in 2 years time.

Annexes

1: Decisions of the World Heritage Committee at its 31st session and State of Conservation Reports

Decisions report (Christchurch, 2007)

38. Iguazu National Park (Argentina) (N 303)

Decision: 31 COM 7B.38

The World Heritage Committee,

1. Having examined Document WHC-07/31.COM/7B,
2. Recalling Decision **30 COM 7B.31**, adopted at its 30th session (Vilnius, 2006),
3. Commends the State Party for its decision to deny authorization for the operation of a fixed hot-air balloon at the property;
4. Urges the State Party to carry out a joint comprehensive public use planning process, in cooperation with the management authority of Iguazu National Park (Brazil) to ensure that the property's Outstanding Universal Value and conditions of integrity, particularly in regards to criterion (vii) is adequately conserved;
5. Requests the State Party of Argentina, in coordination with the State Party of Brazil, to invite a joint UNESCO/IUCN monitoring mission to assess the state of conservation of the property, for examination by the Committee at its 32nd session in 2008, with a particular focus on:
 - a) developing a framework to assess the carrying capacity for the two adjacent properties ;
 - b) identifying solutions to problems associated with public use; and
 - c) obtaining detailed information on plans for hydro-electric developments in the region.

39. Iguazu National Park (Brazil) (N 355)

Decision: 31 COM 7B.39

The World Heritage Committee,

1. Having examined Document WHC-07/31.COM/7B,
2. Recalling Decision **30 COM 7B.31**, adopted at its 30th session (Vilnius, 2006),
3. Commends the State Party for its decision to deny authorization for the construction of the proposed Baixo Iguazu hydroelectric dam;
4. Urges the State Party to carry out a joint comprehensive public use planning process, in cooperation with the management authority of Iguazú National Park (Argentina) to ensure that the Outstanding Universal Value of the property and its conditions of integrity, particularly in regard to criterion (vii), are adequately conserved;

5. Requests the State Party of Brazil, in coordination with the State Party of Argentina, to invite a joint UNESCO/IUCN monitoring mission to assess the state of conservation of the property, for examination by the Committee at its 32nd session in 2008, with a particular focus on:
- a) developing a framework to assess the carrying capacity for the two adjacent properties ;
 - b) identifying solutions to problems associated with public use; and
 - c) obtaining detailed information on plans for hydro-electric developments in the region.

2 Terms of Reference for Mission to Iguazu/Iguaçu

- (i) Assess the state of conservation of this property and the factors affecting the Outstanding Universal Value of the property and its conditions of integrity, in particular in relation to tourism development, public use and infrastructure; and this needs to be done for the two States Parties;
- (ii) Hold consultations with the Argentinean and Brazilian authorities and relevant stakeholders in examining the progress made in relation to the recommendations of the 31st session of the WH Committee (see Decision 31 COM 7B.38 and previous Decisions):
 1. the development of a framework to assess the optimum limit for sustainable visitation and consider a cap for the number of visitors for the two adjacent properties;
 2. the realization of a joint comprehensive public use planning process, in cooperation with the management authority of Iguaçu National Park (Brazil) and identified solutions associated with public use;
 3. detailed information on plans for hydro-electric developments in the region.
- (iii) Assess progress in improving transboundary cooperation, sustainable financing, and coordinating tourism development;
- (iv) Ensure that all discussions of threats and solutions include consideration of the impact or potential impact on the values of the property for both criteria (vii) and criteria (x);
- (v) Inquire with local authorities if the issues of risk reduction and climate change are incorporated in planning and management and specific actions implemented on this if there are any;
- (vi) On the basis of the foregoing findings, make recommendations to the Government of Argentina and Brazil and the World Heritage Committee for a better conservation and management of the property; and
- (vii) Prepare a mission report on the findings and recommendations of this Monitoring Mission following the attached format. This report should be prepared jointly with the other experts involved in the mission, with the IUCN expert focussing on the natural values of the property.

3: Itinerary and programme of the mission

Date	Time	Activities	Observations/ Remarks	Agency in charge
06.04.2008	Morning	Arrival of 2 experts Pedersen+Putney	Transfer to hotel reserved by PNI Brazil	National Park of Iguazú (Argentina) Daniel Crosta + Lorena Ferraro
			Check hotel reservations for 6 + 7 April; inform PNI Argentina :airport transfer	National Park of Iguazú (Brazil)
07.04.2008	Morning	General presentation of the Park: its unity, projects programmes, activities, present situation; this will include themes of interest to UNESCO: - procedural/juridical situation of the Colono road and the Barrage -procedural/juridical situation of the Barrage road -tourism -state of wildlife Discussions and clarifications	Discussions on presentation	Apolônio Rodrigues + Jorge Pegoraro
			Preparation of meeting logistics	National Park of Iguazú (Brazil) - Rita
LUNCH			Restaurant at Porto Canoas	National Park of Iguazú (Brazil)
07.04.2008	Afternoon	Visit of public use areas at the Cataratas	Preparation of visit logistics	National Park of Iguazú (Brazil)
08.04.2008	Morning	Proposed itinerary: from HQs, flight over the Ceu Azul National Park, the corridor of biodiversity, and Park School at Campo do Bahia.Flight over the protected areas of Ceu Azul at Floriano, east of the National Park to Iguazú river to the local proposal site for the barrage.Along the Iguazú river to Capanema – a tourism zone on the Brazil/Argentina frontier, from the Colono Road flight over the “peninsula” Argentina, observation of the strategic area between the 2 Parks (peninsula and areas of Iguazú river – Panoramic view of the Cataratas) FIM	Preparation of visit logistics	National Park of Iguazú (Brazil)
			Provide transport for 2 UNESCO experts + other participants from Nat’l Park Iguazú (Argentina)	
LUNCH			Restaurant at Porto Canoas	National Park of Iguazú (Brazil)

08.04.2008	Afternoon	Visit of the Cataratas area-CIES Presentation in the auditorium of the Visitors' Centre	Discussions on the presentation Preparation of the itinerary of the next visit	National Park Iguazú (Argentina) Technical delegation (Ariel Soria), Public Use (Romina Caselli) and Conservation (Lorena Ferraro)
08.04.2008	Working Dinner with Ministry of Ecology and Tourism		Place to be decided	National Park Iguazú (Argentina) Daniel Crosta
09.04.2008	Morning	Visit to the Andresito community following the Route 101	Organisation of visit logistics	National Park Iguazú (Argentina)
	Afternoon	Presentation of the Araucaria XXI project to stakeholders	Organisation of meeting logistics	National Park Iguazú (Argentina) Raul Romero
10.04.2008	Whole day	Meeting with UNESCO experts and representatives of National Park of Iguazú – discussions, orientations, clarifications. Evaluation/ feasibility of a new “emergency” exit of the Park’s auditorium at the Visitors’ centre.	Organisation of meeting logistics	National Park Iguazú (Argentina)
11.04.2008		Departure of experts	Transfer of experts to airport	National Park Iguazú (Argentina)