

World Heritage Watch Report 2017



World Heritage Watch

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WORLD HERITAGE WATCH

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Editorial Team

Stephan Doempke and Geoff Law (chief editors) with support from Elena Belokurova, Nigel Crawhall and Martin Lenk

Cover photos: Białowieża (wikimedia commons), Diyarbakir (Sur Conservation Platform), Agadez (Nigel Crawhall), Bali (ProjectKalpa)

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Preface

For two years – 2015 in Bonn and 2016 in Istanbul – World Heritage Watch has organized an NGO Forum immediately prior to the Annual Session of the UNESCO World Heritage Committee, continuing an initiative which had been started by Russian civil society in St. Petersburg in 2012. The Bonn Conference served to establish the role civil society plays in the safeguarding of World Heritage sites, and the potential role it could, or should play in future. In a strategic document, 115 participants defined their aspirations towards UNESCO and the World Heritage Convention. At the Istanbul Conference, there was a thematic focus on civil society's contribution to monitoring progress of World Heritage sites towards sustainability, in terms of both protection and development.

Through our participation in the meetings of the World Heritage Committee we understood that we must make stronger efforts to make ourselves heard where the decisions are taken. However, this would require a modified approach.

While the two conferences have made the many positive contributions of civil society to the World Heritage abundantly clear, their reports had come too late to have any immediate effect on the Committee decisions taken only a few days later. The publications, enlightening as they were, could only impress the interested reader or the potential donor but otherwise were little more than for the record.

Drawing our conclusion from this experience, we decided (a) that henceforth we would focus our annual work on the sites on the agenda of the next WH Committee meeting, and (b) that the reports we would gather from civil society actors worldwide must be published and distributed to the decision-makers in time ahead of the Committee Meeting in order to allow them to integrate them and to reconsider any of their positions.

This has required an extra effort from everyone involved but in particular from those who prepared reports. They had to focus to a much higher degree on the issues discussed (or not) by State Parties in their State of Conservation Reports, and on the extent to which these had actually implemented the requirements from the last Decisions of the World Heritage Committee.

It is the aim of World Heritage Watch and the civil society actors who constitute its network to be considered a useful additional player in the decision-making processes of the World Heritage Convention. We will succeed in this only if we can manage to provide reliable additional information which the Committee does not receive from the State Parties and Advisory Bodies.

The World Heritage Watch Report 2017 is the first, albeit modest attempt to reflect this aspiration. With the extremely limited resources we have at our disposal, the result is not always as perfect as we ourselves would like to have it, but we are convinced that most of the material presented here will bring new aspects to light which will help the members of the WH Committee to take better-informed decisions about the sites which are the heritage of all of us.

For their extremely valuable contributions, our thanks go first and foremost to the authors. Elena Belokurova for the Russian-speaking world, and Nigel Crawhall for the indigenous peoples of Africa were of invaluable help in communicating and coordinating, and thus making it possible to receive papers from people and places to which it would otherwise be almost impossible to reach out. Geoff Law from Hobart, Tasmania volunteered to edit the papers, and Martin Lenk through his cartography and photo research demonstrated again what a difference good illustrations can make to the understanding of a text. Finally, our heartfelt gratitude goes to computer designer Bianka Gericke who never let us down when things had to be done within deadline. Berlin's Landesstelle für Entwicklungszusammenarbeit – the Agency for Development Cooperation of the City-State of Berlin – is to be praised for supporting the printing of this volume.

It is our sincere hope that the result of the common effort of all of us will not go unnoticed by decision-makers and the wider public alike, and that it will help to safeguard our planet's sites of the most outstanding universal value for future generations to enjoy.

Berlin, May 2017

The WHW Board of Directors:

Stephan Doempke, Uli Gräbener, Maritta Koch-Weser, Rolf Kreibich and Silvan Rehfeld

I. Natural Sites

Białowieża Forest in Danger of Destruction

Robert Cyglicki, Greenpeace Poland, on behalf of the following coalition of NGOs:



Białowieża Primeval Forest (BF) is a large tract of forest straddling the border between Poland and Belarus. It is widely recognised as the best preserved fragment of mixed deciduous forest of the northern temperate zone in Europe. The area has an exceptionally high value for nature conservation, including extensive old-growth forests, and is home to the largest population of the European bison, an iconic species. The BF is a so-called “node of concentration” of biodiversity, and far exceeds all other European forests in numbers of fungi, plant and animal species that occur in its territory.

The Białowieża Forest, first inscribed on the World Heritage List in 1979, was re-nominated under criteria ix and x in June 2014 as a transboundary property covering the entire forest on both sides of the border between Poland and Belarus. According to the justification for the re-nomination, the extended area protects a diverse complex of forest ecosystems and associated non-forest habitats with their rich biodiversity of plants, animals and fungi. Of particular importance are old-growth forests, which include extensive undisturbed areas where natural processes continue (criterion ix). The area has a very high proportion of old-growth forests, with a high amount of dead wood in various stages of decomposition. BF has exceptional conservation significance due to the extent of its old-growth stands, which should be interpreted not just as “stands of old age” but as forest fragments of natural origin, which have continuously covered the area for centuries.

Białowieża Forest is also a “hot spot” for biodiversity conservation in Central Europe (criterion x). BF provides habitat for 59 mammal species, 178 bird species, 13 amphibian species, seven reptile species and well over 9,000 insect species.

According to the “Management Plan for the Białowieża Forest World Heritage Property – Roadmap for preparation and implementation”, BF is divided into different management zones where varied protection regimes are applied. There are zones where strict protection, partial protection I or “partial protection II regime” are applied. Taking into account the current situation, it is important to mention that in the “partial protection II” zone no wood extraction is allowed.

The Polish part of BF is managed by two authorities: about 20% is managed by the Białowieża National Park and the remaining area (around 80%) is managed by State Forests, a state-owned holding. The State Forests area is divided into three administrative Forest Districts (Hajnówka, Białowieża and Browski), each of which has a Forest Management Plan (FMP) in place since 2012. These were drawn up for a 10-year period (2012-2021) and each of them sets a reasonable limit on timber harvest. Together, they limit the timber harvest to 469,980 m³ during the 10-year period (averaging about 47,000 m³ logged annually) in the Polish part of BF.

The timber-harvest quotas established for the three Forest Districts were largely exhausted by 2015, after only four of the ten years. This resulted in a 2015 proposal to update the FMP for the forest district that had already surpassed its allowable limit. Similar updates are expected soon for the remaining two forest districts as they are approaching their 10-year limits, too. The proposed update to the FMP for Forest District Białowieża proposes a serious increase in intensity of logging. The annual logging intensity in the next six years is proposed to increase by a factor of three compared with the original quota set in 2012 which was recognized as sustainable.

The proposed logging will include large parts of the BF within the “partial protection II” zone, where logging (including “sanitary felling” and salvage logging) was not foreseen (in contrast to the “active protection of biodiversity and landscape” zone). Moreover, the intense logging that has already



Fig. 1. Forests in the Białowieża World Heritage property

taken place in the last three years across BF was conducted in numerous stands situated in the “partial protection II” zone as well.

This all constitutes a serious breach of the obligation to protect the Outstanding Universal Value (OUV) of the World Heritage property – the ongoing ecological processes of key importance for this biodiversity hot-spot, as embodied in criterion ix. Intense logging would decrease the area of key habitats supporting the unique biodiversity of the site and adversely affect the potential for restoration. This would also seriously impair the integrity of BF, a breach of the Operational Guidelines for the Implementation of the World Heritage Convention, and of the EU Habitats Directive.

The foresters claim to be motivated by a desire to halt the outbreak of bark beetle and “save the forest”. Despite these assertions, the outbreak of bark beetle in BF is impossible to halt, given the requirement to find and fell at least 80% of infested trees. That is impossible in this extensive tract of forest, 35% of which is totally protected from logging. In the remaining area, spruce trees are often embedded in a matrix of old oak-hornbeam forests. Applying the proposed silvicultural measures in these stands is also logistically unfeasible, given the vast area of the property and the small window of opportunity in which to find and remove the infested trees before the adult insects emerge and disperse to infest other trees.

The “sanitary logging” conducted in 2013-2015, including in the protection zones where it was not foreseen by World Heritage Property dossier, as well as the large-scale intervention allegedly required to address the developing bark-beetle outbreak, were not mentioned in the official State of Conservation (SOC) report for BF in 2016. The SOC report for the Polish part of the property is not complete as it does not present all the information on implementation of the Committee decision (40 COM 7B.92). It also presents opinions which are not based on data and scientific knowledge, and, crucially, it attempts to justify increased wood extraction from Białowieża Forest, thereby threatening the site’s OUV.

The increased logging was formally accepted in March 2016. The State Party of Poland attempted to justify its decision by reference to the bark-beetle outbreak. In fact, such outbreaks have been shaping Białowieża Forest for ages and are part of the natural processes of the forest (criterion ix). The report of the IUCN Advisory Mission (4–8 June 2016) says that “bark beetle outbreaks should be considered as a biological process, in the sense of the World Heritage Convention” and “from the mission experts’ view, the main objective should be to maintain the overall ecological character of the Białowieża Forest and restore it, when necessary, by minimizing human intervention and facilitating the natural processes...”

As many species and habitats in the Białowieża Forest are dependent on the abundance of dead wood and old-growth forest stands, their effective protection requires the Polish government to abandon its plans to increase logging.

However, the SOC report said increased logging was “to enable the active conservation of species and habitats” without specifying any species and habitats which would benefit. In fact, the official justifications for increased logging are largely attempts to hide the true motivation – commercial wood extraction. Interestingly, the SOC report clearly shows that at least 78% of the wood extraction was commercial. The Committee “considers that such commercial timber extraction would represent a potential danger to the property in accordance with Paragraph 180 of the Operational Guidelines” (40 COM 7B.92).



Fig. 2. Logging operation, Białowieża World Heritage property. Photo: Greenpeace

This decision of the Committee is a long way from being implemented due to the following issues:

1. Amendments to the Forest Management Plan for the Białowieża Forest District are being implemented in Poland which would provide for a threefold increase in logging and could result in disturbance of natural ecological processes. What’s more, logging at Hajnówka and Browsk Forest Districts has been intensified, with wood extraction 50% higher than the yearly average. The regime of management zones for the property has not been respected. Also, 39% of the wood (about 50,000 trees) was extracted from a zone excluded from logging.
2. The recommendations of the IUCN Advisory Mission of 2016 should be implemented as soon as possible. Very little has been done so far in this regard.
3. The OUV of BF, especially natural processes, is endangered by intensified logging.
4. The State Party of Poland has still not prepared a proper evaluation of potential impacts of the amendments to the Forest Management Plan on the BF World Heritage site. The State Party is claiming that such an evaluation was included in its Strategic Environmental Assessment, deliv-

ered along with the SOC report. But this was rejected by the WH Committee, IUCN and the European Commission.

5. The conclusions of the report of the IUCN Advisory Mission to BF are far from having been “considered ... with all relevant stakeholders”, as requested.
6. The Committee requested the State Party “to ensure that no commercial timber extraction is permitted within the entirety of the Polish part of the property and considers that such commercial timber extraction would represent a potential danger to the property in accordance with Paragraph 180 of the Operational Guidelines”. Yet 78% of the wood harvested at BF has constituted commercial timber extraction.
7. The Polish Ministry of the Environment, through its actions, has not prioritized preparation of the Integrated Management Plan. It took half a year to prepare a small step, a Draft provisions document, to address that point of the decision. What’s more, that step was made in wrong direction. The Draft provisions do not guarantee that “no actions can be allowed within the entire property that could negatively impact on its OUV”.



Fig. 3. Logging at forest stand 280 in Białowieża Forest (Białowieża Forest District) in the UNESCO zone “Partial Protection II – other forests excluded from use”.

Photo Dariusz Gatkowski / WWF Poland

The Committee’s decision is therefore far from being implemented. In fact, it was ignored when the State Party implemented its decision to increase logging of BF only two months after the Committee session. The data on logging is dramatic and shows that the State Party of Poland is systematically transforming the best preserved old-growth forest in Europe into heavily managed forest of the sort one can find all over Europe.

Conclusions

Białowieża Forest is under threat. The work undertaken by State Forests will have a profound impact on the OUV of Białowieża and on its state of conservation. Białowieża Forest is an irreplaceable area for biodiversity conservation due to its mostly undisturbed nature. It is an area where – in line with criterion ix – key ecological processes govern the natural development of terrestrial ecosystems and communities of plants and animals. The significant intensification of logging that has been planned is a serious threat to biodiversity conservation at Białowieża Forest.

The increased rate of logging, including inside management zones formally excluded from forestry, will bring substantial changes to the conservation status of the Białowieża Forest. This drastic degradation of the forest environment by high logging intensity will destroy the on-going ecological process shaping the forest ecosystem, constituting a significant breach of criteria ix and x of the World Heritage Property.

We therefore strongly urge World Heritage Committee to play a vigilant role in preventing any negative changes to the OUV of the Białowieża Forest property. We ask you to consider drafting an adequate decision for the 41st session of the World Heritage Committee. We also ask you to adopt the process of Reactive Monitoring, to ensure that the OUV of the property is not threatened by the ongoing intensive logging in Białowieża Forest.

Belarusian Belovezhskaya Pushcha as an Example of Successful Salvation of a World Heritage Site

Heorhi Kazulka, Belovezhskaya Pushcha – 21 century, Belarus



Belovezhskaya Pushcha was the first property, not only in Belarus but in the countries of the former USSR generally (apart from Russia), to be included on the World Heritage List. In 1992, the UNESCO World Heritage Committee inscribed a cross-border site as a separate unit “Bialowieza Forest” (141,885 ha, with a buffer zone of 166,708 ha). In Belarus, it was initially a small central section of the strictly protected zone (5,500 hectares). In 2014 the World Heritage status was extended to the entire territory of Belovezhskaya Pushcha (80,100 ha). The Belarusian Belovezhskaya Pushcha has also been part of a National Park (since 1991) and a Biosphere Reserve (since 1993). The World Heritage property in Poland initially covered an area of 4,747 hectares (the Bialowieza National Park only) and was enlarged to 61,785 ha in 2014. The uniqueness and ecological value of Belovezhskaya Pushcha comes from the fact that this is ancient, relict, primeval, virgin, lowland broad-leaved forest, preserved relatively untouched and, in comparison with other lowland forests of Europe, is little disturbed by human economic activity. In addition, this forest provides habitat for several interna-

of living organisms, it has no equal on the plains of Europe. The flora of Belarusian Belovezhskaya Pushcha includes 1,040 species of higher plants, more than 3,000 species of fungi, 270 species of mosses, and more than 290 species of lichens. The fauna includes 59 mammal species, 250 bird species, seven reptile species, 11 amphibian species, 24 species of fish and more than 12,000 species of invertebrate animals. About 10,000 species of insect are registered here alone. Belovezhskaya Pushcha is home for the largest population of bison of the Bialowieza subspecies (more than 512 animals in the Belarusian part) in the world. There are many rare and endangered species.

A serious contradiction of the World Heritage concept

From the very beginning of the World Heritage nomination process, there was a serious contradiction in the Belorussian part of Belovezhskaya Pushcha. An area of 87,400 hectares of the territory of Belovezhskaya Pushcha was absolutely or partly protected after the Second World War. But only 5,500 hectares (or 7%) of the unique primeval forest subsequently came under the UNESCO patronage, while the rest of the vast territory (93%) was not within the World Heritage Site. (The “Belovezhskaya Pushcha” National Park now covers an area of 150,083 ha)

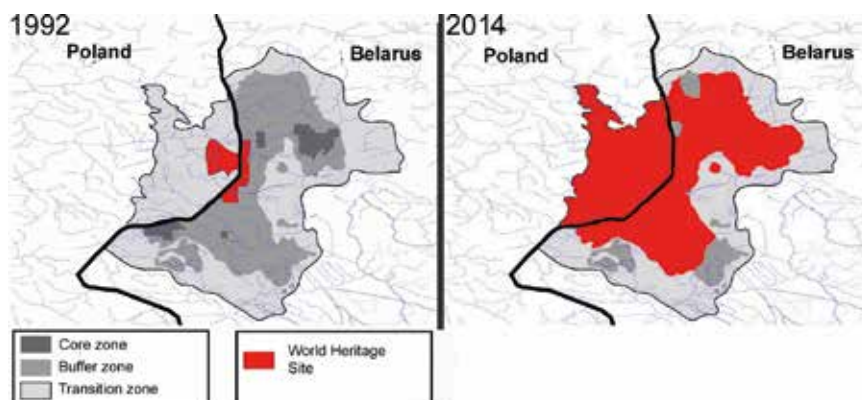


Fig. 1. Extension of the area of the Belovezhskaya Pushcha World Heritage Site in 2014

tionally endangered species. Belovezhskaya Pushcha maintains a unique gene pool and is the standard for natural processes in lowland Central Europe. The average age of forests in Belovezhskaya Pushcha is more than 100 years. Some of forest sites reach ages of 250-350 years old. In Pushcha there are more than a thousand giant trees (400 to 600-year-old oaks, 250-to-350 year old pines and ash, 200-to-250 year old spruces, etc). Belovezhskaya Pushcha is home to relict communities of plants and animals. As to the number of species

of living organisms, it has no equal on the plains of Europe. A long-term practice of selective sanitary felling and clearing deadwood allowed preservation, to a certain extent, of the relict forest outside the boundary of the strictly protected zone. In addition, the volume of logging was relatively small – about 60 to 70 thousand cubic meters per year.

However, since 2001, large-scale timber harvesting and a dramatic intensification of other economic activities have taken place in Belovezhskaya Pushcha. The volume of tim-

ber harvested reached 250,000 cubic meters per year. An outbreak of bark beetles which affected the spruce stands was the stated occasion for this. But the true reason was the culmination of an industrial woodworking project (the harvesting of high-quality timber for a huge timber-processing mill), as well as a lack of the concept and methodology for environmentally friendly logging in the protected area of Belovezhskaya Pushcha. This led to a threat to the unique biological diversity and ecological balance within the primeval forests.

The period from 2001 to 2011 will go down in history as mockery and barbarism towards the great forest¹. This occurred because people whose activities had little in common with wilderness protection, ecologically friendly management, morality and humanism came to rule the national park. In violation of environmental legislation, an attempt was made to introduce primitive forestry technologies typical of regular forestry enterprises. In particular, illegal clear sanitary felling of living forest was conducted; giant trees (pine and spruce) were cut down; scientific plots for permanent forest monitoring were destroyed after logging; and man-made forests were created on a massive scale. In the center of Belovezhskaya Pushcha, an estate of "Father Frost" was illegally built, which became an area of mass tourism. Land drainage in the buffer zone of the National Park was conducted. Even in the strictly protected zone, commercial hunting with the involvement of foreigners was illegally carried out. There were also many other negative things for nature and people such as staff reductions in the Park and persecution and oppression of the local population².

At the same time, the territory of Belovezhskaya Pushcha was closed off from public "green" influence, and any attempts to overcome this ban by independent environmentalists, journalists and "green" activists were stopped, even in violation of the law. Civilized cooperation with the environmental community was absent. There was a significant deterioration in the social sphere and in the observation of human rights. These were the hardest times for Belovezhskaya Pushcha in all of its post-war history. During a period of official tyranny and impunity, an uncivilized regime was established, effectively a police state, in which the country's Constitution and legislation were not properly applied³. As a result, the National Park was suspended for a prestigious European Diploma in 2007 for five years.

International public defence of Belovezhskaya Pushcha

To confront such policies and management within the National Park, an international public campaign was launched in 2003 to defend Belovezhskaya Pushcha⁴, with the involvement of experts from UNESCO and the Council of Europe, and international environmental organizations such as WWF and Greenpeace. The public-initiative group "Belovezhskaya Pushcha - 21 Century" became its core⁵. The worldwide community learned about the tragedy at Belovezhskaya Pushcha. Letters of protest with a demand to stop barbarity in the Belovezhskaya Pushcha Primeval Forest were sent from everywhere to Belarus. It has brought success. Managers of the National Park were forced to react and stop the illegal logging of the best living forests, as well as to reduce the total amount of logging and give up some of the planned ecological adventures. As a result of this public pressure, and with the support of UNESCO, the area of the strictly protected zone of the National Park was doubled in 2004 from 15,000 to 30,000 hectares, with the integration



Fig. 2. Forest and marshland, Bialowieza World Heritage property.

of its separate parts into a single compact area. This was the first significant victory.

In 2007, it was announced at the highest governmental level that the strictly protected zone of Belovezhskaya Pushcha would be expanded to cover the majority of the geographic area of the forest. In 2011, there was a long-awaited change in the National Park's management and the director of Belovezhskaya Pushcha was fired. In 2012, the strictly protected zone of the National Park was once again enlarged to cover more than 83% of the relict forest. Three genera-

1 <http://bp21.org.by/en/ff/>

2 <http://bp21.org.by/en/docs/>

3 <http://bp21.org.by/en/ff/600foto79.html>

4 <http://bp21.org.by/en/docs/>

5 <http://bp21.org.by/ru/idea/>

tions of environmentalists and scientists had fought for this outcome.

In 2008, the authoritative London-based magazine *The Economist* published an article "Revolutions coloured green." It talked about how the environmental movement and initiatives around the world in countries with problematic political conditions used modern technology for nature protection. Countries where successful campaigns for ecological protection had occurred included Armenia, Papua New Guinea, Indonesia, Iran, Poland, Egypt and Greece. The article also described the case of Belarus, referring to the BP-21 Public Initiative Group and its successful defence of Belovezhskaya Pushcha:

"... Or consider the recent history of Belovezhskaya Pushcha, a forest park straddling Belarus and Poland. The Belarus side is managed by a well-connected agency whose new boss has been urging his staff to cook up arguments in favour of commercial logging. Heorhi Kazulka, a forestry official who lost his job because he refused to play ball, is waging an online battle to publicize the park's destruction. What began as a lone effort has attracted many supporters who offer tips and photographs."

The significance of the extension of the World Heritage property

The extension of the World Heritage property to cover the whole territory of Belovezhskaya Pushcha in Belarus is fully in keeping with the development of ecological tourism and will bring an obvious benefit to this economic sector. Tourism development, in turn, will involve the local population providing services, thus enhancing its well-being. This approach is consistent with the concept of sustainable development in the Belovezhskaya Pushcha region. And, of course, this will benefit wild nature and biodiversity. All of the above will undoubtedly serve to raise the prestige of both the National Park and the Republic of Belarus in the eyes of the world community.

About the current situation

In 2015, the National Park obtained an international certificate under the FSC forest-management system. This made it

possible to start an open and independent environmental assessment of nature protection in Belovezhskaya Pushcha with public participation, and to put other important issues on the agenda (for example, reduction of the excessively high population of red deer, introduction of environmentally-friendly forest-management practices in the economic zone, liquidation of plantations of aggressively intruding species such as red oak). In cooperation with scientists and public environmental organizations, innovative scientific and technical projects are being carried out within the National Park (such as restoration of drained bogs, rehabilitation of streams, and conservation of the wolf population).

At the same time, some of the region's deepest problems were revealed, such as the low activity of the local population and insufficient public participation in the management of the National Park and nature protection. The reason for this is the weakness of civil society in Belarus with its non-democratic post-soviet traditions. It will require much effort to change this situation and to democratize society.

Conclusion

Belovezhskaya Pushcha has, at last, become officially, fully and strictly protected as a World Heritage site! Today one can say that the 600-year-long period of slow destruction of Belovezhskaya Pushcha Primeval Forest has ended, and a new era of nature conservation and preservation has begun.

Lastly, Belovezhskaya Pushcha is not only a unique piece of natural heritage but also a place of special spiritual power coming from the living Earth. Its huge spiritual potential should be revived, released and realized. It is quite possible to achieve a high spiritual state of awareness, which is called enlightenment. In combination with a high standard of nature protection, Belovezhskaya Pushcha should become the Center of spiritual ecology – providing a new direction on planet Earth that integrates ecology, humanism, spirituality and love for nature and people. After all, its very name, as translated from the Belarusian language, has a deep spiritual meaning – "Pushcha", white, pure, undefiled, holy.

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Western Caucasus: Unsolved Problems and New Threats

Dmitry Shevchenko, Environmental Watch on North Caucasus

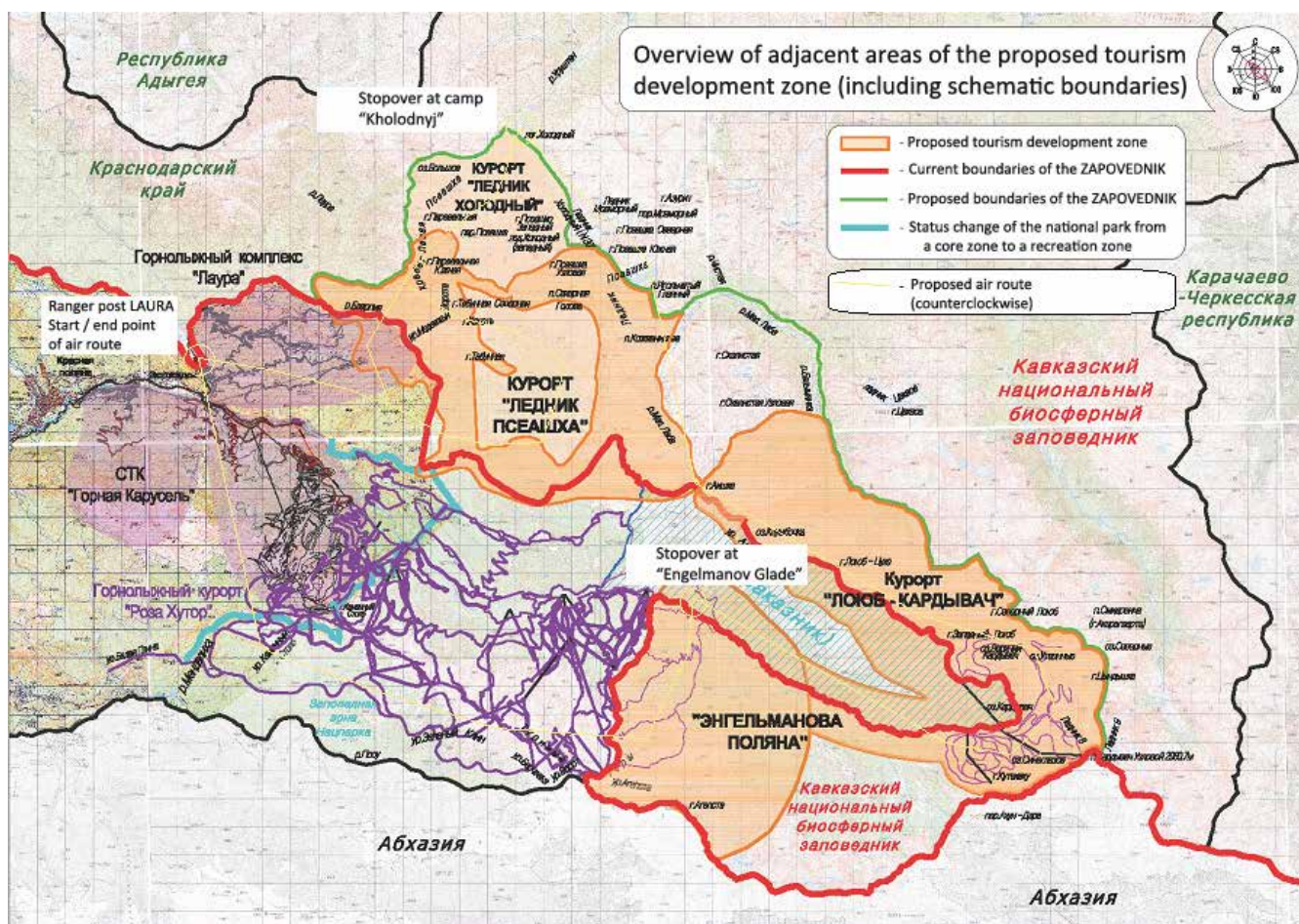


Fig. 1. Map showing proposed changes to zoning in the Western Caucasus to facilitate massive tourism and ski-field developments

The western part of the Greater Caucasus (Western Caucasus) is distinguished by an exceptional diversity of flora and fauna, being one of the main centers of biodiversity in Eurasia. Over six thousand species of plants and animals have been recorded in this area, which is also famous as the largest mountain forest reserve on the European continent. Forests occupy not less than 60% of the total area of the reserve. In the local flora there are more than three thousand species, out of which 55 species of vascular plants are listed in the Red Book of Russia.

The Western Caucasus is inhabited by a large number of endangered, rare, endemic and relict species of plants and animals. Here are preserved the unchanged natural hab-

itats of Caucasian red deer, West Caucasian tur, chamois, Caucasian subspecies of brown bear, and wolf. Twenty-five species of vertebrates living in the Western Caucasus are listed in the Red Data Book of Russia and eight of them are included in the International Red Book. A special place in the ecosystem is occupied by the Caucasian bison. Work on its reintroduction began in the early 1920s.

In 1999, a number of natural protected areas of the Western Caucasus were included in the eponymous UNESCO World Heritage Site with a total area of 282,500 hectares. The nomination includes the Caucasian state natural biosphere reserve with its buffer zone, the Big Thach nature park, and the following nature monuments: Buyny Mountain Ridge,

Headwaters of Tsitsa River and Headwaters of Pshekh and Pshekhaskh.

For the duration of its existence of the Western Caucasus property, the Russian government has not only failed to take necessary and sufficient measures to preserve its natural integrity, but has also contributed to threats to this territory.

1. The situation with the construction of the “Science Center Biosphere” and the road to it from the city of Sochi

In 2002, the Russian Minister of Natural Resources, Vitaly Artyukhov, signed decree No. 789 “On the establishment of an integrated research and technology center within the Caucasian State Natural Biosphere Reserve”. According to this document, the objectives of the “scientific center” were to include securing the protection of nature within the biosphere reserve, research, environmental monitoring, implementing technological and environmental education, and experimental work on the productivity of the biocoenosis of the Western Caucasus.

Construction work began in 2003 despite a lack of permits and in the absence of positive findings from the state environmental impact assessment. By the summer of 2004, the foundation of the “Biosphere-1 facility” was completed and a hostel was built for the staff (“Biosphere-2 facility”). By 2007, the residence and the “hostel” were almost finished, and intensive work began on preparing ski slopes. A swathe through the fir forest was cleared for a cable car from the entrance of the residence to a ski lift, despite the lack of a permit to do so. Officers of the Kurdzhipsokogo Leskhoz (a forest management entity) accidentally discovered this illegal logging. According to their statement, the police department of the Maikop district of Adygea initiated a criminal case (No. 5070431), but on the instructions of the leadership of the Ministry of Internal Affairs of the Russian Federation, the case was relocated from Adygea to Moscow, where it was discontinued after some time¹.

In 2004, in order to “legalize” these constructions the Russian Affairs Department initiated a process to remove an area known as Lunar Glade from the reserve. As a result, about 200 hectares were excluded from the reserve as part of

the “specification of borders”, while remaining within the boundaries of the World Heritage site.

In 2013, the “Science Center Biosphere” began to build a road from the village Solokh-Aul (Lazarevsky district of Sochi), which was to reach the barrier at “Babuk-Aul”. Officially, the project was named “Road route to the meteorological station of the Caucasian Reserve”. About 10 kilometers of this road were constructed within the Caucasian reserve.

The construction of the road was accompanied by massive logging in the valley of the Shakhe river, including boxwood groves (*Buxus colchica*) – a Caucasian relic listed in the Red

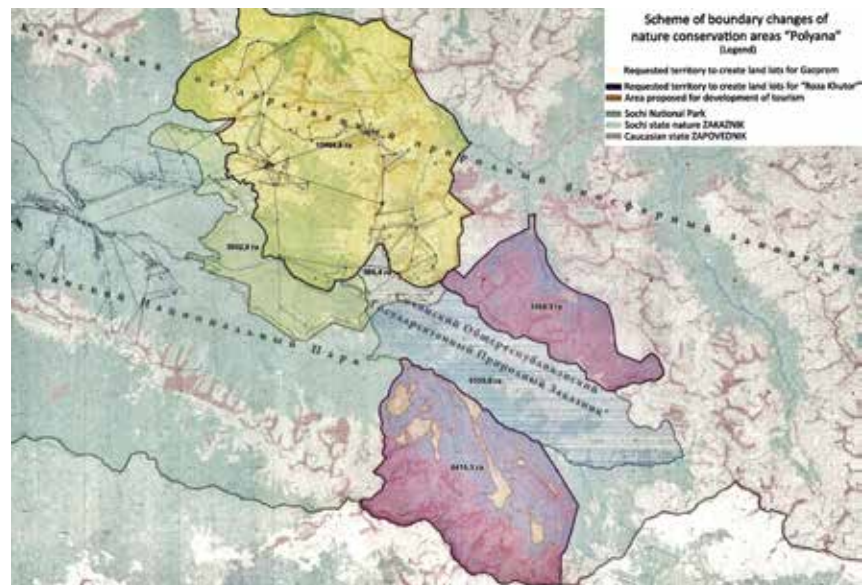


Fig. 2. Map showing boundary changes proposed in nature conservation reserves in the Western Caucasus to facilitate massive development of ski-fields and cable cars

Book of the Russian Federation. Along the road from the village of Solokh-Aul to the barrier at “Babuk-Aul”, construction equipment has been causing soil erosion and disrupting the courses of the streams, thereby polluting the Shakhe River – a habitat for trout and the Atlantic salmon. At the end of 2013, the construction of the road was suspended, but the damage to the mountain landscapes remained and the environment was not rehabilitated.

2. The threat from the proposed complex on the Lagonaki Plateau and changes to the nomination of the Western Caucasus

In June 2010, at the economic forum in St Petersburg, the “Altitude 5642” program was presented, envisaging the construction of a network of ski resorts worth about \$15 billion in the Northern Caucasus, and a framework investment agreement was signed between OAO Resorts of the Northern Caucasus and a consortium of creditors under the auspices of the French public-sector financial institution “Deposits and Consignments Fund”.

¹ See link: <http://ewnc.org/node/660> [in Russian]

The most western resort of the proposed chain was “Lagonaki”, on the plateau of the same name, within the biosphere zone located inside the World Heritage property. The schematic maps of Altitude 5642 showed that this unique mountain plateau would be severely defaced by roads, ski runs, cable ways and power lines. As well as the Western Caucasus reserve, the planned resort would also affect the nature monument Upper Tsitse River.

In 2011, the government of the Russian Federation initiated amendments to the Federal Law “On Special Economic Zones in the Russian Federation,” providing tax breaks for residents of touristic and recreational zones. In addition, the State Duma amended the Federal Law “On Specially Protected Natural Territories”, allowing the construction of “physical education and sports facilities” within biosphere reserves.



Fig. 3. Development of major ski-field infrastructure, Western Caucasus

Photo: Dmitry Shevchenko

The building of infrastructure at the Lagonaki plateau has been restrained only by the uncompromising position of the UNESCO World Heritage Center. But this prompted the Ministry of Natural Resources of Russia, as well as the authorities of Adygea and the Krasnodar Krai, to re-draft the nomination for the Western Caucasus World Heritage site.

The new nomination, on the one hand, planned to increase the area of the World Heritage property by 69,828 hectares by incorporating the protected area of the Sochi National Park (on the southern slope of the Greater Caucasus Range). On the other hand, it involved an excision of 6,550 hectares which developers said would “no longer meet the criteria for integrity and Outstanding Universal Value (OUV)”. This statement applied to the Lagonaki Plateau, most of the Fisht-Oshten mountain range, as well as the area of Lunnaya Polyana. In 2014, this draft of a new nomination for the Western Caucasus was submitted for approval by the Ministry of Natural Resources of Russia and then sent to the UNESCO World Heritage Center in Paris.

3. The threat of extending ski resorts in the Krasnaya Polyana region at the expense of the territory of the Caucasian Reserve

In 2016, Gazprom announced plans to significantly expand its ski mountain-tourist center (MTC) in the Krasnaya Polyana area: the company wants to increase the resort’s capacity from 25,000 people a day to 40,000 by building four more ski resorts on the territory of the Caucasian reserve.

The first complex is planned to be located on the top of Mount Tabunnaya. This would involve a cable car from the already existing MTC Gazprom. The intention is to build a tourist center on Tabunnaya, as well as a ski school, a children’s entertainment center, attractions, cafes, three restaurants and a mountain hotel. Gazprom proposes to build a cable car across the valley of the river Pslukh up to the

Aishkho ridge. For Aishkho itself there are plans to build restaurants, two multifunctional centers, and two mountain hotels as well as camping areas. From here the cable car would be extended to the Pseashkho Glacier, where skiers could ride nine months a year and where they would be provided with a tourist center, four restaurants and a mountain hotel. Another cable car, according to Gazprom’s plans, would stretch from the source of the Pslukh River and will loop the ski area to the Kholodny Glacier. Proponents of the new MTC say that the new 250 km of ski slopes and 83 km of cable

cars “will increase the capacity of the resorts by 20 thousand people a day” – almost double the current capacity.



Fig. 4. Development of new roads into the Western Caucasus World Heritage property.

Photo: Dmitry Shevchenko

To facilitate such developments inside the Caucasus Reserve, the State Duma passed a law in 2016 on so-called “Biosphere special zones”, allowing borders of nature reserves to be amended to allow construction of sports and tourist infrastructure. However, the problem was not just the legal obstacle, but that, if the infrastructure proposed by Gazprom were established, the Caucasus Reserve would cease to exist as a compact protected nature reserve. Being at the core of the Western Caucasus World Heritage property, this would lead to a complete loss of the property’s environmental value.



Fig. 5. Mountain scenery, Western Caucasus

Photo: Dmitry Shevchenko

Simultaneously with Gazprom, Rosa Khutor LLC announced plans to extend its resort. To the company it seemed that the rented area on the northern slopes of the Aibga Ridge (part of the Sochi National Park) was insufficient to increase the capacity of its resort. It therefore decided to obtain the right to build additional ski infrastructure on the southern slope

of the Aibga Ridge, in the district of the Turikh Mountains, as well as in the upper reaches of the Mzymta River. These areas are unique natural territories from the point of view of biodiversity and include pristine landscapes of forests and mountains.

Moreover, Rosa Khutor also plans to construct two more resorts directly within the boundaries of the Caucasian reserve. The company has already begun building a road to the upper reaches of the river Mzymta. These construction works are conducted inside the former core zone of the Sochi National Park along with large-scale deforestation and disturbance of watercourses.

To preserve the Western Caucasus World Heritage property, the following measures are required

- The government of Russia should reject any of the plans by OAO Gazprom and OOO Rosa Khutor to extend ski resorts into the territory of the Caucasian reserve and its buffer zones;
- The government of Russia should extend the Caucasus Reserve by including the former Sochi Zakaznik and all or part of the Psebai Zakaznik. This would be done as compensation for the excluded areas of the “Biosphere complex”, and as compensation for the environmental damage caused by construction of the complex and associated roads;
- The government should establish a buffer zone around the entire Western Caucasus World Heritage site and ensure an appropriate regime for its protection, including restrictions on logging.

The Natural System of Wrangel Island Reserve World Heritage Property: Main Threats

Mikhail Kreindlin and Andrey Petrov, Greenpeace Russia



Located above the Arctic Circle, this property includes the mountainous Wrangel Island (7,608 square kilometres), Herald Island (11 square kilometres) and surrounding waters. It was inscribed in 2004 under criteria ix and x for its rich natural history, unique evolutionary status within the Arctic, and great biodiversity. It provides refuge for whales, walrus, sea birds and snow geese, and has the world's highest density of ancestral polar-bear dens. Several years ago Wrangel Island started to face threats from possible oil drilling in the Chukchi Sea and the construction of a military base, although the regime of nature reserve and World Heritage status did not allow for these developments.

The 2016 State of Conservation (SOC) Report, submitted to the World Heritage Centre by the State Party (the Russian Federation) insists that *"A complex of measures for provision of the necessary facilities and cleaning the territory from the accumulated environmental damage during the previous economic activity was carried out on Wrangel Island in 2016 to ensure the security of the Russian Federation. The area of territory, affected by these works, is less than 0.001% of the total area of the World Heritage Site "Wrangel Island"; at that the location, earlier engaged in business activities, is in use. ... Thus, the specified activity does not affect the Outstanding Universal Value (OUV) of World Heritage Site "Wrangel Island".*



Fig. 1 Wrangel Walrus

Although the installation necessary for ensuring security really does occupy a small area of the World Heritage property, and thousands of drums left from previous operations

will be removed, the area concerned is part of the habitat for fauna protected by international agreements and inscribed on the IUCN Red Data List. So the activities associated with constructing the military base do cause significant harm for these species.

According to scientists' data, the creation of the military base will inevitably lead to serious disturbance of the natural complex due to the constant presence of a considerable number of servicemen on the island, the construction works that have commenced, and the active movements of vessels in the marine area of the nature reserve. The data in the comments to the 2015 SOC Report identify cases of poaching and harm to polar bears on the part of contractors engaged in the construction of military facilities on Wrangel Island.

According to Russian media sources, the number of objects and staff of the organizations conducting the construction had grown in 2016. For example, "Spetsstroy" (Federal Agency for Special Construction) of Russia announced that works on eight military-base facilities on Wrangel Island will be completed before the end of the year. With this aim, the General Administration of engineering work No. 2 working at Spetsstroy had increased the number of construction workers involved in the execution of works to more than 100.

Spetsstroy has also confirmed that, by the end of the year, it plans to have constructed a garage, boiler room, water-treatment plants, residential and administrative complexes, and a modular station for the extraction of water, as well as the position of the en-route radar complex¹. According to the Russian Defense Ministry, the newest trass radar system (TRLK) "Sopka-2" was put into operation on Wrangel peninsula in 2016². This was stated to journalists by the chief of the press service of the Eastern Military District (EMD), Colonel Alexander Gordeyev.

¹ <https://pronedra.ru/weapon/2016/10/22/voennaya-baza/>

² Khabarovsk, 4 January, TASS correspondent Sergey Mingazov. <http://air-fly.ru/na-ostrove-vrangelya-v-arkticheskoy-zone-weden-v-ekspluatatsiyu-radiolokatsionnyj-kompleks.html>

The air bases are located between Wrangel Island in the east (north of the Bering Strait) to the Norwegian border in the west. Military construction will continue in 2017, despite the fact that it is planned to cut the defense budget by 27% this year³.



Fig. 2 Tundra landscape on Wrangel Island

Photo: Greenpeace

At the same time, according to experts, any impact that causes anxiety for bears, even the seemingly minor impacts of environmental tourism, can significantly affect the state of the population of bears on Wrangel Island. The population of polar bears is now under threat. The website of the "Polar Bear" special program of the Russian Presidential Administration says: "Currently, the major threats to the polar bear are: industrial development of the Arctic, pollution and habitat destruction as well as direct destruction by poaching. The factor limiting movement of the polar bear is seasonal sea ice..."⁴



Fig. 3 Polar bear on a glacier, Wrangel Island

Photo: Greenpeace

It is necessary to note that during the breeding season polar bears are extremely sensitive and usually do not allow people to approach within a kilometer." To avoid frightening away polar bears in the nature reserve during passage of vessels

through the ice and on-the-ground passage of vehicles in the nature reserve is impossible. Therefore, severe restrictions should be introduced within the reserve on the number of cruises, landing sites, routes passing through the territory of the reserve, the number of visitors landing at any one time from vessels, and the size of land groups". So wrote the head of the scientific department of the reserve and world-famous Arctic zoologist Nikita Ovsyannikov last year. Based on monitoring results, he demanded suspension of the construction of two small eco-tourism lodges on Wrangel Island because even this small intervention had already caused significant damage to the female bears. "We need an independent complex examination of the project and administrative decisions to stop the escalation of the anxiety factor for polar bears on Wrangel Island."

Naturally, the construction of the military base will cause much more damage to the population of polar bears, as well as to other species of marine and semi-aquatic animals (such as the walrus, grey whale and various species of birds).

According to previously published information, the director of the reserve recognized that construction affects wildlife within the reserve. "The base is built on the site of the former Ushakovskoe village. We tried to place it outside of the bears' passage. On Rogers Bay spit the walrus sometimes appear during autumn, but now because of construction and the frequent flight of helicopters, walrus stopped appearing in this place."⁵

The OUV for which Wrangel Island was inscribed as World Heritage is therefore under threat. At the same time the Ministry of Natural Resources and Ecology of the Russian Federation developed and published amendments to the Federal Law "On Specially Protected Natural Areas" that foreshadow:

...

Section 2. Changing of boundaries of Federal specially protected natural areas in a case of exclusion of land plots and water bodies from their area is allowed only in relation to:

- b) land plots and water bodies necessary for realization of activities for organization of defense of the Russian Federation, provision of protection and preservation of the State boundary of the Russian Federation, in the absence of alternative solutions for the placement of the respective objects;⁶

Thus the areas occupied by military infrastructure inside the boundaries of the Wrangel World Heritage property could be excluded from the area of the nature reserve by a decision of the President of the Russian Federation. The draft law does not limit the size of these excisions (i.e. the area

³ <http://inosmi.ru/politic/20170116/238534497.html>

⁴ <http://programmes.putin.kremlin.ru/bear/>

⁵ http://defendingrussia.ru/love/ochistit_ostrov_vrangelya

⁶ <http://regulation.gov.ru/projects#npa=56055>

excluded from the boundaries of the nature reserve could be extended beyond the area already occupied by the military installations on Wrangel Island).

The Russian Federation has not submitted to the World Heritage Centre any notification about plans of construction of military objects or about conducting military-training exercises on the territory of the property. The State Party of the Russian Federation has therefore made decisions and conducted activities that have already damaged the natural system of the World Heritage property and, if continued, could entail the loss of its OUV.

The State Party of the Russian Federation is preparing amendments for legislation to legalize the construction of military installations on Wrangel Island and to make their expansion possible. It has therefore not fulfilled the requirements of the decisions of the World Heritage Committee at its 39th and 40th sessions. The State Party to the Convention has therefore made decisions and conducted activities that correspond to the criteria for the inscription of the Natural System of Wrangel Island Reserve World Heritage property on the World Heritage in Danger List at the 41st session of the World Heritage Committee.

Golden Mountains of Altai — State and Threats



Oksana (Oxana) Engoyan, "Altai — 21 century"



Fig 5: Protected Areas and World Heritage Sites in the Altai

The Golden Mountains of Altai were inscribed on the UNESCO World Heritage List in 1998 under criterion ix for Outstanding Universal Value (OUV). This 1.9-million-hectare property represents the most complete sequence of altitudinal vegetation zones in central Siberia, including steppe, forest steppe, mixed forest, subalpine vegetation and alpine vegetation. It provides important habitat for endangered species such as the snow leopard.

The property consists of five clusters. There are two state nature reserves (Altaisky and Katunsky), two nature parks (Belukha and Tranquillity Zone of Ukok Nature Park) and a buffer zone around Teletskoye Lake. These reserves provide various degrees of protection. However, threats apply to all clusters and include:

- Disturbance of wildlife (tourism, particularly uncontrolled tourism); and
- Destruction of ecosystems through pollution, logging, soil-cover violations and so on.

The Katunskiy and Belukha cluster

In Katunskiy nature reserve and the adjacent Belukha nature park, tourism is organized on a commercial basis. According to the official figures, Belukha nature park was visited by eight thousand people in 2015, which is 77% more than in the previous year (2014 – 5000 people.) Unfortunately, there is no monitoring of the condition of natural systems. The state of conservation of this cluster can be assessed only very approximately. For example, the region contains the head-

waters of the Katun river and in 2014 suffered from a large flood. However, data on the ramifications of this catastrophe for water bodies within the reserve were not published. This situation has resulted in the revival of a proposal for hydroelectric power stations on the Katun River.

The Altaisky and Teletskoe Lake cluster

The Altasky nature reserve and the buffer zone around Teletskoe Lake (its left bank), are also highly exposed to anthropogenic pressures. Factors include:

- Controlled and uncontrolled tourism. According to official figures, the reserve was visited by 68,828 people in 2015;
- Active development of tourist activities on the left bank of the Chulyshman River accompanied by mass visits to the territory of the reserve, located on the right bank. Large-scale construction of tourist facilities and infrastructure are also occurring on the lower reaches of the Chulyshman River;
- An increase in the number of boats: according to official figures, at the beginning of 2016 there were registered 937 units consisting of small vessels (in reality there were many more). This has caused pollution of the lake with oil products;
- Economic development of the left bank, including mining, forestry, tourism and infrastructure development.

Despite the recognized environmental value of the Altai Siberian pine forests, the most serious threats arise from forestry activities. Logging in impacted Siberian pine forests is not formally recorded as timber harvesting and appears in the documents as “sanitary-improving measures” and “forest care”. However, in most cases this is a loophole that allows the logging of Siberian pine as a commodity timber. This leads not only to the extraction of valuable Siberian pine trees, but also to a deterioration in ecological conditions. It reduces the sustainability of forests and creates eroded hillsides. Wherever there are roads, there are also the felling of trees, vast wastelands left after clear-cutting, and abandoned stacks of rubble and rotten wood along the roadsides. This is unacceptable, not only for management of fishing resources but also of operational forests.

In addition, the Kam-Pari Company Ltd has been granted a licence (number GOA00257BR) for the development of a deposit of gold on the Maly Kalychak River inside the boundaries of the cluster. It is not known definitely if the development will proceed, but if the licence period is extended, it may well go ahead. The Maly Kalychak River is a tributary of the Samysh River which flows into Teletskoye Lake.

On 2 February 2017, the Prosecutor’s Office of Turochaksky District identified violations of environmental legislation in

the waters of Teletskoe Lake in the Samysh tract, where a road is under construction in the lake’s water-protection zone. Although the Court decision has entered into force, the construction of roads to the Samysh will continue. Moreover, as part of the development of a tourist-and-recreational framework around Teletskoye Lake, there are plans to build a road more than 15 kilometres long from the village of logach to a ski resort on the mountain of Kukuja and to the mouth of the Samysh River¹.

Residents have protested against plans to “thin out” the taiga along the Teletskoe Lake in order to facilitate road-building. Representatives of the Tubalar indigenous people live in this village. The pertinent information was confirmed by the Deputy Head of administration of Turochaksky district, Vyacheslav Haravlev². Development will therefore potentially damage Teletskoye Lake.



Fig. 2. Damage to the forest in the Teletskoe Lake area

The World Heritage Committee has repeatedly stated that the development of mineral resources is incompatible with World Heritage status (Decision 36 COM 7B.24). Issuing a license for the development of the gold deposit inside the boundaries of the Altai World Heritage area therefore threatens the property’s OUV.

Active construction of tourist infrastructure has also been carried out in the buffer zone of Teletskoye Lake. For example, a large tourist base with the name “Altai Village” has been constructed there. The road and power lines were established in 2015–2016. Associated clearing of forest as well as the growing influx of tourists could damage the property’s OUV.

¹ <http://www.gorno-altaisk.info/news/72918>

² <http://www.bankfax.ru/news/104735/>

Tranquillity Zone of Ukok Nature Park cluster

The Tranquillity Zone of Ukok Nature Park is under growing threat from anthropogenic pressures. According to official figures, the number of visitors has declined from approximately 700 people in 2015 to about 500 people subsequently. However, this is untrue. In 2013 the permit regime was abolished for citizens of the Russian Federation. This has contributed to the Park's accessibility. In addition, there is a growing number of offers from travel agencies to build tourist infrastructure within the park.



Fig. 3. Four-wheel-drive tourism in the Tranquillity Zone of Ukok Nature Park

The use of All Terrain Vehicles (ATVs) within the park is an issue. In the territory of the park and on the only public road to it, about 10-12 off-road vehicles have been observed every day, including heavy vehicles adapted for the transportation of tourists such as KAMAZ and GAZ-66 (belonging to the

company "Altai-Tour"). There is much evidence of the passage of vehicles and the impacts of parking in the water-protecton zones outside of specially designated places with hard surfaces (such places don't exist within the nature park itself). Unauthorized campsites are characterized by discarded household trash and other waste in the protective zones of the wetlands (lakes Ukok, Kaldzhinkol, Kaldzinkol-bas and Gusinoe). This leads to further disturbance and destruction of ecosystems. Of particular concern is the bar-headed goose (*Anser indicus*), which nests on Gusinoe Lake. This species is inscribed in the Red Book of the Russian Federation and on the IUCN's Red List. Tourist groups stay on Gusinoe Lake constantly. The website of "Altai-Tour" marks Gusinoe Lake as one of the stops on the automotive tour to the Ukok Plateau³. The constant presence of large numbers of people, especially during nidicolous (nesting) and post-nidicolous periods, exacerbates disturbance of the bar-headed goose and could reduce its numbers within the nature park.

There are therefore the following violations of legislation of the Russian Federation:

- In accordance with the Water Code of the Russian Federation (article 65), the following activities are prohibited inside the boundaries of water-protective zones: "... Movement and parking of vehicles (except special vehicles), except for their movement and parking on roads in specially equipped places with hard surfaces...";
- In accordance with the Federal Law "On Environment Protection" (article 60), activity that leads to a reduction

³ <http://www.altai-tour.ru/tours/avtotury/avtotur-aktru-plato-ukok-teletskoe-ozero/>



Fig. 4. Map of the proposed route of the gas pipeline through the Tranquillity Zone of Ukok Nature Park

of the number of rare and endangered animal and plant species and which impairs their habitat, is prohibited;

- In accordance with the Federal law "On Wildlife" (article 24), activities that could lead to death, reduction in number, or destruction of habitat of fauna listed in the Red Books are not allowed;
- In accordance with the Federal Law "On Specially Protected Natural Areas" (article 21) on the territories of nature parks, activity leading to a change in the historically formed natural landscape, the reduction or destruction of environmental, aesthetic and recreational qualities of nature parks, as well as a violation of the maintenance regime for historical and cultural monuments, is prohibited;



Fig. 5. A view of the Ukok Plateau in the Golden Mountains of Altai World Heritage property.
Photo: Greenpeace

- In accordance with the Federal Law "On Environmental Impact Assessment" (article 12), objects whose construction or reconstruction occurs on the lands of regional and local specially protected natural areas, with the exclusion of project documentation mentioned in sub-point 7.1 of the article 11 of this Federal Law, in accordance with the legislation of the Russian federation and legislation of the subjects of the Russian Federation, is subject to obligatory environmental impact assessment.

In accordance with the regulations for the Tranquillity Zone of Ukok Nature Park Nature Park⁴, management of the park is to be undertaken by the authorized body of the state of the Altai Republic in the sphere of environment protection. Operational management of the park is therefore entrusted to the budget institution of the Altai Republic named "Direction of specially protected areas of the Altai Republic". In practice, however, this institution conducts no surveillance in the sphere of organization and functioning of the Tranquillity Zone of Ukok Nature Park Nature Park. This situation has led to uncontrolled use of the area by tourism interests and consequent harm to natural complexes and their components.

As regards the gas pipeline "Altai" ("Power of Siberia-2"), negotiations are continuing. However, a new scheme for planning of pipeline transport provides for the construction of the "Altai" gas pipeline through the Golden Mountains of Altai World Heritage property. Any claim that there is no significant anthropogenic influence on the territory of the Tranquillity Zone of Ukok Nature Park Nature Park does not therefore not correspond to reality.

Uncontrolled tourism is inflicting serious anthropogenic pressures on the natural ecosystems of the World Heritage property (Tranquillity Zone of Ukok Nature Park) that could lead to the loss of the property's OUV. Authorities are not effectively regulating tourist numbers, restricting the entry of vehicles to the property, or evaluating the damage. Thus, there are sufficient grounds for inscribing the Golden Mountains of Altai World Heritage property on the World Heritage in Danger List. It is necessary for a decision to be made about such an inscription during the forthcoming 41st Session of the World Heritage Committee.

⁴ Altai Republic 2005; Decree of the Government of Altai Republic 23 May 2005; No. 77 (in the edition of decrees of the Government of Altai Republic dated 24 April 2006 No. 62, 21 April 2008 No. 87, 8 September 2011 No. 244, 2 August 2012 No. 202, 15 March 2013 No. 68, and 18 August 2015 No. 254)

Planned Dams in Mongolia in the Context of Lake Baikal

Arkadiy Ivanov, Greenpeace Russia
Sergey Shapkhaev, Buriat Regional Union for Baikal
Eugene Simonov, Rivers without Boundaries Coalition



Russian proverb: "Woe does not come alone"

Lake Baikal is an ancient, massive lake in the mountainous Russian region of Siberia, north of the Mongolian border. Considered the deepest lake in the world, it was listed as World Heritage in 1996 under all four natural criteria.

The most important current problem affecting Baikal is a decline in shallow-water endemic communities as a result of water warming, a decline in the level of the lake, eutrophication, and breeding of the alien species. Despite official recognition of these problems for years, there has been no systematic management response. In 2016, the Ministry of Natural Resources was forced to admit that the origins of the problem are still not clear.

Eutrophication will be further exacerbated by forest and peat fires. It is expected that catastrophic fires in the catchment area of Baikal in 2015 will inevitably lead to changes in the physical and chemical characteristics of drainage to the lake and could considerably influence the condition of water ecosystems. Little monitoring is done to document these impacts. The only response planned is to open the affected area to clear-cut "sanitary logging" to prevent pest outbreaks. For these purposes, a draft law allowing clear cuttings in the Central Environmental Zone of the Baikal Natural Area was developed¹ and if adopted may allow "sanitary logging" over huge areas, creating a basis for mass abuse.

Proposals to soften restrictions imposed by several other laws and regulations are under consideration, including:

- To reduce the application of the Federal Law "On Environmental Impact Assessment" dated 23 November 1995;
- To amend the Federal Law "On Protection of Baikal Lake" N 94-FZ dated 1 May 1999;
- To reduce the geographic scope of the Regulations "On the water protective zone of Baikal Lake" (to be reduced

from the whole area of the Central Zone to 500 meters from the shore).

An Environment Impact Assessment on development of the "Baikal Harbor" special economic zone (SEZ) on the property's Outstanding Universal Value (OUV) is still absent despite many years of requests. The SEZ has been transferred from federal to provincial authorities and remains dysfunctional.



Fig. 1. Lake Baikal.

In spite of public statements by the authorities, waste neutralization and site restoration of the Baikalsk Pulp and Paper Mill (BPPM) industrial site have not been conducted and acceptable technologies have not been identified.

The period of suspension of the license for development of the Kholodninskoye zinc deposit in the Central Zone ended on 31 December 2014. No new decisions about the future of this license have been made until now, thus presenting a potential threat to the OUV of the site.

A Management Plan for the Lake Baikal World Heritage property has not been developed and little is known whether there is an official intention to do so. The lack of this plan is aggravated by the relegation of management responsibility from the Ministry of Natural Resources of the

¹ <http://regulation.gov.ru/projects#npa=56174>

Russian Federation, as the leading coordinator of the Baikal Commission, to the Federal Agency of Water Resources (a purely hydro-economic body) which has led to decisions compromising Lake Baikal's protection. On 1 July 2016, the Government of the Russian Federation issued the Decree of No. 626 "On maximum and minimum values of the water level in Lake Baikal in 2016-2017". This Decree widens the limits of water-level change from one to more than two meters, thus providing better conditions for downstream hydropower and water intake facilities on the Irkutsk Dam that belong to the Irkutskenergo\EN+Group. So far permission to violate previous limits has been given only for two years and not forever. The term of this decree expires in 2017 but a desire by the authorities to achieve restoration of the lake level is not apparent.

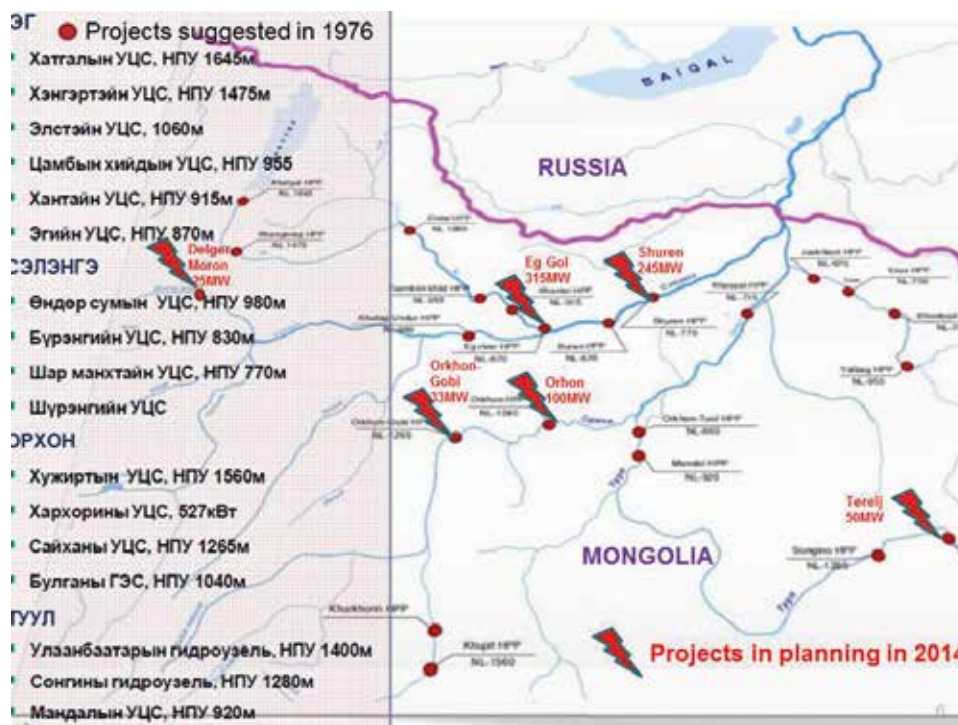


Fig. 2. Proposed dams affecting the catchment of Lake Baikal

Map: Rivers without Boundaries

In 2017, at a public meeting with the Russian Minister of Natural Resources, the experts employed by the Federal Agency of Water Resources responded to a civil-society request for establishing water-level control standards more acceptable to the ecosystem with a statement that "there is no reliable monitoring data showing that regulation adversely affects the ecosystem." At the same time, the Government stopped funding the oldest monitoring station that had been measuring the characteristics of planktonic communities in the lake for over 70 years. Even minimal monitoring has been reduced².

Domestic problems and potential threats as well as inefficient management in Russia are quite sufficient reasons to

be deeply concerned with the well-being of Lake Baikal. Unfortunately more problems are in the making upstream in Mongolia.

Update on plans in Mongolia

As reported to World Heritage Watch in 2015 and 2016, Mongolia plans massive development of hydropower and water-transfer facilities in the basin of Lake Baikal. There are plans for the Egiin Gol Hydro, the Shuren Hydro and the Orkhon-Gobi Hydro\Water-transfer complex, with feasibility studies for the latter two being supported by the MINIS Project under a World Bank loan. Such projects have been listed as a number-one mitigation measure under Mongolia's

Nationally Determined Contribution (NDC) under the Paris Agreement, with more than \$600 million of "climate finance" requested from the global community to assist in its implementation.

The Mongolian government has recently made several statements that it is ready to start development of the Egiin Gol and Shuren dams as soon as funds are available. The Egiin Gol Hydro construction is included in the GOM Action Program for 2016-2020³, while financing Shuren Hydro was again discussed in December 2016 during an official visit to Kuwait⁴ of the Chairman of the State Great Khural, Mr

M.Enkhbold. Meanwhile Mongolia is very slow to implement any requirements stemming from the World Heritage Convention.

Virtually nothing has been done to fulfil WHC requirements regarding Egiin Gol Hydro, the largest ready-to-go dam project. Construction began in 2015, but was stopped when China EximBank put finance on hold. Full data from the previously conducted EIA has still not been released to the public, as was noted by locals during a public consultation in Buryat Republic.

2 <http://www.nature.com/nature/journal/v538/n7623/full/538041a.html>

3 <http://embassyofmongolia.co.uk/wp-content/uploads/2016/10/Government-action-programme.pdf>

4 <https://www.news.mn/content/print/320527>

The World Bank MINIS Project has organized consultations in Russia from March to June 2017 to discuss detailed environmental and social assessment for the Orkhon and Shuren dams after which it will be finalizing relevant terms of reference (TORs). An important component of the process is a Regional Environmental Assessment (REA, a type of strategic assessment). So far, the recommendations issued by an IUCN Mission and the Decisions of the WHC Committee have not been sufficiently taken into account in the design of the feasibility-study process. The MINIS Project managers claim they designed their studies to fulfil WHC requirements. We believe that without radical improvement of those draft TORs, the intended assessment will not properly reflect all possible impacts on Lake Baikal OUV. We have the following concerns:

(A) Decision 40 COM 7B.97 of the World Heritage Committee clearly requested “an assessment of cumulative impacts (CIA) of any planned dams and reservoirs in the Selenge river basin that may have an impact on the OUV and integrity of the property”. It also called on parties to jointly develop strategic environmental assessment for future hydropower projects which could potentially affect the property. However, the Shuren and Orkhon projects will have two separate assessments for the same Selenge River Basin. Such an arrangement will create confusion because the same strategic assessment issues will be addressed twice in the same river basin. Alternatively, a unified assessment for the Orkhon and Shuren projects, if properly implemented, could satisfy the Committee’s request.

(B) The Committee clearly asked for an assessment of the cumulative impact of the projects. The draft TORs provide for two REAs which are incorporated as small introductory parts in the detailed ESIA for the Shuren and Orkhon projects. Sealing REAs inside ESIA creates a perverse incentive for a winning consultant to reduce its effort on the former and focus on the latter. The TORs exacerbate this corrupt incentive by not specifying sufficient quantifiable requirements for the REA, which will therefore just be considered a prelude to a more detailed ESIA, resulting in no clear conclusion. The draft TORs have also allocated insufficient time (5-6 months) to production of the REA. Less ambitious cumulative impact assessments typically take longer. In addition, payments for deliverables are envisioned only for ESIA outcomes, leaving the consultant without any incentive to complete the REA in sufficient detail or quality. Meanwhile, the general tasks outlined for the REA are much wider and challenging than those for a standard detailed ESIA. The selection criteria do not require experience by the consultant in strategic assessments, REAs and cumulative-impact assessments.

The underlying reason for combining the REA and cumulative impact assessment with the ESIA in the same bidding procedure is very simple: the Mongolian government needs

to have completed the ESIA document to seek investors for the dam projects to start construction immediately after the assessments. If the REA and ESIA were divided into two separate consecutive bidding processes, it would increase the probability of an impartial strategic assessment and full consideration of the potential impacts on the property’s OUV.

Call for help from the World Heritage Committee

Since the process of consultations in Russia has given civil society groups a chance to request improvement in assessment design, Greenpeace and RwB have sought a written opinion from the World Heritage Center regarding necessary improvements of the TORs for regional environmental assessments and detailed ESIA. In particular:



Fig. 3. Snowfall on the Selenge River delta, the biggest tributary into Lake Baikal

- Decision 40 COM 7B.97 clearly asks for the EIA for each of the three dams to be carried out separately from the cumulative impact assessment of any planned dams and reservoirs in the Selenge river basin that may have an impact on the OUV and integrity of the property.

- The REA exercise (including the cumulative-impact assessment) should be separated from the detailed ESIA of each particular dam. This would be more in line with Decision 40 COM 7B.97.
- It is essential that such an REA is given sufficient time and resources to proceed (at least not less than is usually required by assessments of similar type and complexity). Attempting to save time and money on this strategic assessment would likely result in a failure to identify and assess all potential impacts on the property's OUV.
- That the experience of potential consultants in undertaking such assessments should be among key selection criteria.
- That the arrangement for assessment should not create an incentive for the consultant to drive the REA components to any predetermined conclusion.
- That it is highly advisable to incorporate into terms of reference for assessments the relevant recommendations from the IUCN on assessing impacts on the OUV of World Heritage properties.

The first series of public consultations took place in the Republic of Buryatia during last weeks of March 2017 and showed a high degree of interest from the local population with more than 1300 people attending the meetings with the MINIS Project delegation. Regrettably, the presentations brought from Mongolia were not about ways to study the potential impacts, but about the supposed absence of any impacts on Lake Baikal, which in MINIS's opinion has already been proven. Consultations have shown not only that local people almost unanimously oppose additional large water infrastructure in the Lake Baikal basin, but also their deep dissatisfaction with the information presented by MINIS Project Representatives. Resolutions from several consultations contain explicit requirements to divide the REA and ESIA into separate consecutive studies done by different consultants with sufficient funding and appropriate composition of consultant teams. People emphasized that a wide consideration of alternatives should help the Mongolian side to determine other ways to develop their energy and water resources. At the final consultation event people requested that the MINIS Project directly address the secretariats of relevant conventions to get their opinion on the quality of the terms of reference before any assessment is launched.

Major threats to the Monarch Butterfly Biosphere Reserve, Mexico

Cecilia Gas, Humberto Fernández and Manuel Llano,
Conservación Humana AC



The Monarch Butterfly Biosphere Reserve (MBBR) covers an area of 59,256 hectares and was inscribed on the World Heritage List in 2008 under criterion vii due to its exceptional natural beauty and aesthetic importance. Each year millions of monarch butterflies (*Danaus plexippus*) migrate from breeding areas in the United States and Canada, travelling more than 4,500 km to hibernate in close-packed clusters of fir forests (*Abies religiosa*) in a mountainous region of central Mexico, creating a magnificent spectacle. However, in recent decades the populations of the monarchs have drastically diminished. According to the World Wildlife Fund Mexico (WWF, 2017), the winter of 2014-2015 was the season with the lowest record of the species in hibernation sites in the last 20 years, with less than a hectare occupied, in contrast with the more than 18 hectares occupied in the winter of 1996-1997.



Fig. 1: Monarchs hibernating in the Sierra Chincua sanctuary. Photo Humberto Fernández

In 2015 scientific groups and non-governmental organisations from Mexico, the United States and Canada formally asked the UNESCO World Heritage Committee to include the Monarch Butterfly Biosphere Reserve on the World Heritage List in Danger. Experts in pollination and in the biology of the monarch endorsed this request although it did not proceed. To address these increasing threats, the World Heritage Committee will re-evaluate the property in its 41st session to be held on July 2017 in the city of Krakow.

Since inscription of the MBBR, the Mexican State has recognised some of the main threats affecting the site, such as the pressures of encroaching human settlements and severe logging. By proposing its inscription as World Heritage, the Mexican State hoped to encourage the establishment of other protected areas and conservation measures along the migration route within the three countries to achieve greater protection of the monarch (Mexico 2017). However, despite multiple protection-measures and examples of international cooperation, the Monarch Butterfly Biosphere Reserve still faces major problems that jeopardise its Outstanding Universal Value (OUV).

The continuing threats to the MBBR have resulted in follow-up actions and interest on the part of UNESCO and the Mexican State as well as certain civil-society organisations that work in the area. Mexico has submitted four reports on the state of conservation to the World Heritage Committee (2010, 2011, 2015 and 2016) and the International Union for Conservation of Nature (IUCN) submitted one in 2011.

In its reports, Mexico has recognised tourism impacts and the severe effects of illegal logging and described the diverse efforts undertaken by the State to counter them. On the other hand, IUCN in its report requested the State Party to raise awareness of the issue and explain the World Heritage status of the reserve and its relevance. Similarly, it recognised the efforts of Mexico to counter the problems of illegal logging and tourism, as well as the management difficulties due to the wide array of landowners within the MBBR.

Habitat degradation due to illegal logging

Private foundations, diverse NGOs and the Mexican government have invested several million dollars in the last two decades for the protection and safeguarding of the MBBR, to an extent far greater than that received by most other protected areas in Mexico. This investment has had positive results in terms of reducing the illegal logging. According to estimations of the WWF (2016), forest degradation in the MBBR due to illegal logging reached 470 hectares in the period 2003-2005, and by 2015-2016 only 12 hectares were affected.

Notwithstanding these improvements, degradation of the hibernation sites continues and is evident in numerous areas of the core zone of the reserve. Recently, scientists have confirmed that 10 hectares of old-growth forest within the boundaries of the World Heritage property were severely logged in 2015.

Illegal logging is an issue that, due to its extent and relevance, has been thoroughly tackled both by the Mexican State and the IUCN in their periodic reports to ensure the integrity of the site. Despite these efforts, the situation remains critical and forest degradation remains one of the main problems within the reserve.

Mining: a major threat not reported to the Committee

Another threat of particular relevance that has not been addressed by the State Party, or the IUCN, or the Committee, is mining. In fact, there are nine mining concessions within the MBBR that occupy an area of 12,836 hectares (almost 23% of the reserve's territory) to extract copper, zinc, lead, silver and gold.

The most concerning development is the Anganguero mining project, located in the heart of the MBBR. This was denounced by the NGO Grupo de los Cien in 2016 on the occasion of the Summit of North American Leaders that was held in Canada. The project is to be carried out by Grupo México, the largest Mexican mining company and fourth largest producer of copper in the world, but also the company responsible for the worst environmental disaster in the

country's recent history due to its mining operations in the State of Sonora.

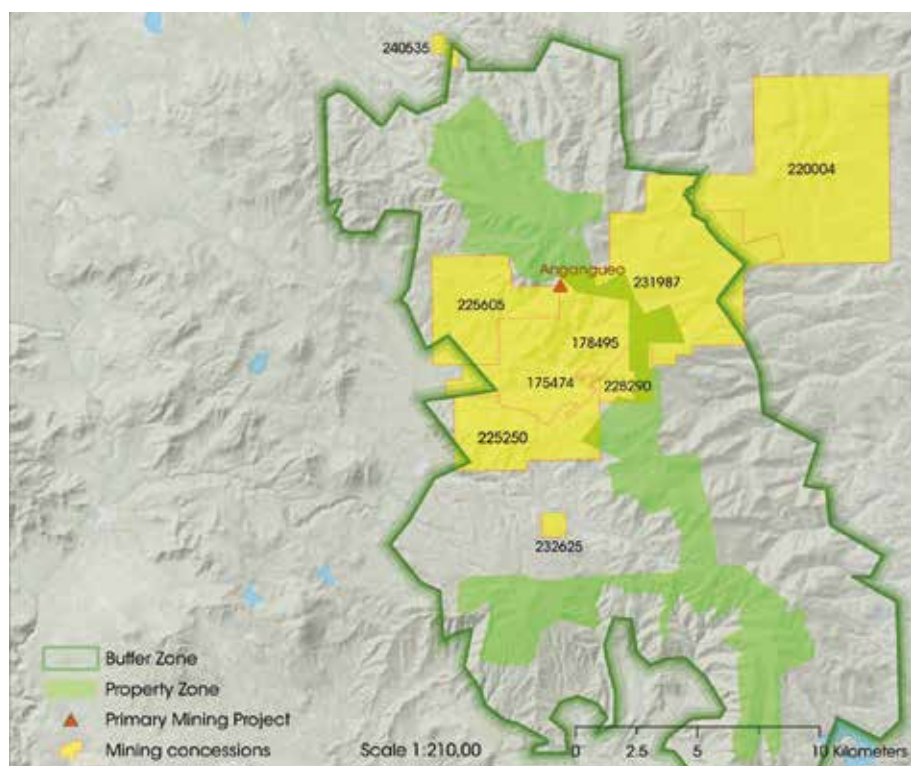


Fig. 3: Map with the mining concessions in the core zone Chincua-Campanario-Chivati. (Source: CONANP and Secretaría de Economía 2017).
Elaboration: Manuel Llano.

The Anganguero project plans to extract minerals from beneath the main core zone of the MBBR and drain large amounts of water from the subsoil within the area of extraction. However, water is vital for hibernating monarchs and to maintain the forest ecosystem. The environmental impact assessment submitted by the company does not mention the inevitable consequences that the opening of the mine will have on the butterflies, which constitute the very essence of the existence of the Monarch Butterfly Biosphere Reserve (Aridjis, 2016). Even though the Secretary of the Environment

Concession title	Holder	Concession surface within buffer zone (ha)	Concession surface within core zone (ha)	Surface buffer + core zone (ha)
175474	José Luis Contreras Romero	7,60		7,60
178495	José Luis Contreras Romero	34,73		34,73
220004	Industrial Minera México SA de CV	2,90		2,90
225250	Comercializadora Sago Import Export SA de CV	4.769,62	803,06	5.572,68
225605	Industrial Minera México SA de CV	1.479,18	1,40	1.480,58
228290	Comercializadora Sago Import Export SA de CV	221,66	194,92	416,58
231987	Industrial Minera México SA de CV	4.643,87	554,62	5.198,49
232625	Fernando Guzmán Chávez y Socios	100,00		100,00
240535	J. Gregorio Torres Sandoval	22,39		22,39
TOTAL (hectares)		11.281,94	1.554,00	12.835,95

Fig. 2: Table of mining concessions within the Monarch Butterfly Biosphere Reserve. (Source: Secretaría de Economía 2017).

Elaboration: Manuel Llano.

and Natural Resources (SEMARNAT) has not yet granted the required authorisations, the pressure is increasing; the Angangueo project is identified by the Secretary of Economy (a powerful ministry of the federal government in charge of the mining sector) as one of the principal mining projects for 2017.

The World Heritage Committee has expressed on multiple occasions that mineral, oil and gas exploration and exploitation are incompatible with World-Heritage status and that such activities should not be undertaken within World Heritage properties (UNESCO, s/f).



Fig. 4: Butterflies cloak trees within the Monarch Butterfly Biosphere Reserve
Photo: Stephan Dömpke

Mexico, as a State Party to the World Heritage Convention, through decision 37 COM 7 of 2013, was urged to respect the commitment of the International Council on Mining and Metals (ICMM) to ensure that no extractive activities are carried out within World Heritage properties, and by making every effort to ensure that extractive companies located in their territory cause no damage to the sites. Even though Grupo Mexico is not part of the ICMM, Mexico as a State Party to the Convention has an obligation not to take any deliberate measures which might directly or indirectly damage the cultural and natural heritage situated within the property (Article 6, paragraph 3 of the Convention).

Inadequate management of tourism

Tourism is another serious threat to the property due to the lack of adequate and rigorous management. When millions of butterflies are hibernating, the sanctuaries become extremely fragile and delicate. The visitor-carrying capacity for the sanctuaries is either non-existent, wrongly determined or not respected. Thousands of people visit the reserve every season in growing numbers each year. They are taken to the sanctuaries by poorly prepared guides that take them too close to the butterflies and do not adequately control the tourists' behaviour, allowing disturbances such as noise and sudden movements.

Additionally, the tourism reception centres of the MBBR called "centros de cultura para la conservación" (centres of culture for conservation), do not really fulfil their functions of interpretation and environmental education. The ecological information is almost non-existent or very deficient and poorly communicates the fragility of the sanctuaries and of the monarch butterfly, favouring the sales of food and souvenirs instead.

In addition to these internal problems, there are other major threats that go beyond national sovereignty, such as extreme climatological events, and the use of pesticides and genetically modified crops in the United States that eliminate milkweed (*Asclepias* spp.), the main food of this species of butterfly.

Recommendations

- Strengthen the permanent protection and surveillance systems in the forest throughout the whole year to completely avoid illegal logging.
- SEMARNAT must resolve as soon as possible the process of environmental-impact evaluation and land-use change submitted by Grupo Mexico, denying the authorization of the Angangueo mining project.
- The Mexican State must cancel all mining concessions located within the MBBR.
- The Monarch Butterfly Biosphere Reserve should be included on the List of World Heritage in Danger until the State Party solves the imminent threats: logging and mining.
- Establish and strictly abide by a limit on visitor numbers based on the visitor carrying-capacity of the monarch sanctuaries during the hibernation season in order to guarantee the monarch's protection.
- Improve the management of tourism within the MBBR, both in the training of local guides and in the environmental communication carried out by the visitors centres.

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Threats to the Islands and Protected Areas of the Gulf of California, Mexico

Humberto Fernández, Cecilia Gas and Manuel Llano.
Conservacion Humana AC.



The Islands and Protected Areas of the Gulf of California comprise a natural serial property composed of over 250 islands, islets and coastal areas spread throughout a vast territory of 250,000 square kilometres in the Gulf of California in northwest Mexico. It was inscribed on the World Heritage List in 2005 under criteria vii, ix and x due to its outstanding beauty, rich marine and terrestrial biodiversity as well as major oceanographic processes present within the property. Its marine productivity sustains an exceptional degree of endemism of fish species and 39% of our planet's marine mammal species, including one third of the cetacean species. The renowned French oceanographer Jacques-Yves Cousteau referred to the Gulf of California as the "aquarium of the world".

The isolation and desert features of the islands and of most of the mainland surroundings of the Gulf of California, with its extreme water scarcity, provided shelter from major urban development and other modern uses until the 1960s, except for guano extraction from the islands and a relative mining boom in the second half of the 19th century (Taylor 2001). Although the islands are practically uninhabited, the number and intensity of human activities have been rising in the last decades. Human population is growing in urban and rural areas on the coastline near the islands, together with large-scale commercial interests from Mexican, American and other international investors, mainly in the fisheries, aquaculture, tourism and mining sectors.

The more than 250 components of the serial property have a total area of 688,558 hectares with a buffer zone of 1,210,477 hectares, which in turn are included in a cluster of 12 protected areas. This high fragmentation makes its protection and management very complex. The threats can vary from region, accessibility and local environment and as such the Mexican government has dealt with them according to islands or groups of priority islands and coastal regions.

The main threats to the property acknowledged by Mexico since its inscription as World Heritage are: unsustainable fishing regulations and poor surveillance capacity; uncontrolled overfishing; harmful fishing techniques to marine wildlife; massive mortality of wildlife due to accidental oil-spills from



Fig. 1. Pelicans and many other resident and migratory birds are sheltered in the islands and islets of the Gulf of California. Photo: Victoria Neamtu.

large crafts; marine and terrestrial pollution; deforestation and soil erosion; habitat modification and disturbance to nesting colonies of avians as well as to sea lions and other cetaceans; introduction of invasive flora and fauna species; poaching and illegal trafficking of flora and fauna; unsustainable tourism practices; large-scale tourist development projects; looting of archaeological remains; and disturbances to indigenous sacred sites. However, it is noteworthy that, amongst the many threats, mining has not been yet recognised by the State Party.

The vaquita and the totoaba species on the brink of extinction

Since 2005, two organisations from the United States have requested that the World Heritage Centre include the property on the List of World Heritage in Danger due to the critical situation of the endangered "vaquita" porpoise (*Phocoena sinus*) and the "totoaba" fish (*Totoaba macdonaldi*) species, both endemic to the upper Gulf of California. This request was reinstated in 2015. Because of the increasing pressures on both species, in 2016 the World Heritage Committee adopted decision 40 COM 7B.75 requesting the State Party to continue its efforts and take urgent additional measures

to address the threats to the vaquita and totoaba, with a view to considering the potential peril to the Outstanding Universal Value (OUV) of the property and its possible inscription on the List of World Heritage in Danger in 2017.

The International Union for Conservation of Nature (IUCN) has carried out three evaluations (2005, 2007, and 2011) since the inscription of the property, mainly dealing with the modification to the boundaries of the property. The State Party has submitted two reports to the World Heritage Committee on the state of conservation (2016 and 2017). In its reports, Mexico describes the initiatives it has undertaken to counteract the multiple threats to the property that it acknowledges, giving special emphasis to the case of the vaquita and totoaba, which have caught international attention. The State Party has prepared a specific conservation plan to protect these species and has established a dialogue with the Secretary General of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), among other measures.

However, despite the aforementioned reports and announcements, the current Mexican federal administration has proven its lack of commitment to nature conservation and its incompetence in law enforcement by failing to stop the corruption that surrounds the illegal trafficking of the totoaba and the illegal fishing practices that are eliminating the vaquita and certainly making an impact on many other species. The budget for the Secretary of the Environment and Natural Resources ministry (Semarnat), which is in charge of natural World Heritage properties, has been cut by 50% from 2014 to present (Llano y Fernández 2017), obviously diminishing surveillance and management capabilities within the property. In 2015 the estimated total population of the vaquita was 97 individuals. To date, there might be around 30 vaquitas alive (WWF 2017), which leaves very little hope that the world's most rare marine mammal will avoid extinction.

Mining: a major threat not acknowledged by the State Party

As with the Monarch Butterfly Biosphere Reserve, Mexico has not reported to the World Heritage Committee the major threat that mining entails to the Islands and Protected Areas of the Gulf of California. This is more appalling since large-scale mining has been taking place within the property and its buffer zones even before its inscription as a World Heritage property. Unfortunately, this serious issue has not been dealt with by the IUCN in its evaluations.

The environmental impact of mining and other extractive activities has been widely documented. The World Heritage Committee has expressed on multiple occasions that mineral, oil and gas exploration and exploitation are incom-

patible with World Heritage status and that such activities should not be undertaken within World Heritage properties (UNESCO, s/f). Mexico, as a State Party to the World Heritage Convention, through the decision 37 COM 7 of 2013, has been urged to respect the commitment of the International Council on Mining and Metals (ICMM) to ensure that no extractive activities are carried out within World Heritage properties, and by making every effort to ensure that extractive companies located in their territory cause no damage to the sites (Article 6, paragraph 3 of the Convention).



Fig. 2. Sonoran Desert vegetation dominates the terrestrial coastal surroundings. Scarcity of fresh water in these arid zones is incompatible with modern large-scale mining techniques which require gigantic volumes of the precious liquid.

Photo: Victoria Neamtu

Despite the above, according to the Public Mining Registry, the Mexican federal government has granted 58 mining concessions which overlap the boundaries of the Islands and Protected Areas of the Gulf of California property (see figures 3 and 4), not to mention those concessions located in the buffer zones. Moreover, several concessions were granted after its inscription as World Heritage.

Two mining projects that have been operating for several years are of special concern. One is the San Felipe open-pit mining complex, operated by Compañía San Felipe S.A. de C.V. a subsidiary of Minera Frisco, one of the largest mining corporations in Mexico. It is located at the edge of the Alto Golfo de California y Delta del Río Colorado Biosphere Reserve. The large-scale extraction of silver and gold is having a major impact, including pollution of the upper Gulf of California, incidentally the habitat for both the endangered vaquita and totoaba. The second large-scale project is the El Boleo copper-cobalt-zinc-manganese mine, located in the coastal fringe of the El Vizcaíno Biosphere Reserve, in the state of Baja California Sur. It is operated by Minera y Metalúrgica del Boleo, SAPI S.A. de C.V. owned mainly by a consortium of Korean companies. According to the company (Minera Boleo 2017) mining started in 2014 with an estimated project life of 22 years.

Concession title	Holder	Protected area	Hectares within the WH property
147866	JESUS MARIA SUAREZ ARVIZU	RB Alto Golfo de California, Delta del Rio Colorado	66,00
165962	CIA. OCCIDENTAL MEXICANA, S.A.	APFF Islas del Golfo de California	339,98
165963	CIA. OCCIDENTAL MEXICANA, S.A.	APFF Islas del Golfo de California	223,43
165964	CIA. OCCIDENTAL MEXICANA, S.A.	APFF Islas del Golfo de California	85,76
165965	CIA. OCCIDENTAL MEXICANA, S.A.	APFF Islas del Golfo de California	0,99
165967	CIA. OCCIDENTAL MEXICANA, S.A.	APFF Islas del Golfo de California	38,12
197116	EJIDO INDUSTRIAL AÑO DE JUAREZ 1972	RB Alto Golfo de California, Delta del Rio Colorado	467,99
197166	JOSE DORAME RAMIREZ Y SOC.	RB Alto Golfo de California, Delta del Rio Colorado	148,00
198810	ARMANDO COVARRUBIAS RUBIO	RB Alto Golfo de California, Delta del Rio Colorado	328,02
198815	ARMANDO COVARRUBIAS RUBIO	RB Alto Golfo de California, Delta del Rio Colorado	347,45
203496	MARIO CESAR RAMIREZ RINCON	APFF Islas del Golfo de California	0,19
205511	MARIA TERESA ARTHUR VDA. DE MESTAS	RB Alto Golfo de California, Delta del Rio Colorado	300,00
211051	MINERA CURATOR, S.A. DE C.V.	RB El Vizcaino	0,38
213773	ANDRES MARTINEZ ROJO	RB Alto Golfo de California, Delta del Rio Colorado	99,98
217361	EJIDO INDUSTRIAL AÑO DE JUAREZ 1972	RB Alto Golfo de California, Delta del Rio Colorado	2.850,63
218684	JESUS PEDRO VILLAGRAN OCHOA Y SOC.	RB Alto Golfo de California, Delta del Rio Colorado	790,97
220483	ANDRES MARTINEZ ROJO	RB Alto Golfo de California, Delta del Rio Colorado	499,98
220977	INDUSTRIA DEL ALCALI, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	1.000,00
221279	RAUL FERNANDO LEMAS POMPA	RB Alto Golfo de California, Delta del Rio Colorado	99,97
221344	RAUL ELIAS FAVELA Y SOCIOS	APFF Islas del Golfo de California	17,05
222988	MARIO MUNGUIA GRIJALVA Y SOC.	RB Alto Golfo de California, Delta del Rio Colorado	153,99
223240	RAUL ELIAS FAVELA Y SOCS.	RB Alto Golfo de California, Delta del Rio Colorado	41,93
223241	RAUL ELIAS FAVELA Y SOCS.	RB Alto Golfo de California, Delta del Rio Colorado	302,75
223242	RAUL ELIAS FAVELA Y SOCS.	RB Alto Golfo de California, Delta del Rio Colorado	10,00
223243	RAUL ELIAS FAVELA Y SOCS.	RB Alto Golfo de California, Delta del Rio Colorado	0,15
223245	NORHA REBECA LEMAS PEREZ	RB Alto Golfo de California, Delta del Rio Colorado	195,00
225299	MINERA TERRA GAIA, S.A. DE C.V.	RB El Vizcaino	77,80
234326	MINERA MARIA, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	10,17
234429	MINERA MARIA, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	12,28
234430	MINERA MARIA, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	13,30
234431	MINERA MARIA, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	59,02
235317	RUBEN E. I. GUERRERO CERECER Y SOCIOS	APFF Islas del Golfo de California	154,93
237942	ALFONSO DACO CALONZO	RB Alto Golfo de California, Delta del Rio Colorado	100,00
238107	ALFONSO DACO CALONZO	RB Alto Golfo de California, Delta del Rio Colorado	100,00
238108	ALFONSO DACO CALONZO	RB Alto Golfo de California, Delta del Rio Colorado	24,20
238109	ALFONSO DACO CALONZO	RB Alto Golfo de California, Delta del Rio Colorado	11,78

Concession title	Holder	Protected area	Hectares within the WH property
238115	ALFONSO DACO CALONZO	RB Alto Golfo de California, Delta del Rio Colorado	148,93
238116	ALFONSO DACO CALONZO	RB Alto Golfo de California, Delta del Rio Colorado	88,00
238183	INDUSTRIAL MINERA DEL DORADO, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	42,59
238184	INDUSTRIAL MINERA DEL DORADO, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	73,00
238323	MINERA REAL DE ANGELES, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	15,46
238493	INDUSTRIAL MINERA DEL DORADO, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	313,19
238494	INDUSTRIAL MINERA DEL DORADO, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	75,44
238981	RICARDO MARTINEZ GUERRERO	RB Alto Golfo de California, Delta del Rio Colorado	35,00
239023	ANTONIO SALAZAR DELGADO	RB Alto Golfo de California, Delta del Rio Colorado	96,00
239081	RICARDO MARTINEZ GUERRERO	RB Alto Golfo de California, Delta del Rio Colorado	31,12
239082	EJIDO INDUSTRIAL AÑO DE JUAREZ 1972 SBC	RB Alto Golfo de California, Delta del Rio Colorado	2.274,99
239083	EJIDO INDUSTRIAL AÑO DE JUAREZ 1972 SBC	RB Alto Golfo de California, Delta del Rio Colorado	86,00
239617	RUBEN E. I. GUERRERO CERECER Y SOCIOS	APFF Islas del Golfo de California	3.239,23
241913	LUIS FERNANDO PARRA IRINEO Y SOCIOS	RB Alto Golfo de California, Delta del Rio Colorado	1.600,01
243954	MINERA REAL DE ANGELES, S.A. DE C.V.	RB Alto Golfo de California, Delta del Rio Colorado	9,76
244859	ENRIQUE GUILLERMO SADA SARRAF	RB Alto Golfo de California, Delta del Rio Colorado	19,65
244860	ENRIQUE GUILLERMO SADA SARRAF	RB Alto Golfo de California, Delta del Rio Colorado	75,35
244910	JOSE LUIS MOLINA	RB Alto Golfo de California, Delta del Rio Colorado	95,24
244948	DANIEL DAVID LOPEZ OCHOA	RB Alto Golfo de California, Delta del Rio Colorado	88,76
244964	JOSE ALEJO KARAM LOPEZ Y SOCIOS	RB Alto Golfo de California, Delta del Rio Colorado	1.856,00
245264	MARIANO FIERRO RAMIREZ	RB Alto Golfo de California, Delta del Rio Colorado	193,95
245379	GUADALUPE AVITIA REYES Y SOCIOS	RB Alto Golfo de California, Delta del Rio Colorado	115,00
Total surface (hectares) within the property			19.544,88

Fig. 3. Table of mining concessions within the boundaries of the Islands and Protected Areas of the Gulf of California. (Source: Secretaría de Economía 2017). Elaboration: Manuel Llano.

Recommendations

- The State Party should effectively report to the World Heritage Committee the overall mining situation affecting the property.
- The Mexican State should cancel all mining concessions located within the property and its buffer zones, in accordance with decision 37 COM 7 of 2013.
- The Mexican State must significantly increase the budget as well as the surveillance and management capabilities for the property to ensure the long-term sustainability of its OUV.
- The Islands and Protected Areas of the Gulf of California should be included on the List of World Heritage in Danger until the State Party solves the imminent threats. Current direct conditions, including the mining activities within the property, are directly pushing the vaquita and totoaba towards extinction.



Fig. 4. Map of the Islands and Protected Areas of the Gulf of California and mining concessions within the property. (Source: CONANP and Secretaría de Economía 2017).
Elaboration: Manuel Llano.

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Tanzania: Selous Game Reserve at Risk Through Unsustainable Developments

Günter Wippel, MENSCHENRECHTE (HumanRights) 3000 e.V.



The World Heritage site Selous Game Reserve (SGR) in the southwest of Tanzania is one of the largest wildlife conservation areas in Africa, covering approximately 51,000 square kilometres. SGR has significant concentrations of elephant, black rhinoceros, cheetah, giraffe, hippopotamus and crocodile, among other species, and was inscribed on UNESCO's World Heritage List in 1982¹.

For several years, the Government of Tanzania and various companies have pursued plans for major industrial developments inside the World Heritage property, such as the Mkuju River Uranium Project and the Stieglers Gorge and Kidunda dams. In 2012, the World Heritage Committee decided "in an exceptional and unique manner to approve the proposed boundary modification of the Selous Game Reserve" and thus opened the way for the Mkuju River Uranium Project. The decision was in defiance of the Committee's own established principle that mining activities are incompatible with World Heritage listing. Protests followed and the decision remains controversial. Poaching has also become a severe problem in the SGR. In 2014, the WHC decided to inscribe SGR on the list of World Heritage sites in Danger and has retained it on this list since.

Two aspects of this situation are highlighted here:

1. What are the dangers posed by the Mkuju River Uranium Project to the SGR World Heritage property and its OUV?
2. To what extent has the State Party complied with the conditions and recommendations set by the World Heritage Committee in its decision of 2012?

What are the dangers of Mkuju River Uranium Project for SGR and its OUV?

The Mkuju River Project (MRP) is a uranium operation and thus entails the handling of radioactive materials, including uranium and approximately 25 decay products, many of which are much more radioactive and/or toxic than uranium itself. The waste products (tailings) contain about 85% of the original radioactivity of the ore and will remain radioac-

tive for thousands of years due to the long half-lives of some of the decay products. After 10,000 years, the radioactivity will have decreased only marginally; after 50,000 years it will have decreased to about 70%; and after 100,000 years to 43%. In human terms, tailings remain dangerous forever.



Fig. 1. Giraffes in the Selous Game Reserve World Heritage property.

Tailings at the MRP from the open-pit mine will amount to some 160 to 240 million tons (due to the low grade of uranium in the ore) which will need to be isolated safely from the environment for thousands of years. The mining operation will consist of a 120-square-kilometre checkerboard of open or re-filled pits, scats dumps, a tailings-storage facility (TSF), diverted creeks, an erased hill, a uranium mill and a mining camp (Fig. 2).

Tailings are in the form of slurry and will be stored behind a dam at MRP. Dams sometimes break. The UN Environmental Program and the International Commission on Large Dams have stated that on average "one major tailings dam incident occurs each year". The World Heritage Committee has repeatedly called for "disaster preparedness". At the MRP operation, there remains the question of how to prepare for a million-ton leakage or spill from the TSF. Management of tailings is a serious technical and financial task. MRP has no adequate plans to store tailings safely in the long run. Similarly, Tanzanian laws and regulations have no provisions to secure the financial means for appropriate handling of tailings after the mine has closed.

¹ <http://whc.unesco.org/en/list/199>

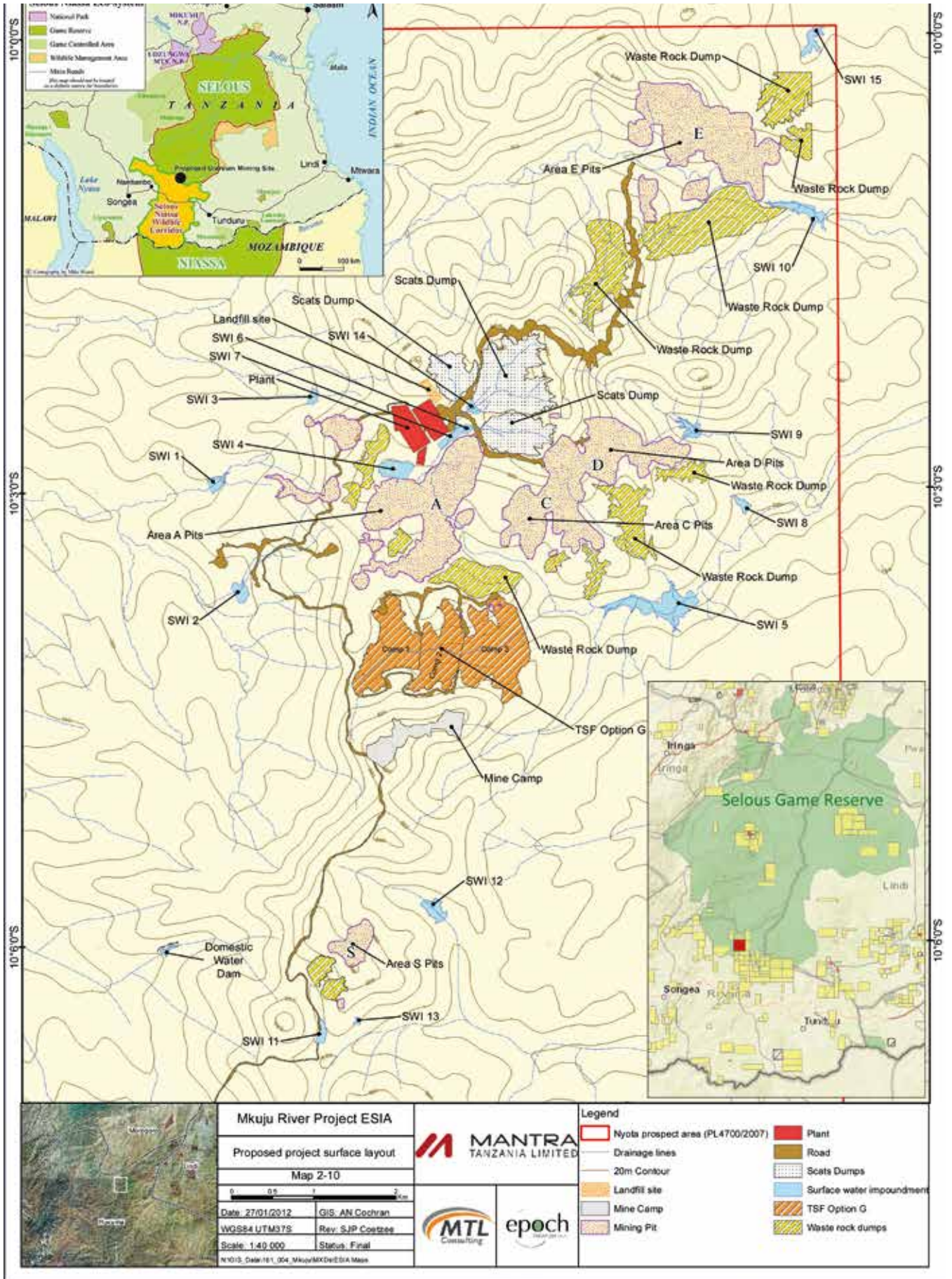


Fig. 2. Project layout of Mkuju River uranium mine with open-pits, tailings storage facility and dump sites. Insets show location of mine site within Selous (top left) and Prospecting Licenses within part of the property (bottom right)

The long-term risks posed by uranium mine tailings are in contravention of the aims of the World Heritage Convention (Article 4). Uranium-mine tailings should therefore not be placed in or adjacent to a World Heritage site.

Compliance with WH Committee “conditions and recommendations”

(a) No more mining activities in WHS SGR

In 2012, the World Heritage Committee decision requested the State Party ‘not to engage in any mining activity within the Selous Game Reserve World Heritage Property ...’ (36 COM 8B.43, 7(c))

Although the State Party stated that there would be no new prospecting licenses (PL), the cadastre map (on Fig. 2) of the Ministry of Energy and Mines still displays approximately 40 PLs inside the SGR, some 29 of them granted after the above request by the Committee². In 2016, the Committee reiterated “its utmost concern” about:

1. the ongoing lack of clarity in terms of the extraction method, water monitoring and disaster preparedness as regards the Mkuju River Project (MRP), ...
2. the legal possibility of mineral exploration and exploitation in the property and the overlapping mining and prospecting licenses, despite the commitment made by the State Party to not engage in any mining activity within the property, in line with the established position of the Committee that mining and oil and gas exploration and exploitation are incompatible with World Heritage status ...” (40 COM 7A.47)

Five years after its 2012 decision, there is no satisfactory progress on the implementation of the Committee’s request to refrain from mining activities inside the SGR.

(b) Respect the economic and social needs of workers

In 2012, the World Heritage Committee’s decision urged the State Party to ensure “that economic and social needs of the local population and workers are respected and that social conditions in and around the Selous Game Reserve, in particular linked to the Mkuju River Mining site, are subject to monitoring”. (36 COM 8B.43)

The MRP Environmental and Social Impact Assessment (ESIA) shows serious deficiencies in public participation, major parts of which were done through “one-on-one” consultations with officials. It remains unclear how the Committee’s call “to respect economic and social needs of the local population ...” will be implemented aside from the promise of jobs.

(c) (Lack of) Compliance with IAEA and international standards

The World Heritage Committee, in its decision of 2012, urged the State Party to ensure that “the mining activity and processing of the uranium is carried out corresponding to state-of-the-art international standards in adherence to International Atomic Energy Agency (IAEA) rules governing the processing of uranium materials”. (36 COM 8B.43)



Fig. 3. An aerial overview of the Selous Game Reserve World Heritage property

In 2015, an IAEA mission spotted grave shortcomings in Tanzania’s laws and regulations regarding radiation protection and the implementation of those laws. It said “with strong commitment from the Government ... the regulator [referring to TAEC – Tanzania Atomic Energy Commission] has an opportunity to become an independent, strong and effective body”, thereby inferring that the TAEC is currently neither strong nor independent.

- The IAEA criticized the lack of clear delineation between the responsibilities and functions of the Ministry of Energy and Minerals and the Tanzania Atomic Energy Commission (TAEC)³. A later report of the IAEA Uranium Production Site Appraisal Team (UPSAT) mission to Tanzania stated that, among other shortcomings:
- The 2012 ESIA should be updated to reflect current plans;
- Plans have changed considerably – for example, tailings and scats are located at different locations from those originally planned;
- Plans on TSF management are not sufficiently detailed;
- There is little information available regarding the uranium mill.

Currently, the Mukju River Project is far from compliant with IAEA and international standards.

² <http://portal.mem.go.tz/map/>; last updated 19 March 2017; viewed on 21 March 2017

³ IAEA 2015: www.iaea.org/newscenter/pressreleases/iaea-mission-says-tanzania-faces-challenges-radiation-safety-regulation

(d) The in-situ-leaching issue – WHC Decision 2015

In its 2015 decision, the World Heritage Committee urged the State Party “to ensure disaster preparedness and independent water monitoring prior to active mining, to provide a detailed description on the planned mining project, including details on the mining design, the extraction and processing methods and the measures foreseen to minimize contamination risks as well as an Environmental Impact Assessment (EIA) in the case of consideration of in-situ Leaching (ISL)”. (39 COM 7A.14)

In 2016, the Committee reiterated its utmost concern about “the ongoing lack of clarity in terms of the extraction method, water monitoring and disaster preparedness as regards the MRP”. (40 COM 7A.47)

The environmental licensing of MRP was based on the open-pit mining method. However, the company announced that it might change to in situ leaching (ISL), or a “first of its kind” combination of ISL and open-pit mining. ISL is currently advertised by the mining industry as an environmentally-friendly method. In fact, one of the preconditions for utilizing ISL is the confinement of the uranium ore body in order to avoid release of the leaching liquid (such as sulphuric acid) into the environment.

The 2012 MRP ESIA states: “This method can only be applied if the uranium deposit is located in porous rock, confined between impermeable layers and below the water table. Although the ore containing rocks at the MRP can be classified as porous and hence amenable to in situ leaching, there is a lack of confinement between impermeable layers. Unless the on-going drilling program proves otherwise, in situ leaching will be difficult to recommend under the current geologic conditions.”⁴

Clearly, the necessary precondition for ISL does not apply to Mkuju River; the Mkuju River deposits are therefore not suitable for ISL. In addition, a “first of its kind” combination of open-pit mining and ISL will impose incalculable risks on the adjacent SGR World Heritage property due to a lack of experience with such a combination. The World Heritage Committee’s repeated calls for clarification of the mining method and for a detailed description of the mining plan therefore remain unanswered.

(e) Other WHC conditions and recommendations

Information is lacking with respect to other issues. For example, in regard to the protection of the Selous-Niassa Wildlife Corridor, compliance and information are lacking.

Conclusion

1. Operation of a uranium mine, open pit or ISL or combination of both, and, more specifically, waste products such as uranium tailings pose a long-term serious danger to the OUV of the SGR World Heritage property. Such a project should not be located in or near a World Heritage property.
2. For five years, WHC has sought implementation of its 2012 ‘conditions and recommendations’.

The environmental impact assessment for the Mkuju River project has proven to be preliminary and incomplete. It fails to address the ISL issue. The IAEA and IAEA UPSAT mission confirm these concerns. Public participation has not taken place appropriately.

The IAEA pointed to a lack of clear delineation of tasks between relevant government agencies, affecting the efficiency of radiation-protection regulations and their implementation.

In order to resolve the lack of compliance with the Committee’s conditions and recommendations and to avert future damage to the property and its OUV, the excised area should be re-integrated into the SGR World Heritage property. Cancellation of mining licenses in areas overlapping World Heritage sites was demanded in 2014 by the joint NGO statement on no-go and no-impact measures for extractive activities in natural and mixed World Heritage sites⁵.

The World Heritage Committee set a noble precedence in 2013 when the Koongarra area, including a uranium deposit, was incorporated into Australia’s Kakadu National Park World Heritage property⁶.

4 MRP ESIA, Chapter 6, 6.4.1.2 Alternative 2: In-situ Leaching, pp 6-7

5 https://www.awf.org/sites/default/files/WorldHeritageSite_No-Go-Extraction.pdf

6 <https://australianmap.net/wp-content/uploads/2012/02/Koongarra-From-Project-to-Park-lowres.pdf>

A Letter from the National Committee for Saving the Sundarbans (Bangladesh)

National Committee for Saving the Sundarbans

Introduction

The National Committee for Saving the Sundarbans (NCSS) is a coalition of over 50 environmental organizations in Bangladesh dedicated to protecting the natural biodiversity and cultural heritage of the Sundarbans – the world’s largest mangrove forest – which is facing serious threats from large-scale projects including the Rampal coal-fired power plant, encroachment by powerful interests, deforestation, and the effects of climate change such as sea level rise, increasing salinity and cyclones.

The letter

In this letter, we summarize our concerns about the responses of the Government of Bangladesh (GoB) to the Reactive Monitoring Mission (RMM) in the State Party State of Conservation (SOC) reports of 9 October and 27 November 2016.¹ Due to limited time and resources, we have focused our critique here on the misinformation and shortcomings in the Government’s responses, which do not adequately respond to threats identified in the RMM and past World Heritage Committee decisions related to the Rampal power plant’s air emissions, coal-ash pollution of waterways, and associated shipping and dredging. We convened independent scientist and engineer reviews of each of these aspects of the GoB responses. Their detailed findings were appended to this letter.

A. Air-pollution control measures for the Rampal power plant are inadequate.

Air-emissions expert and engineer Dr Ranajit Sahu concluded that the GoB responses to UNESCO regarding emissions from the Rampal plant are problematic for three reasons:

1. The project has not been designed with state-of-the-art air pollution technology that is widely in use at many coal-fired power plants throughout the world.
2. The project’s air-quality modelling is outdated, inaccurate and fails to consider cumulative impacts. Mercury and many other toxic emissions were never analysed.
3. The Government of Bangladesh mistakenly relied on the World Bank/IFC guidelines for air quality, which are insuffi-

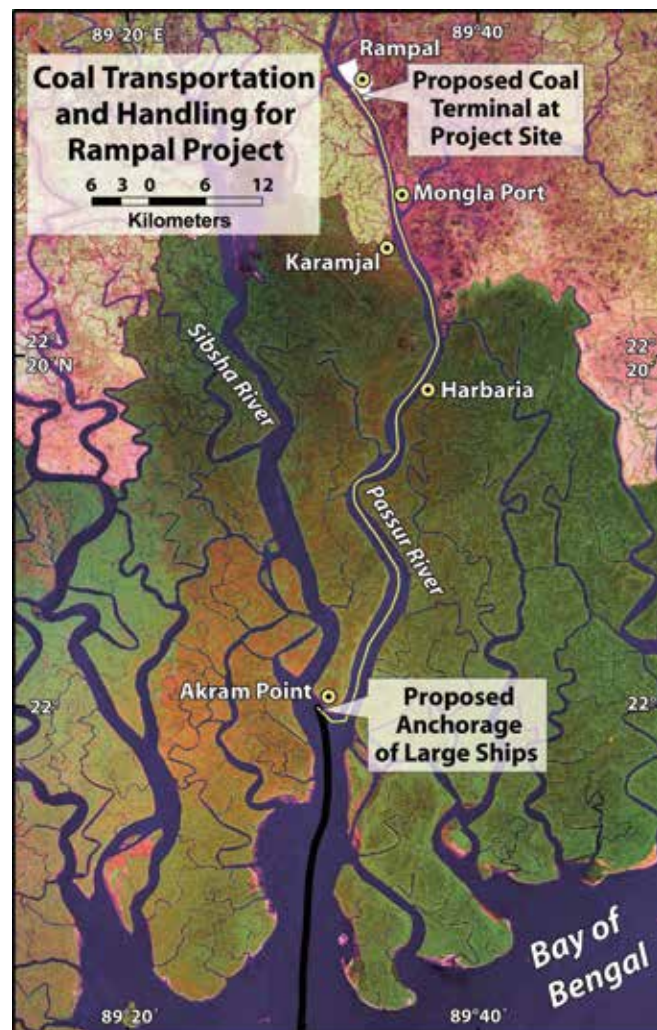


Fig.1: Coal Transportation and Handling for the Rampal Project.

Map: AlaloDulal

¹ Government of Bangladesh, Response of Government of Bangladesh on the Report of Reactive Monitoring Mission to the Sundarbans World Heritage Sites, Bangladesh from 22 to 28 March, 2016 (9 October 2016) <http://whc.unesco.org/document/154862>; Government of Bangladesh, Updated Report of the Government of Bangladesh on Decision 39 COM 7B.8 by the World Heritage Committee (27 November 2016), <http://whc.unesco.org/document/155112> ("GoB Response of 27 November 2016").

cient to protect the millions of people near the Sundarbans and its fish and wildlife from cancer, respiratory illness, heart disease, and hormonal, neurological, and reproductive damage.



Fig. 2: A waterway through the mangroves in the Sundarban World Heritage property.
Photo: Amazing Bangladesh

B. The coal ash disposal plan at Rampal will contaminate surface and groundwater

Coal-ash expert and wildlife biologist Dr Dennis Lemly concluded that the Government's responses regarding coal ash are problematic for five reasons:

1. There is no basis for the expectation that 100% of coal ash from the Rampal plant will be used in cement factories. Even if half of all fly ash is sold to the cement industry throughout the life of the plant, the ash pond will be full in twelve years. In the remaining 48 years of operation, the power plant will produce over 20 million tons of toxic waste ash with no disposal plan at all.

2. The possibility of using coal ash as fill for low-lying areas around the power plant has not been ruled out, which poses a substantial threat to the environment, public health and the economy of the region.

3. Even without the rupture of dyke walls from earthquakes or uneven settling of filled land under the ash pond, the high-concentration slurry disposal of coal ash as proposed at Rampal has not been proven to avoid leaching of toxic metals into groundwater.

4. The ash-pond walls will be breached by probable storm tides of 7.4 meters during the lifetime of the plant, allowing leachate from over two million cubic meters of ash waste into the watershed.

5. Examples from the United States of selenium leachate from coal ash indicate that similar contamination of the

Sundarbans could devastate fish, amphibians and crustaceans, causing severe physical deformities and reproductive failure.

C. The Government has not sufficiently assessed the threats from dredging and shipping in the Bay of Bengal and Passur River, or made adequate plans to mitigate those threats.

Aquatic ecologists Dr William Kleindl and Dr Jon Brodie concluded that the Government's responses regarding dredging and shipping are problematic for four reasons:

1. The environmental assessments on dredging are incomplete, contradictory, have not undergone public consultation and do not meet the guidelines of the IUCN's Advice Note on World Heritage Assessment, as requested by UNESCO.

2. There is no clarity as to where dredge spoil will be dumped upstream from the Sundarbans between Mongla Port and the Rampal site (three million tons) and from the Bay of Bengal to Akram point (30 million tons), or what ecological effects dredging may have on the Outstanding Universal Value (OUV) of the Sundarbans World Heritage site.

3. The Government of Bangladesh is poised to move forward with dredging in violation of the recommendations of the monitoring mission and previous decisions of the World Heritage Committee.

4. There are no effective emergency-response measures in place to respond to coal-transport accidents on the Passur River, Bay of Bengal, or coal-transfer operations at Akram Point.



Fig. 3: Demonstrators on a march from Dhaka to the Sundarbans in protest of the Rampal Project, 10 March 2016.
Photo: The Daily Star / Asian News Network

Recommendations

Reaffirming the requests of our February 2016 petition to the World Heritage Committee², we respectfully request the World Heritage Committee to take four actions at your 41st session in July 2017 to protect the OUV of the Sundarbans:

1. Add the Sundarbans to the List of World Heritage in Danger due to threats from inadequate freshwater flows, the Rampal power plant, and lack of integrated management of shipping, dredging and industrial carrying-capacity of areas surrounding the property.
2. Call on Bangladesh to immediately cancel the coal plant at Rampal and its associated dredging for coal transport in the Bay of Bengal and Passur River.
3. Request the Government of India to explain its involvement in the coal plant at Rampal to the World Heritage

Committee, in light of its legal obligations under Article 6.3 of the World Heritage Convention to avoid harm to World Heritage sites situated in other countries.

4. Call upon international financiers not to invest in or provide support for companies or activities related to the coal plant at Rampal, and instead support Bangladesh developing clean, renewable energy upstream from the Sundarbans, as per the guidance of the World Heritage Committee's Sustainable Development Policy of 2015, which calls on state parties to "promote the use of renewable energy sources" in the wider settings of World Heritage sites.

Sincerely,
Sultana Kamal Convener,
National Committee for Saving the Sundarbans
March 2017

² National Committee for Saving the Sundarbans (NCSS), Bangladesh Andolon Poribesh, Nijera Kori & Waterkeepers Bangladesh, Protecting The Sundarbans World Heritage site: Petition to UNESCO's World Heritage Committee concerning imminent threats posed by the proposed Rampal and Orion coal-fired power plants (1 February 2016), <http://ncssbd.org/resources/> and https://drive.google.com/file/d/0B0Z2Wg-WYzVDoOUUxRmROeTdkSE5xVkhIYm9GVUNFcll_pVF9B/view.

Tropical Rainforest Heritage of Sumatra: Habitat for Endangered Wildlife Faces New Threats

Panut Hadisiswoyo, Founder and Director, Orangutan Information Centre
Shayne McGrath, International Conservation Advisor



The Gunung Leuser National Park (GLNP) is part of the Tropical Rainforest Heritage of Sumatra (TRHS) World Heritage Site and recognized as a UNESCO Biosphere Reserve and ASEAN Heritage Park. The GLNP makes up around one third of the Leuser Ecosystem (LE) which is considered by experts, including the IUCN, to be one of the world's 'most irreplaceable protected areas', ranked 33rd out of more than 173,000 protected areas worldwide (Le Saout, S. et al 2013). Protected under Indonesian law as a National Strategic Area for its Environmental Protection Function, the LE is the largest contiguous intact rainforest in the whole of south-east Asia, and the last place on Earth where critically endangered orangutans, rhinos, elephants and tigers coexist in the wild.

The Leuser portion of the TRHS continues to be subject to a number of severe threats, including legal and illegal road developments, plantation establishment, and infrastructure developments. Here we draw attention to several concerns we have about the 2017 State of Conservation Report recently submitted by the Indonesian State Party (Government of the Republic of Indonesia 2017) regarding the TRHS World Heritage Site, which has been on the List of World Heritage in Danger since 2011. Below we summarize the issues of most urgent concern regarding the State Party report, as it refers to the GLNP and its surroundings:

Key Concerns

a) Failure to mention alarming large-scale infrastructure project plans inside the wider LE (eg, hydropower dams PLTA Tampur, Lesten and PLTA Kluet, Meukek and road networks) which will have devastating impacts

on biodiversity in the GLNP component of the World Heritage property and beyond, particularly key migration-routes of critically endangered species such as the Sumatran elephant.

b) Failure to adhere to or acknowledge its own pledge, made in the 2016 State Party report, that "The State Party confirms its commitment that the Aceh Spatial Plan will not have any negative impact on the property and key areas



Fig. 1. The Leuser component of the Tropical Rainforest Heritage of Sumatra World Heritage property and the broader Leuser Ecosystem

in the Leuser Ecosystem". In fact, despite three years of campaigning by civil society, the outgoing Aceh government has been putting the province's destructive spatial plan ('Qanun No 19/ 2013, RTRWA 2013-2033') into effect and, as well as failing to prevent widespread clearing by oil-palm plantations, began visibly seeking to dramatically scale up developments inside the LE in 2016.

- c) Failure to enact effective law-enforcement measures to reach prosecution and sentencing of perpetrators of poaching, illegal logging, encroachment and other forest crimes. Although the State Party SOC report documents an increase in the number of patrols, the 'arrest' rate is less than 3%, with the actual prosecution rate unknown.
- d) Failure to provide strategies to counter the reported illegal activities in GLNP (or TRHS as a whole) which threaten the Outstanding Universal Value (OUV) and continued survival of critically endangered species such as the Sumatran rhino. In place of detailed protection strategies specific to TRHS, a 466-page introductory book on increasing the population of 25 'Endangered' animal groups (comprising 41 separate species) across Indonesia is included in full within the 496-page State Party 2017 Report. However, of the 25 groups listed, only six are actually found within the TRHS, meaning that the other 19 animals are wholly irrelevant to the report.
- e) Lastly, a concern which is extremely pressing and deserving of special attention – the failure of the State Party to mention the attempts of the outgoing Governor of Aceh province, Zaini Abdullah, and others to downgrade the status of thousands of hectares of 'core zone' within the GLNP to 'utilisation zone' to allow geothermal development (Hanafiah, J. 2017).

The proposed geothermal project area is the Kappi Plateau. This remote site lies at the very heart of Leuser, in an area that not only harbors some of the last remaining wild populations of all four of Sumatra's most iconic critically endangered species, namely the Sumatran rhino, tiger, elephant and orangutan, but is also the core of the only remaining major corridor between the eastern and western habitat blocks of the ecosystem. Degrading this area will dramatically reduce the long-term survival prospects for these and a multitude of other species. Indeed, any major development within the Kappi region, especially when accounting for all of the accompanying roads and settlement infrastructure that will inevitably follow, will only serve to degrade the TRHS, which has been inscribed on the list of World Heritage in Danger since 2011, severely depleting its OUV.

The Indonesian Ministry of Environment and Forestry (MoEF), through the Director-General for Conservation of Natural Resources and Ecosystems (Ditjen KSDAE), publicly stated that the request for a change of the zoning would be rejected (Satriastanti, F. E. 2016), and at the end of September 2016 informed the GLNP park head that any re-zoning of part

of the core zone area in GLNP was not possible. The Ditjen KSDAE acknowledged the new Indonesian regulation, Law No. 21 of 2014 on Geothermal in favour of geothermal operations in conservation areas (Republik Indonesia 2014) – as appealed to in the 2016 State Party report – but the conclusion rightfully remained that re-zoning was not possible due to the area being a UNESCO World Heritage Site and meeting or exceeding all legal criteria for "core zone" status. The incoming Governor of Aceh, Irwandi Yusuf, has announced to media that he intends to protect the GLNP and LE from the various activities that threaten the region, including personally cancelling the geothermal development project proposed for GLNP (Hanafiah, J. 2017).



Fig. 2. Wild rivers in the Leuser Ecosystem are threatened by hydro-electric development.
Photo Paul Hilton

Unfortunately, despite the decision in September by the Indonesian MoEF and the recent pledge by the incoming Governor of Aceh supporting that decision, this matter is far from settled. Ongoing developments indicate that neither the Turkish company looking to develop the geothermal project nor the Indonesian government consider the proposed project to be off the table. A senior advisor to the MoEF organized a meeting on 9 January 2017 at the Ministry headquarters between the company, UNESCO and KSDAE to further promote the geothermal plans in GLNP. On 17 March, representatives from KSDAE, a GLNP zoning team and other central government departments met to finalize the GLNP's zoning. NGOs were not invited to participate and a demonstration was staged in front of the meeting to protest against the proposal to change the zoning. The results of that meeting have yet to be disclosed but an invitation to a Focus Group Discussion on 21-22 March about development plans for geothermal energy in the TRHS has just been sent to exclusively central government departments by the Ministry of Energy and Mineral Resources (ESDM).

During 2016, the Aceh government was seeking approval and funding for a number of other large-scale infrastructure developments within the LE. These include plans for mega

hydropower projects in the Kluet, Tampur and Jambo Aye water-catchments which would severely threaten the integrity of the LE surrounding the GLNP. While we fully support the development of renewable energy, Indonesia's electricity needs can be significantly supported through the development of numerous small-scale run-of-the-river hydropower schemes, as well as other sources, which would have negligible ecological impacts and provide a far more stable power supply than a few large schemes.

Recommendations

In order to protect the OUV of the TRHS, we have submitted to the World Heritage Centre and the Indonesian government a series of recommendations, including:

- a) We urge the Indonesian government not to grant any concession or permits with regard to plantation, energy, mining, or road development, expansion, or refurbishing of any kind, within the property;
- b) We urge the Indonesian government and incoming Governor of Aceh province to overrule the outgoing Aceh government's proposed Aceh Spatial Plan and to implement a management plan that protects and preserves the Leuser Ecosystem for future generations;
- c) We urge the Indonesian government to publish and implement a proper species-conservation strategy that addresses the future of each of the key species within the TRHS;
- d) We urge the Indonesian government to enact effective law-enforcement measures against all levels of perpetrators threatening the property, sanctioning those found guilty and thereby deterring further criminal actions;
- e) We urge the Indonesian government to maintain its National Moratorium on permits and expansion of palm-oil cultivation and mining ventures; to officially apply this moratorium to the entirety of the Leuser Ecosystem; and to prioritize an urgent review of those permits currently in existence within it;
- f) We urge the Indonesian Government to provide detail of the progress and implementation of the "Moratorium on the expansion of palm oil and mining in the Leuser Ecosystem" including revisions made following the change of government in Aceh;
- g) We urge the Indonesian government to work with UNESCO's World Heritage Centre and the IUCN towards extending the TRHS World Heritage property to encompass the entire Leuser Ecosystem, in order to capture all areas of OUV and to help address the above threats. This would be consistent with the World Heritage Committee's request (40 COM 7A.48, clause 4);
- h) Finally, we urge the World Heritage Committee to keep the TRHS on the World Heritage in Danger List, until such time that these and other issues have been resolved with respect to the entire property; to urge the Indonesian Government not to downgrade the protection status of any part of TRHS or the Leuser Ecosystem; and to prevent the development of infrastructure that will adversely affect the property's OUV and integrity, such as the proposed geothermal plant on the Kappi plateau, road developments, and the hydropower dams PLTA Tampur, Lesten and PLTA Kluet, Meukek.



Fig. 3. Protected rainforest in and around the TRHS World Heritage property have been devastated for oil-palm plantations and by illegal logging.

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World Heritage and Climate Change – A Great Barrier Reef Case Study

Earthjustice (USA)
Environmental Justice Australia



In 2017, the World Heritage Committee has an opportunity and a responsibility to protect World-Heritage-listed coral reefs, including the Great Barrier Reef World Heritage Area, from the devastating effects of climate change. This report provides a framework for the Committee's assessment of the international legal obligations of countries where climate-affected World Heritage properties are located. Applying the framework to Australia, the report concludes that Australia is failing to fulfil its obligation under the World Heritage Convention to protect the Great Barrier Reef from the impacts of climate change.

Coral reefs are one of the most remarkable and biologically diverse elements of Earth's natural heritage, supporting more species per square meter than any other marine environment. Reefs provide spawning, breeding, nursery and feeding grounds for key elements of the ocean ecosystem. They provide economic and environmental services to millions of people. Corals are fundamental to Australia's Great Barrier Reef and many other World Heritage sites.

Unfortunately, corals around the world are bleaching and dying because of ocean warming and acidification caused by out-of-control greenhouse gas emissions. The plight of these corals – and of the World Heritage sites on which they depend – is growing more dire every year. Without strong global action to reduce greenhouse-gas emissions, many may not survive beyond the middle of this century.

In the past few years, the effect of climate change on corals has been made frighteningly evident. Elevated ocean temperatures have triggered wide-scale coral bleaching events around the world, from the United States' Papahānaumokuākea Marine National Monument, to France's Lagoons of New Caledonia, the Seychelles' Aldabra Atoll, and Kiribati's Phoenix Islands Protected Area. On Australia's Great Barrier Reef, a staggering 22% of corals died in 2016 – the worst coral die-off in recorded history. In the northern third of the Reef, an area that had previously been relatively unaffected due to its distance from other human pressures, approximately two-thirds of the shallow-water coral died in just eight to nine months. On some reefs in the north, almost all the coral died.



Fig. 1. Coral near Orpheus Island, Great Barrier Reef World Heritage Area (Australia).
Photo: Greg Torda

Scientists tell us that even under the most ambitious current reduction scenarios for greenhouse-gas emissions, 70% of corals worldwide are projected to suffer from long-term degradation by 2030, and, accordingly, limiting warming to 1.5°C or less is essential for the survival of coral reefs and many other marine ecosystems. To minimize the impacts of climate change on World-Heritage-listed coral reefs and limit global average temperature rise to well below 2°C – the goal the parties to the United Nations Framework Convention on Climate Change adopted in the Paris Agreement of 2015 – humanity must immediately and substantially reduce greenhouse-gas emissions. This means taking immediate steps to reduce the burning of fossil fuels, the largest source of greenhouse gases.

Under the World Heritage Convention, Australia has primary responsibility for protecting and conserving the Great Barrier Reef, and it must address both existing and potential threats to the Reef, whatever their source. The Convention requires Australia to “do all it can ... to the utmost of its own resources” to take “appropriate” action to protect and conserve the Reef. This obligation reflects the international legal principle of common but differentiated responsibilities, which is a way of determining a nation's “fair share” of responsibility for solving an environmental problem by tak-

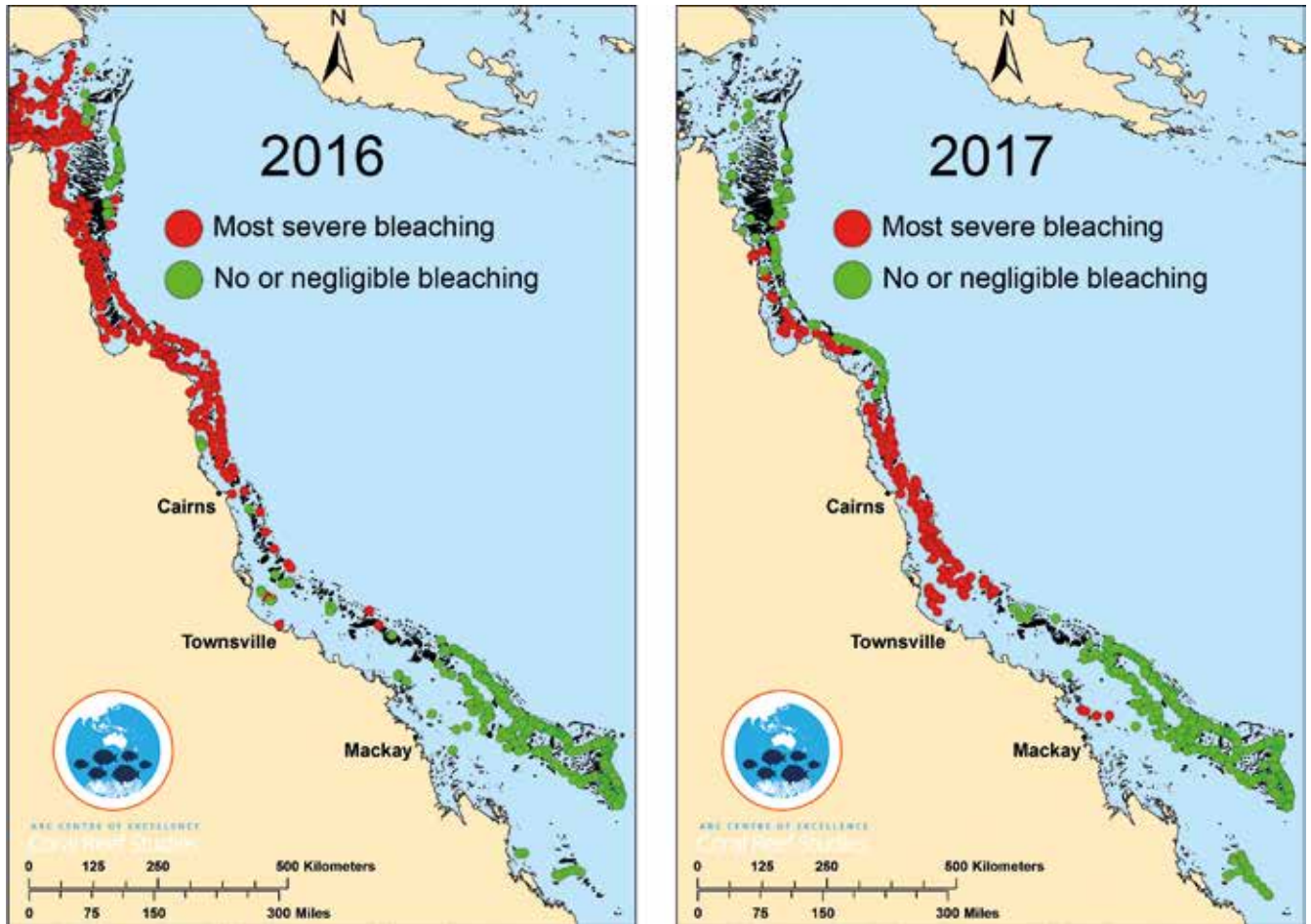


Fig. 2. Coral-bleaching events 2016-17, Great Barrier Reef World Heritage Area (Australia). ARC Centre of Excellence for Coral Reef Studies

ing into account differences in states' contribution to particular environmental problems, and their economic and technical capacity to address them.

Like all nations with World-Heritage-listed coral reefs, Australia's fair share to protect the Great Barrier Reef begins with action to increase the Reef's resilience by minimizing non-climate stressors. For small island states and other states with minimal greenhouse gas emissions or fossil fuel developments, the duty may end there, and may even be conditioned upon the receipt of technical and/or financial assistance from wealthier nations and/or those responsible for more emissions. But for Australia, the obligation to do "all it can ... to the utmost of its resources" requires more. In light of Australia's resources, capacity to act, and very high per-capita greenhouse-gas emissions, Australia must take serious and effective action to reduce its current greenhouse-gas emissions and to cease the construction of new fossil-fuel extraction infrastructure that will lock in decades of greenhouse-gas emissions.

Unfortunately, Australia is failing to meet these obligations. It is not doing its fair share to reduce its greenhouse-gas

emissions, especially as evidence indicates that Australia is unlikely to meet its commitments under the Paris Agreement, and it is permitting the development of massive new coal mines that will contribute substantially to climate change and the further deterioration of the Great Barrier Reef. Also, Australia's Reef 2050 Plan – its framework for managing the Reef until 2050 – relies on inadequate government policy to address Australia's contribution to climate change and is silent on the impacts of emissions from the new fossil-fuel extraction projects in Australia. Finally, Australia is failing to adequately reduce non-climate stressors on the Reef: among other things, it has permitted the expansion of the coal export port at Abbot Point, within and adjacent to the World Heritage Area, which will contribute to the cumulative deterioration of the Reef.

In light of the extreme vulnerability of the Great Barrier Reef World Heritage Area to the impacts of climate change, and because the World Heritage Committee's Advisory Bodies are currently considering Australia's implementation of the Reef 2050 Plan, we recommend that at its 41st session in July 2017, the World Heritage Committee should:

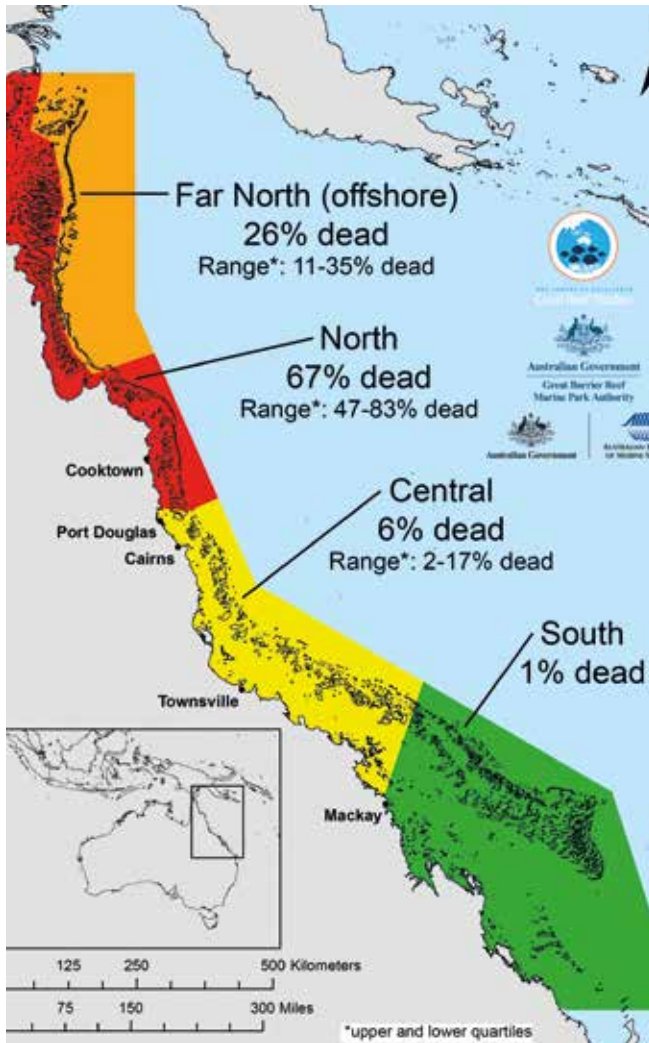


Fig. 3. Loss of coral on the Great Barrier Reef. ARC Centre of Excellence for Coral Reef Studies

1. Express its deep concern about coral bleaching and mortality in the Great Barrier Reef World Heritage Area, and about the threat that climate change poses to the health and survival of the Great Barrier Reef ecosystem;
2. Call on Australia not to approve or support any new development projects that will directly, indirectly or cumula-

tively harm the Great Barrier Reef World Heritage Area, including by contributing to climate change;

3. Request Australia to invite a monitoring mission as soon as possible to review Australia's response to the coral bleaching crisis and the effectiveness, implementation and funding of the Reef 2050 Long-Term Sustainability Plan, and to consider the state of conservation of the property as a whole;
4. Require Australia to report annually on its progress in implementing the Reef 2050 Plan and its response to the coral bleaching crisis, including on the substantive near-term steps it is taking to immediately address the threat of climate change to the Great Barrier Reef World Heritage Area;
5. Call on Australia to ensure that it meets its commitments under the Paris Agreement and does its fair share to reduce its greenhouse-gas emissions;
6. Inscribe the Great Barrier Reef World Heritage Area on the List of World Heritage in Danger; and
7. Call on financiers not to support or fund development projects that will directly, indirectly, or cumulatively harm the Great Barrier Reef World Heritage Area.

In addition, the Committee should perform the same analysis of the obligations of other states with World Heritage-listed coral reefs, keeping in mind that small-island states and other states with minimal greenhouse-gas emissions or fossil-fuel developments may have no duty beyond taking appropriate action to reduce non-climate reef stressors, possibly conditioned upon the receipt of technical and/or financial assistance from wealthier nations and/or those responsible for more emissions.

This paper is the Executive Summary of an extensive study which can be downloaded from <http://earthjustice.org/news/press/2017/new-report-calls-on-world-heritage-committee-to-protect-threatened-corals> or <https://envirojustice.org.au/major-reports/world-heritage-and-climate-change>

Drowning by Numbers: Effects of Global Warming and Fossil Fuel Mining on the Wadden Sea

Frank Petersen, Ellen Kuipers and Esmé Gerbens,
Waddenvereniging



Climate Change is real. Preservation of natural World Heritage sites such as the Wadden Sea needs to take the effects of climate change into account. One of the foremost impacts of climate change is a rising sea level. Should the sea level rise significantly, shallow inland seas like the Wadden Sea may very well 'drown'. In that case none of the natural characteristics will remain that were crucial to its inscription on the World Heritage List.



Fig. 1. Satellite image of the Wadden Sea area (Dutch, German and Danish part)

The Wadden Sea is a shallow inland sea between the North-West European continent and a string of sandy islands. Twice a day at low tide the sea turns to land. Brave athletic people can walk from the mainland to one of the islands in the time-window between two tides. Birds have the same time-window to feed from the Waddensea's rich bottom-dwelling populations of mussels and cockles. The fragile balance of tides and exposed seabed is one of nature's unique ways to shape landscape and ecosystems and was key to the nomination by the Dutch, German and Danish government of the Wadden Sea for UNESCO World Heritage Status. In 2009 the Wadden Sea was accepted on the global list as one of the world's natural wonders. Subsequent extensions have occurred.

The State of Conservation (SOC) Report submitted to the UNESCO World Heritage Secretariat in November 2016 pro-

vides a recent update on the integrated management of the WHS by the three governments concerned. However, in relation to the potential effects of fossil-fuel mining and the use of fossil fuels causing climate change, the SOC Report appears to lack crucial management decisions. The three governments concerned are clear in their concern that "climate change may have an impact on many different Wadden Sea ecosystem features and elements, human activities and interests, at various spatial and temporal scales. It is important to recognize that climate change is a cross cutting theme. Therefore, dealing with impacts of climate change requires an integrative approach across borders, disciplines, sectors and administrative layers (ICZM)."

A clear omission in the SOC Report is the recognition by the three governments (all three parties both to the UNESCO conventions and to the Paris Agreement on Climate Change) is their failure to relate the positive impacts of the Paris Agreement to the protection of the Wadden Sea. A reduction of exploration for fossil fuels underneath the WHS and a global reduction in the emissions of CO₂ (in other words the use of fossil fuels) may very well prevent further impacts of climate change on the Wadden Sea World Heritage property.



Fig. 2. Map with drilling sites and planned drilling sites in the Dutch part of the Wadden Sea

In other words, the State Parties responsible for the proper management of Wadden Sea World Heritage property outline the need for climate change adaptation policies and measures but appear to fail in making a joint initiative to prevent climate change by allowing more fossil-fuel mining underneath the Wadden Sea World Heritage property.

Reports by WWF and Waddenvereniging have clearly outlined that new or increased extraction of fossil fuels is a threat to the protection and preservation of the Wadden Sea. Specifically, the Dutch government appears to be ignoring these warning signals and intends to facilitate, and financially benefit from, further fossil-fuel extraction from beneath the WHS.

State parties, as well as energy companies such as Shell and Exxon/Mobil, are still keen on realizing new projects for fossil-fuel mining. Under the latest Dutch Mining Act some restrictions have been set on new mining projects. Mining installations are not allowed within the legal borders of the Wadden Sea World Heritage site. However, the use of mining installations only 500 meters outside the World Heritage property remains legal. Mining within the Wadden Sea World Heritage property is illegal, but mining underneath the Wadden Sea is, strangely enough, completely legal and is facilitated by the Dutch government both legally and financially.

Knowing this legal loophole, energy companies and their investors take the somewhat cynical position that “as long as it’s legal we can do it”. The effects of fossil-fuel mining on the World Heritage property are however identical. No matter if a mining installation operates within or just outside the legal limits of the WHS, the effects on both nature and climate are the same. In the new Mining Act the Dutch government appears to take the interests of energy companies more seriously than its obligation to UNESCO to preserve the natural characteristics of the Wadden Sea.

A recent report presented by Waddenvereniging, and peer-reviewed by some of the most prominent Dutch scientific experts on climate change, clearly warns the authorities of the likelihood that Wadden Sea will ‘drown’¹ – particularly in the event that the Dutch government continues to facilitate fossil-fuel mining underneath the property.

NGOs such as Waddenvereniging have repeatedly presented their concern about the impacts of fossil-fuel mining for the preservation of WHS Wadden Sea because of its local effects. The interrelated local effects of mining in combination with the global effect of using fossil fuels should concern governments responsible for the protection and conservation of the Wadden Sea World Heritage property. This applies not only in relation to climate-change adaptation strategies, but perhaps even more so in strategies to prevent the extraction of fossil fuels from World Heritage sites.



Fig. 3. Wadden Sea panorama.

Photo Henk Postma

There is a lack of such strategies by the Dutch government. It would be both logical as well as useful should the 2017 session of the World Heritage Committee provide clear guidance to all parties to the Convention about the need for the prevention of CO₂ emissions due to activities affecting World Heritage sites – especially when climate change is considered a potential risk to the site concerned, as is the case for the WHS Wadden Sea. This would also be a way for UNESCO and its World Heritage Committee to contribute to, and strengthen, the Paris Agreement on Climate Change.

But on a more emotional and moral level it would be wonderful should the WH Committee decide that the world’s most unique natural sites cannot be put in a position where they contribute to the world’s most pressing environmental problem. The Wadden Sea should not be an accomplice to one of the largest threats to its own preservation and conservation.

The commercial pressure to explore and extract fossil fuels from beneath the Wadden Sea is enormous. Various international energy companies and corporate investors appear to prefer numbers over nature. The risk that the Wadden Sea World Heritage property may drown due to the effects of fossil-fuel mining and global warming are still ignored by the State Parties responsible for its protection and preservation.

Knowing the most recent scientific report on both climate change and its effect on the Wadden Sea, and knowing the immense financial pressure exerted by energy companies on national and local authorities to continue fossil-fuel extraction from beneath the Wadden Sea World Heritage property, we propose that the World Heritage Committee, at its 2017 meeting in Krakow, presents clear guidelines that call on the States Parties to:

- Manage World Heritage properties in a such a way that their conservation is also beneficial to their obligations under the Paris Agreement on Climate Change;

¹ Schuttenhelm, Rolf, ‘De toekomst van de Waddenzee: een stijgende zeespiegel over een dalende bodem’, https://waddenvereniging.nl/wv/images/PDF/Toekomst%20van%20de%20Waddenzee/ToekomstvandeWaddenzee_rapport.pdf

- No longer manage the Wadden Sea World Heritage property in a way that contributes to extra or more fossil fuel-mining and the subsequent increase in CO₂ emissions from the use of these fossil fuels.

A more extensive report about potential undersea mining and its effects on the Wadden Sea can be downloaded at <http://waddenvereniging.nl/wv/images/PDF/Rapport%20The%20Steering%20power%20of%20money.pdf>

In addition to these more general suggestions, it may be beneficial to consider the Wadden Sea World Heritage property as a case study in the best practice of preventing further fossil-fuel mining from underneath the site. The Committee should request the three governments concerned to report at the next session of the World Heritage Committee on the progress of seriously preventing further exploration of fossil-fuel mining underneath the Wadden Sea World Heritage property.

II. World Heritage Properties and Indigenous Peoples

Mikisew Cree First Nation's Call to Better Safeguard Wood Buffalo National Park

Melody Lepine, on behalf of the Mikisew Cree First Nation



The world needs to know what's happening here, and the effect from the oil industry and the Bennett Dam and climate change. The people here are suffering and they cannot practise their God given right to hunt, to trap, to fish, to be Mikisew. It's a sad reality.

Mikisew Cree elder

We, the Mikisew Cree First Nation, are an indigenous group whose homeland includes the Peace-Athabasca River Delta in the Wood Buffalo National Park World Heritage Site in northern Canada.



Fig. 1: The Athabasca River delta from the air.

Photo: Garth Lenz

The Peace-Athabasca Delta is the largest inland freshwater delta in North America and arguably the largest boreal wetland in the world. It supports wood bison, migratory waterfowl and songbirds and a range of unique and important natural processes, all of which were part of justifying the inscription of Wood Buffalo National Park as a World Heritage site in 1983. Critically, the Peace-Athabasca Delta also supports the way of life of indigenous peoples such as us. For Mikisew people, the Peace-Athabasca Delta, called Ayapaskaw in Cree, is everything.

As traditional stewards of these lands and waters, we have witnessed parts of the Peace-Athabasca Delta in Wood Buffalo National Park deteriorate as a result of poor management of industrial activities and climate change. Because our culture is tied to the Peace-Athabasca Delta, the loss of Wood Buffalo National Park's natural values puts our distinc-

tive culture at risk. The Peace-Athabasca Delta has already deteriorated to a point that our elders feel a sense of tremendous loss and sadness for current and future generations.

The industrial activities that are changing the Peace-Athabasca Delta are located outside of the Park, along the two main rivers that create the delta. Upstream on the Peace River there are major hydroelectric dams. A new, major dam is currently under construction, despite significant indigenous and academic concern about deficiencies in its approval process. Upstream on the Athabasca River is the oil-sands region of Alberta, where an ever-increasing number of oil-sands mines and large tailings ponds are located adjacent to



Fig. 2: The Peace River and Athabasca Oil sands upstream from Wood Buffalo National Park.

Map: Wikimedia commons

that river. The largest-oil sands mine ever to be proposed and the first to be partially within a watershed that flows directly into the Peace-Athabasca Delta is now well-advanced in its approval process despite limited consideration of impacts on the Peace-Athabasca Delta.



Fig. 3: Aerial view of an oil sands mine in Alberta. Photo: Jennifer Grant

Even though some of the largest industrial projects in North America are upstream of this world heritage site and are known to have downstream effects, necessary legal safeguards and management measures for the park’s Outstanding Universal Value (OUV) are lacking. Weak regulatory protections, deficient information, problematic land-use planning outside the park and a lack of meaningful consultation with indigenous peoples undermine protection of the Peace-Athabasca Delta.

Although the Peace-Athabasca Delta is our home and the place where we go to maintain our way of life, our perspectives and our knowledge of the mounting changes to the Peace-Athabasca Delta have been dismissed and ignored for years. We have no formal, effective role in the management of the Park or the stressors that are threatening it. Promises that Canada made to us to correct man-induced changes to water levels in the Park have gone unimplemented. Our input into environmental assessments and other management processes is routinely ignored.



Fig. 4: A Mikisew Cree elder building a wooden canoe. Photo: Melody Lepine

Because of the ongoing failure of governments to respond to our requests for credible actions to manage the threats to the Peace-Athabasca Delta, we turned to the World Heritage process in late 2014 by filing a petition to have Wood Buffalo National Park inscribed on the List of World Heritage in Danger. Our petition gained support from former Parks Canada officials, former park wardens, leading scientists and multiple indigenous groups and civil-society organizations. As a result of our petition, in 2015 the WHC requested that Canada invite a joint World Heritage Centre / IUCN Reactive Monitoring Mission (RMM) to review the impacts of development on the property. The RMM took place in the fall of 2016 and the report was released in March 2017.

The mission report represents the first international consideration of Canada’s safeguards for and management of the Wood Buffalo National Park. It confirmed that our concerns about the integrity of the Peace-Athabasca Delta are not “overstated” as Canada has suggested. The mission characterized the scale of the threats to the natural and cultural heritage of the Peace-Athabasca Delta as “exceptional.” The report is notable for identifying overarching concerns in three areas: long-standing and unresolved conflicts between Aboriginal Peoples and governmental and private-sector actors; governance deficiencies, including but not limited to impact assessment, environmental monitoring and water management across jurisdictions; and the effects of observable and anticipated climate change.

The mission concluded that Canada should be given one opportunity to develop a structured and adequately funded response to 17 recommendations, in effect amounting to “major operations.”

On 10 March 2017, Canada’s Minister of the Environment called the report a “call to action”. Unfortunately, other signs have emerged recently that seem contrary to the Minister’s statement and our perspective of what is needed to effectively manage the threats to the Park. Throughout the mission, Canada showcased a program called the Peace Athabasca Delta Ecological Monitoring Program as evidence of its efforts to involve indigenous peoples in environmental monitoring. Since the mission ended, Canada has reduced funding for that program. In recent months Canada has questioned some of the Mikisew’s rights in the Park for the first time. Our efforts to be fully and effectively involved in the strategic environmental assessment for the park have been frustrating.

Of greater concern is Canada’s draft State of Conservation (SOC) report for the park. As of five days before it is to be filed, the draft does not acknowledge the mission’s findings and, while stating support for the intent of the mission’s recommendations, it endorses the same monitoring programs and management measures that the mission found to be

inadequate, underfunded or poorly coordinated as ways to safeguard the park. Even if Canada makes last-minute revisions, the draft report demonstrates that old habits and management approaches that do not adequately safeguard the park remain strong.

Given the new attention on the issues facing the Peace-Athabasca Delta and the fresh recommendations from the RMM for how to improve the management of these issues, 2017 is a potential turning point for Wood Buffalo National Park. Ultimately, to address the serious situation facing the Peace-Athabasca Delta, Canada must develop new safeguards and improved management measures in partner-



Fig. 5: A herd of wood buffalo.

Photo: www.arcticourscanada.ca

ship with the Mikisew Cree First Nation. The World Heritage Committee's decision in 2017 regarding Wood Buffalo National Park will be important for determining whether this comes to pass.

We call for the World Heritage Committee to:

- express growing concern with the State Party's management of threats to Wood Buffalo National Park, including the State Party's approval of the Site C Hydroelectric Project despite the Committee's 2015 decision;
- instill a sense of urgency for the development of a comprehensive action plan for Wood Buffalo National Park by requiring the action plan be submitted at the 2018 session of the World Heritage Committee;
- confirm that the State Party must fully and effectively include the Mikisew Cree First Nation in the development of the comprehensive action plan for Wood Buffalo National Park; and
- confirm that the State Party should fully and effectively include the Mikisew Cree First Nation in the management of Wood Buffalo National Park.

We also call on Canada to commit to fully and effectively include the Mikisew Cree First Nation in the management of Wood Buffalo National Park and in all stages of the development of the action plan to manage the threats to Wood Buffalo National Park.

Tuareg Heritage and International Obligations: Air & Ténéré World Heritage Site in Niger

Nigel Crawhall and Mohamed Ewangaye,
Indigenous Peoples of Africa Coordinating Committee

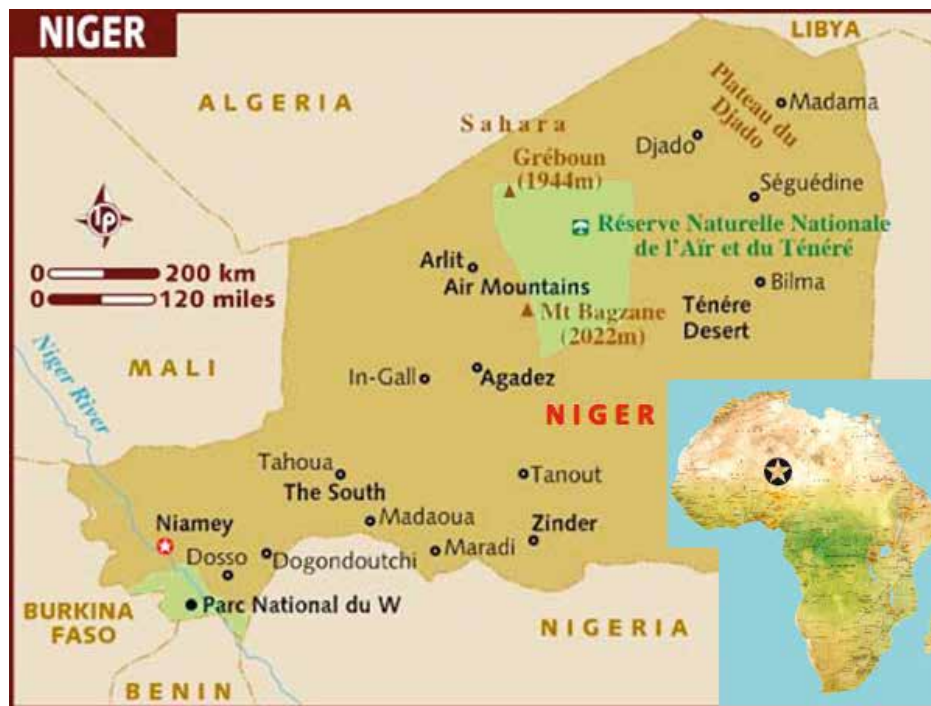


Fig. 1: Location of the Air and Ténéré National Nature Reserve in the central Sahara.

Map: Lonely Planet / Martin Lenk

At 77,360 square kilometers, Air and Ténéré National Nature Reserve (RNNAT) is the largest World Heritage Site on the African continent and one of the largest protected areas in the region. The pastoralist Tuareg, the indigenous people of Air and Ténéré in northern Niger, have governed the region for over a thousand years and have merged traditional governance-systems with potential new configurations to achieve effective conservation. Political instability over two decades has placed great strain on the wildlife and the Tuareg. This included a collapse in endangered species, the site being placed on the UNESCO endangered list, and substantial dislocation of the local population. It also triggered an almost total collapse of the tourist economy.

Now, with peace and democratic rule having been re-established, the Tuareg and the Government of Niger are asking what support the international community is likely to provide to help them re-establish the integrity of the conservation system and to strengthen local site management in line with the original inscription and the aspirations of the custodians of the territory.

Background

The property of Air and Ténéré was registered as a Natural Reserve in 1988, some ten years after its conservation value was noted by the national government. In 1991, RNNAT was inscribed as a natural World Heritage site at the 15th session of the World Heritage Committee in Carthage, Tunisia. The pre-inscription period was marked by a series of increasingly severe droughts and socio-political tensions. Almost immediately after inscription the territory was plunged into two decades of armed civil conflict which took a major toll on humans, wildlife, the economy and the Outstanding Universal Value (OUV) of the property. RNNAT was placed on the In-Danger list of the World Heritage Convention and remains so ahead of the Committee's 41st session in Krakow in 2017.

The Air and Ténéré area is a dramatic landscape of wild arid mountain terrain, life-giving oases, and a vast sea of desert sands. For thousands of years it has sustained the traditional culture and pastoralist economy of the Tuareg people. Air

and Ténéré raise complex issues about the relationship between the national government, the indigenous peoples of a territory, and the responsibilities of the international community when drought and civil conflict spiral out of control and destabilise both nature and its custodians.



Fig. 2: The Ténéré Desert and Aïr Mountains.

Photo: Manfred Gebhardt

At its 41st session of the UNESCO World Heritage Committee, members will be studying an IUCN update on its 2015 reactive mission and the national state of conservation report of the Aïr and Ténéré National Nature Reserve. After 25 years, Niger is attempting to make African history by having a site withdrawn from the endangered list. This effort is supported by the Tuareg traditional authority, the regional and local government, and the pastoralists themselves. The question being posed is what does it take to get a site off the endangered list and how are the indigenous peoples, national state party and the UN agencies and Advisory Bodies meant to work together to achieve this?

Historical context

One of the earliest human archaeological sites, the Gobero cemetery, indicates the presence of the Kiffian population, hunter-gatherer-fisherfolk dating back somewhere between 8000 and 10 000 years BCE¹. A substantial rock-art tradition was established in the Aïr (from Ayǎr in Tamachek, the Tuareg language) between 6,000 years BCE to 1,000 years AD. Some of the rock art distinctly represents the emergence of Tuareg occupation as the Sahara became increasingly arid.

From the 11th century the Tuareg emerge as dominant in the Aïr landscape and economy. There are distinct arguments for a cultural continuity between the Tuareg of Aïr and the people of Abyssinia. The famous cross of Agadez could well be a derivative of the orthodox Coptic crosses. By the mid-15th century, the Sultanate of Aïr began to establish its political

dominance in relation to the competing Songhai Empire. The region became a Tuareg confederation under the auspices of a paramount chief. The allegiance of the Tuaregs of the Aïr to the Ottoman Empire transformed the traditional authority into a fully-fledged Sultanate which continues to play an influential and stabilising role to this day.

In modern times, Aïr and Ténéré tell the modern story of conflict and the struggle for democracy and self-determination in the Sahara. The landscape of Aïr and Ténéré is scarred by the conflicts of colonial occupation and a turbulent transition to independent and democratic rule. It is a landscape disturbed by uranium mining, far from metropolitan life; a land of camel herders, artisans, holy men, ancient mosques and a resilient system of clan and caste.



Fig. 3: The vice sultan of Aïr in front of the main mosque in Agadez. Photo: Nigel Crawhall

Niger achieved independence from France in August 1963. In the early 1970s, a series of droughts devastated the pastoralist north, destabilising the rural economy and pushing herders into the urban areas. From 1975, the IUCN, WWF and the UN Environment Programme (UNEP) were invited to give Niger guidance on how to address the rapidly declining biodiversity of the northern region. This emerged as a proposal to conserve the rocky mountainous arid region of the Aïr and the vast sand territory of the Ténéré.

¹ <https://anthropology.net/2008/08/14/the-kiffian-tenerean-occupation-of-gobero-niger-perhaps-the-largest-collection-of-early-mid-holocene-people-in-africa/>

Bourgeot (2007) argues that the Tuareg have adapted and reconfigured their traditional systems of governance to promote conservation and to merge with the overhaul of the political system which presented opportunities for an emerging decentralization. The resulting cooperative approach was formalised as *unités géographiques d'aménagement et de congestion* (UGA) – community-based conservation monitoring units – in each of the desert valleys inside the reserve. The UGA are currently being re-established after the second period of rebellion. They play a frontline role in conservation, governance and communications.



Fig. 3: The vice sultan of Air in front of the main mosque in Agadez. Photo: Nigel Crawhall

The rise of a conservation ethic and its support by various elements of Tuareg society could have seen a significant turnaround of the vulnerable biodiversity in the 1990s. However, in parallel, the elite in Niamey were driving an ambitious agenda to establish uranium mining in the north, notably at Arlit on the western boundary of what was to become the World Heritage Site. Arlit's surging population during the boom years, the crash of uranium prices, and the burgeoning need for wood, water and meat aggravated the biodiversity crisis in the Agadez Region. Uranium mining has had many social and ecological impacts in the north and still remains a driver of illegal natural resource extraction in and around the property.

In May 2009, the Constitutional Court refused to allow the incumbent president to hold a referendum on extending his presidential mandate. In February 2010, there was a coup d'état led by Salou Djibo who suspended the constitution, dissolved the national institutions of governance and arrested President Mamadou Tandja. In March 2011, Mahammadou Issoufou was democratically elected to the

Presidency and promptly appointed Brigi Rafini as the first Tuareg Prime Minister of the Republic of Niger.

Rafini was not only the first Tuareg to hold such a high position in the Republic, he was also born in the village of Iferouane, the main village at the entrance to the Air and Ténéré Reserve. He had played a key role in getting IUCN into Niger in the 1980s, personally working on the dossier for the World Heritage inscription of Air and Ténéré. It is due in large part to Rafini's efforts that the inscription occurred (under criteria vii, ix and x). However, by 1992, the site had to be put on the UNESCO endangered list where it has remained.

RNNAT ended up on the World Heritage 'endangered' site list due to various forces acting on the property which placed its OUV at risk. Overtime, those dynamics have changed but left the rare species now on the edge of extinction. The Republic of Niger is working diligently to address the requirements for getting off the list and restoring the tourism and prestige of the famous site.

The sharp decline in wildlife, leading to species extinction and the imminent threat of further species extinction has had a number of inter-related drivers over the past decades. The primary issue is an inability to create synergies between conservation by the indigenous pastoralists and local authorities in relation to the legal and technical functions of the protected areas and forestry divisions of government. Air and Ténéré is a vast and remote territory, and without considerable effort by local communities, conservation is not possible.

The first drivers were the impacts of droughts, unauthorised hunting which included foreign hunters and the growing impact of the uranium mines in the area. This was seriously aggravated with the outbreak of the two back-to-back rebellions in the 1990s and early 2000s, leading to armed conflict, a collapse in wildlife administration, mass displacement of local people and general lawlessness. Some species, such as the red-neck ostrich were both hunted and traumatised by mortar fire.

According to eye-witness accounts, the military, sent up from the south of Niger to control the northern insurrection, played a major role in slaughtering wildlife during the 1990s. This included allegations of randomly shooting at rare species for target practice as well as more focussed efforts by senior military to have their larders and freezers stacked with wild venison. It was repeatedly alleged that senior military officials were keeping red-neck ostriches as pets in their gardens. It was alleged that wealthy, well-connected hunters from the Gulf States came to hunt in and around the reserve with impunity and substantial arms.

The military's role in the rapid demise of rare species has not been the subject of a formal investigation. With the new

regime of Mahamadou Issoufou, the military and administration have rapidly been brought back under control and the courts began taking action against military poachers.



Fig. 5: Highly endangered red-neck ostriches.

Photo: Nigel Crawhall

Currently, according to both the State Party and the IUCN, the main concerns are that the endangered species are at the very limit of their threshold for recovery. Now, any type of poaching or ecosystem degradation can make the difference between survival or extinction. The concerns are about small scale poaching along the borders of the site and illegal wood extraction from inside RNNAT. In 2015 consultations, most of the mayors noted that illegal products are sold openly in Tabelot market and along the road to Arlit. There is some confusion at this stage as to who precisely should be reporting, arresting and dealing with illegal resource extraction. There is general agreement that the UGA and the local communities must be the frontline of the conservation efforts, which likely requires a great deal more dialogue and trust building. They however must be backed up by the force of the law.

A new threat in the region is the discovery of gold on the north-eastern side of the park and the dangerous syndicates which are smuggling would be migrants and refugees through the remote territory.

The “endangered” status is linked to the threats to the OUV, notably the imperilled status of endangered species, particularly the addax antelope (*Addax nasomaculatus*) and the red-necked ostrich (*Struthio camelus camelus*). Earlier “greening” initiatives have triggered a serious problem with the highly invasive *Prosopis juliflora*. The government has taken many

important steps in re-establishing the integrity of the property and site management. This has included substantial engagement with the Sultan of Air and all levels of government. Several UGAs have been re-established and a massive new reserve has been created to provide a safe corridor for species migration (Niger Fauna Corridors Project).

The IUCN 2015 reactive mission explored with traditional and administrative authorities issues of governance, rights and the views of indigenous peoples within the territory, ranging from camel herders living in the reserve to His Highness, the Sultan of Air, Ibrahim ben Oumarou Ibrahim. Interviews were held with municipal authorities from Timia, Tabellot and Iferouane, with the Governor’s office in Agadez, and eventually with His Excellency, the Prime Minister.

As a result of the mission, which provided a catalytic opportunity for different levels of administration and society to engage with each other about the future of the World Heritage site, the Sultan organised a tour of the region, speaking directly to Tuareg people in towns and remote settlements about their religious and cultural duty to conserve.

The 2015 IUCN mission found that the process of decentralization promoted capacity-building in and around the reserve. Although Timia is outside the reserve, the leadership of Timia acts in concert with other municipalities for the conservation of the site. Tabellot is also important and appears to need greater attention to achieve public understanding of the threats of illegal harvesting of wild resources.

The mission noted that community participation in decision-making is achieved through the following structures:

- a framework of consultations by staff of the Reserve with villagers and leadership;
- geographical management units (UGA) which people would like restored;
- community brigades for natural resource monitoring within RNNAT;
- municipal land commissions and the Regional Assembly.

Most of these structures had been previously operational but have become debilitated by the political instability and need to be reformulated and empowered.

Current Tuareg aspirations for self-determination have transformed into a new enthusiasm about being part of the whole of Niger, of being active in national politics and the transformation to an accountable and representative democracy. The north remains poor but there is increased hope that improvements will come from an equitable use of the national resources. If tourism is re-established, Agadez will quickly regain some of its former economic vitality.

The IUCN reactive mission ended with an interview with the Prime Minister. Rafini is enthusiastic about the rehabilitation of Aïr and Ténéré and the vision of a well-conserved World Heritage Site for future generations to appreciate and enjoy. His message to the outside world however was a challenging one. Why, he asked, does the United Nations create a treaty for World Heritage, but then withdraw and leave the site to suffer whatever damage comes along when a national situation becomes a crisis? Donors and multilateral agencies that supported inscription all withdrew from Niger during the conflict years. If the purpose of the United Nations is international solidarity, and the purpose of the World Heritage Convention is to protect the OUV of such sites, is it not also then incumbent on the international community to assist during times of conflict and instability, to help the different actors protect the site, and to try to mitigate threats while working towards long-term solutions?

The effective conservation of biodiversity in the Aïr and Ténéré and the self-determination of the Tuareg people are

supported by the national government. However, in one of the poorest countries in the world, successful World Heritage conservation requires effective international cooperation, especially during times of conflict and post-conflict. At this stage, resolving the threats to the property and supporting the indigenous peoples of Niger requires concerted international attention and action.

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A Culture and Human Rights Centered Approach at the Tri-National de la Sangha, Central Africa

José-Martial Betoulet-Bangala, Joseph Mukomo Itongwa,
Ernesto Noriega and Tatjana Puschkarsky, OrigiNations



The Tri-National de la Sangha (TNS), situated in the North Western Congo Basin, is an exemplary case of cooperation between three neighboring states in the conservation of a large forest landscape. Composed of three contiguous National Parks, the core zone of the TNS encompasses 746,309 hectares of humid tropical forest. The buffer zone of 1,787,950 hectares is mostly occupied by forest concessions. The property consists of numerous habitats: tropical forests comprised of deciduous and evergreen species; a great diversity of wetlands, including swamp forests and periodically flooded forests; and many types of forest clearings of major conservation importance that continue to be connected at the landscape level.

Name of the Park	State Party	Area
Parc National de Nouabalé-Ndoki	Republic of Congo	Property: 406,455 ha
Parc National de Lobéké	Cameroon	Property: 217,854 ha
Parc National de Dzanga-Ndoki	Central African Republic	Property: 122,000 ha

TNS was inscribed on the UNESCO World Heritage List in 2012 due to its outstanding biodiversity values (criteria ix and x) in order to guarantee ongoing ecological and evolutionary processes in a mostly intact forest landscape at a very large scale. It provides a safe refuge for viable populations of forest elephant, critically endangered Western lowland gorilla, endangered chimpanzee, and several antelope species such as sitatunga and bongo.

The inscription decision of the Committee likewise extolled the cultural heritage of the indigenous population, their rights to customary use, and their outstanding knowledge in the preservation of this environment:

(b) Increase further the involvement and representation of local and indigenous communities in the future conservation and management of the TNS landscape in recognition of the rich cultural heritage of the region, the legitimacy of their rights to maintain traditional resource use, and their rich local knowledge, including through providing effective and enhanced mechanisms for consultation and collaboration.” (35 COM 8B)



Fig. 1. The TNS World Heritage property.

Map: WWF

The tropical forests of the Congo Basin have been the home of indigenous hunter-gatherers for several thousand years. Over time, these societies have developed an intimate synergy with the territory they inhabit, establishing a vital bond with the forests and rivers which they rely on for their sustenance. This close interaction has defined the values and shaped the social organization of these communities and has generated sophisticated traditional environmental knowledge systems and a deep understanding of these fragile landscapes – a heritage which makes them ideal partners in any effort to protect the forest.

Background

However, with the arrival of logging concessions attracting major new population groups to the region over the last few decades, the rich culture of the forest-dwelling BaAka and the riverine Sangha-Sangha has come under immense pressure. Discrimination, exploitation and a total disregard for their traditions and way of life on the part of the majority population of Bantu settlers undermine their cultural self-esteem and discourage the transmission of traditional knowledge and ancestral practices to the next generations. The indigenous peoples of the region have experienced grave violations of their fundamental human rights such as inadequate access to justice and political participation. Since the coup d'état in CAR in 2013, health and education institutions operate at a minimal level. Civil-society structures are scarce and dysfunctional.

An approach based on indigenous rights and culture

In 2012, a project was started in the Dzanga-Sangha Forest Reserve, the buffer zone of the CAR component of the TNS, to strengthen and further the culture and rights of the local indigenous population. The objective of this initiative is to empower the autochthonous peoples of Dzanga-Sangha in becoming protagonists in the solution to the many challenges facing their communities, taking into their own hands the protection, promotion, and management of their cultural and natural heritage and the defense of their rights.

Furthermore, it seeks to advance the indigenous rights of the BaAka population by facilitating access to justice at the local level and by improving their social, economic and political participation through the strengthening of their own civil-society associations in accordance with traditional values. The project seeks to strengthen these peoples' competence and their capacity for self-determination and organization,



Fig. 2: Training of human rights monitors.

Photo: IPACC

enhancing cultural self-esteem as the first step in unleashing the communities' own potential to tackle critical human rights, conservation and development challenges. By sustaining and promoting traditional culture and knowledge, particularly among the young BaAka, a higher level of self-confidence is attained which then enables the development of community-generated visions and strategies. In this process, traditional cultural-knowledge holders and village elders play an important role in the instruction of youth, guiding the emergence of a new generation of leaders.



Fig. 3: Transmitting traditional knowledge on medicinal plants. Photo: Originations

Results

Over the years, a strong, well-informed and outspoken indigenous youth group has emerged, engaged in the documentation and transmission of their communities' traditional knowledge and values. In addition, a human-rights center is now providing legal assistance to this marginalized population. Training in human rights and anti-discrimination campaigns using theatre, film and the local radio have raised the awareness of the population regarding indigenous rights and have dramatically changed the legal situation of the BaAka. An indigenous human-rights promoter from the Democratic Republic of Congo has supported this process by sharing his own experience in a human-rights monitoring project in DRC. A network of human rights-monitors, including members of the youth group, has been established, with active members in all villages reporting abuses to the human-rights center. The center is currently pursuing several cases of rape of BaAka girls, establishing an important precedent in the country.

Exchanges with indigenous groups and conservation partners in Congo and Cameroon have sparked a new wave of interest in the approach of this initiative, particularly its focus on strengthening the cultural self-esteem of indigenous youth and their empowerment through the access to the means and opportunities to effectively participate in the protection of their cultural and natural heritage. Examples of

this culture-based approach include the mapping of forest resources and the monitoring of the health of the ecosystem through the use of traditional knowledge and skills.

Threats to the site

As reported by the States Parties, next to poaching, small-scale mining and road development, logging poses a concrete threat to the conservation of the TNS as well as to the livelihoods and the culture of the indigenous population of the three parks. The TNS consists of a core zone of three contiguous national parks, and a buffer zone of mostly forest concessions. Whereas for Cameroon and Congo, this poses certain risks to conservation, the situation in CAR is aggravated by the small size of Dzanga-Ndoki National Park and its partition into the two distinct sectors of Dzanga and Ndoki. These comprise the smallest component of the TNS with only 122,000 ha. Its protection has required a buffer zone, the Dzanga-Sangha Forest Reserve, designed as a multi-use zone to accommodate to the needs of the local population.



Fig. 4: Indigenous youth group.

Photo: OrigiNations

However, two years after the inscription of TNS on the World Heritage List, two logging firms (one of them international) were granted a concession to operate in the Dzanga-Sangha Forest Reserve and its surroundings. The World Heritage Committee asked the States Parties to “ensure and monitor socially and environmentally high performance standards of the logging and hunting concessions” (35 COM 8B.4).

The indigenous youth group initiated through this project is beginning to emerge as a significant civil society actor in Dzanga-Sangha. It has started to collaborate with the forest concession by identifying sacred sites and forest resources (medicinal trees, caterpillar trees, fruit trees etc) of critical value to their communities. This information has been shared with the forest concession company and will be taken into consideration in its cutting schedule. This collaborative method will also be included in the concession’s

management plan to ensure that the interests of the population will be respected throughout the remaining cutting area. Conversations have been held on how the social effects of logging in the Reserve can be mitigated. The arrival of new workers and settlers is followed by a scarcity of bush meat and an increase in the price for staples. Consisting of a predominantly male working force, this population influx is often accompanied by a proliferation of alcohol and drugs as well as a sharp increase in prostitution with a consequent surge in sexually transmitted diseases.

Conclusion

The project has successfully facilitated contributions by indigenous peoples to the protection of their region’s natural and cultural heritage, founded on a strong sense of self-esteem and the attainment of basic rights. Enhanced participation of the BaAka in conservation efforts such as monitoring and the subsequent involvement in decision-making processes concerning the management of the park will have a strong positive impact on conservation. Similarly, careful management of the protected area can immensely improve the living situation and cultural viability of the indigenous population. By acknowledging the interdependence of cultural continuity, human rights and a healthy forest, both the indigenous communities and conservation actors are starting to find common ground on which to build a partnership on equal terms in order to more effectively tackle shared challenges.

The description of TNS on UNESCO’s World Heritage website reads as follows:

“The inscription on the World Heritage List presents a concrete opportunity for the States Parties to translate a range of different commitments of the States Parties regarding the rights of local and indigenous people into action on the ground. Maintaining the ecological values of the property will not only depend on law enforcement but eventually both on the standards of commercial resource extraction in the buffer zone and the acceptance and support of parks by the local and indigenous communities in the surrounding landscape.”¹

¹ <http://whc.unesco.org/en/list/1380/>

World Heritage Sites in Botswana – Indigenous Perspectives

Leburu Molatedi Andrias, Diphetogo Lekgowa, Baakantse Satau and Gakemotho Satau, Indigenous Peoples of Africa Coordinating Committee



The Okavango Delta is a vast inland waterway located in the north-west of Botswana which was inscribed as the 1000th site on the World Heritage list in 2014 under natural criteria (vii), (ix) and (x). Adjacent to Okavango is the Tsodilo Hills World Heritage site, one of the most important rock-art sites in the world. Both territories are home to the indigenous people of southern Africa, the San, and more specifically, the Bugakhwe, ||Anikhwe and Ju|'hoansi San. The areas also include Bantu-speaking communities that arrived more recently. This paper, derived from extensive consultation with traditional groups, NGOs and government, looks at how indigenous peoples have engaged in the Okavango Delta inscription and discusses what is required for good and equitable governance of the property.



Fig. 1: The Okavango Delta from the air.

Photo: Teo Gómez

Okavango Delta – a unique opportunity

It is the view of the indigenous peoples that the World Heritage inscription of the Okavango Delta is good for Botswana and can be a resource for future generations¹. In Africa, culture and nature are closely intertwined. Poverty is an issue which must be addressed for human rights, equality

and conservation objectives. The Okavango Delta presents opportunities for innovations in addressing all three issues.

During the nomination process, the government agreed that the cultural characteristics of the site should be noted in the dossier. This bridge between natural inscription and conservation of the cultural landscape aligns with UNESCO's aim of having "community" as one of the pillars of inscription. Defining how the cultural heritage will be part of the management and governance for the Okavango Delta remains an important journey.

Dual inscription under both nature and culture is difficult for many African countries and creates questions about whether a particular cultural heritage has Outstanding Universal Value (OUV). The custodial role of communities is not secure within the World Heritage Convention and there are risks and costs in such inscriptions. Human rights and cultural rights need to be negotiated and defined during the nomination phase. The San communities therefore lobbied for their cultural landscape to be recognised in the nomination dossier. The merit of considering cultural values in management plans and reporting was accepted by the State Party, the World Heritage Committee and its advisory bodies.

Indigenous peoples engaged with the 2013 IUCN evaluation supported the inscription while raising concerns regarding security of tenure. The following issues were raised²:

1. Indigenous peoples should be recognised as indigenous to the Okavango Delta, in line with Botswana's obligations under UN norms and standards, notably UNDRIP³;
2. The dossier does not acknowledge indigenous peoples' ancient cultural landscapes;
3. Indigenous peoples will not be subject to forced, coerced or arbitrary removals as a result of the World Heritage inscription.

¹ See the IPACC workshop report: https://www.ipacc.org.za/images/reports/climate_and_environment/environment/Maun_Report_2015.pdf

² Crawhall, N. 2013, TILCEPA Desk Top Review for Okavango Delta Natural World Heritage Nomination, Botswana, p.1 (unpublished)

³ UN Declaration on the Rights of Indigenous Peoples, UN General Assembly, 2007.



Fig. 2: Tsodilo Hills and Okavango Delta World Heritage sites are both in the Ngamiland Province of Botswana.

Map: Martin Lenk

Use of land is an essential element of cultural heritage for indigenous peoples as it facilitates development options and brings with it a sense of dignity (Taylor, 2006). A study carried out by the Expert Mechanism on the Rights of Indigenous Peoples (EMRIP) indicated that “the establishment of World Heritage sites ... often has a negative impact on indigenous peoples because, often, their ancestral rights over their lands ... are not respected or protected”⁴.

Governance system of the Okavango Delta

IUCN emphasises that protected areas require good management and governance. Management deals with what needs to be done to meet conservation objectives. Governance deals with whom should be involved in decision-making (Borrini-Feyerabend et al. 2013). The key issue for Botswana is what kind of governance system should be adopted to address the State Party’s responsibilities and the aspirations of indigenous peoples. The IUCN team’s pre-inscription evaluation described the governance system of the Okavango Delta as “extremely complex ... involving multiple stakeholders and no single authority”⁵. The State Party concurred.

Governance is effective only where there is good information flow and effective participation. San are at a disadvantage with regards to these as they are formally excluded from the national chieftaincy system which is the basis of participation in rural government. Simple measures, such as getting all

relevant documents onto a single website to help villagers understand the land-tenure system, concessions, development plans, management plans and decision-making processes would help empower rural communities. Coherence is required between the roles of the Land Boards, traditional authorities, community development trusts, the private sector, and various levels of government. Villagers felt strongly that there should be improved multi-stakeholder mechanisms for the Okavango Delta.

Indigenous knowledge and the Okavango Delta

An indigenous-knowledge policy could help with livelihoods and successful conservation. It could develop national certification of wildlife trackers; improve monitoring of environmental trends; conserve relevant species; improve anti-poaching; resolve resource disputes; create employment; and develop a landscape-management approach for the property. Indigenous knowledge is fundamental for contemporary landscape-management. At Okavango, it constitutes an understanding of the relationship between humans and biodiversity. The arid areas and wetlands are seen as a single landscape system. Historic cultural practices provide guidance on the management of fauna, flora and fire that sustain biodiversity in the Delta. The different peoples of the Okavango have historically different but overlapping modes of subsistence. Each system of knowledge contributes to sustaining the people and the ecosystem.

In the late 1950s, traditional management of the Khwe and ||Anikhwe was fully operational with a low population den-

4 A/HRC/EMRIP/2015/2

5 World Heritage Nomination – IUCN Technical Evaluation Report, Okavango Delta (Botswana), 2014



Fig. 3: Participants of a meeting on management issues of the Okavango. Photo: Nigel Crawhall

sity and limited immigration. However by the mid-1980s the demographics and population density had changed and the old systems of management were degrading and being blocked. The ||Anikhwe and Khwe traditional land-tenure system was diminished as a result of land occupation by more dominant linguistic groups, resettlements, development policies, and a reduced role for indigenous peoples in leadership and nature conservation.

Traditionally, fire was used by the Khwe to control invasive plant-species, to reduce dry-season fire hazards, to stimulate fresh growth for wild ungulates, and for subsistence pastoralism. Early burning practices were carefully administered and influenced by prevailing vegetation types and weather patterns. The aim was to resuscitate the veld, maximise biodiversity, conserve trees and reduce wild-fire risks. Professional conservationists are rarely trained to understand indigenous systems of natural resource management. They have points of reference which are often different from those of the ||Anikwe or Khwe. Indigenous peoples have a story to tell but feel nobody is listening.

Women of the Delta

Women and girls who have participated in recent workshops within the property have emphasised that their roles have degraded over time. In the past, San women were respected members of the community, holders of knowledge and culture, and providers for the community. The alienation of lands; laws that stop utilisation of wild foods; migratory labour; and conservation economics have pushed women into marginalisation, poverty and dependency.

Indigenous organisations emphasise the need for girls and women to re-establish their self-esteem and dignity and to play a rightful role in sustaining San culture, economy and language. Inscription of the Okavango Delta is an opportu-

nity for conservation to involve community development, skills training, new economic opportunities, and the ability to apply traditional knowledge in rewarding ways. Indigenous women are not satisfied with the notion that they are fit only for cleaning rooms and weaving baskets for tourists. The current development model makes women vulnerable to abuse and exploitation.

Despite their rich expertise in relation to biodiversity, indigenous women struggle to access educational and employment opportunities. For most indigenous women there are no opportunities for training, finance or employment other than at the very bottom of the tourism economy. Yet women of the Delta see themselves as custodians of culture. The region’s Paramount Chief has honoured the San women, emphasising their need for access to sacred sites and natural resources and their role in sustaining their culture.



Fig. 4: Indigenous San women in a consultation meeting Photo: Nigel Crawhall

Lessons from Tsodilo Hills

Tsodilo Hills is a World Heritage cultural landscape adjacent to Okavango. For the San, Tsodilo was their first experience of the World Heritage Convention, raising questions

about what could be improved and how both sites can be governed. In particular, indigenous peoples have called for greater clarity on human-development indicators and the role of local communities in monitoring conservation of the sites' OUV.

There are two communities living close to the site – the Ju|'hoansi (San) and Hambukushu (Bantu). The Ju|'hoansi are traditional hunters and gathers, indigenous to the territory since time immemorial. The Hambukushu are relatively recent immigrants. Both groups are marginalized from local-government representation but have strong traditional beliefs and respect for Tsodilo Hills as a place of worship and ancestral spirits. Tsodilo is a micro-climate supporting game and important plants used traditionally by humans and animals for medicine and food. Planning documents refer to the economic opportunities presented by the inscription. However, Thomas (2004) says that 61% of respondents at Tsodilo felt that the government was not enabling sufficient small tourism enterprises (2004: 35). There remains a need at village level for training and marketing to help the two communities maintain income streams related to the site.

Recommendations for World Heritage in Botswana

The following recommendations have emerged from very broad consultations:

- Okavango Delta needs a single governance mechanism that meaningfully brings together all major stakeholders across different sectors;
- Botswana should consider adopting the Community Management of Protected Areas Conservation model in the management of Okavango, which could become a pilot project to promote African capacity for site management and governance.
- Tsodilo and Okavango should share lessons on sustainable development and conservation of nature and culture;
- The management plan for Tsodilo Hills should include a governance system with reference to the pertinent new IUCN guidelines;
- Human-development indicators and targets for Tsodilo Hills (literacy levels, school qualifications, tracking and guiding certification, biodiversity knowledge, incomes) should be researched and included in the SOC report;
- Government and NGOs should help residents of Tsodilo Hills and Okavango Delta engage with the management

aims, the economic-development plans and the different responsibilities of agencies responsible for the site;

- The situation, including goals and monitoring, for women and girls in the World Heritage sites needs review and dialogue and should be part of management and governance;
- National Museums should engage with UNESCO and its advisory bodies to develop an approach to cultural-heritage conservation within the Okavango Delta and how this gets assessed and reported in the SOC report;
- Botswana should develop a framework for the development, maintenance and integration of traditional knowledge into the site management of the Okavango Delta;
- Botswana should create an inter-departmental working group on natural and cultural heritage conservation, creating a bridge between National Museums and the Departments of Wildlife and Tourism.

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The Hoh Xil World Heritage Nomination: Analysis and Recommendations

Gabriel Lafitte, independent Tibet specialist
Kate Saunders, International Campaign for Tibet

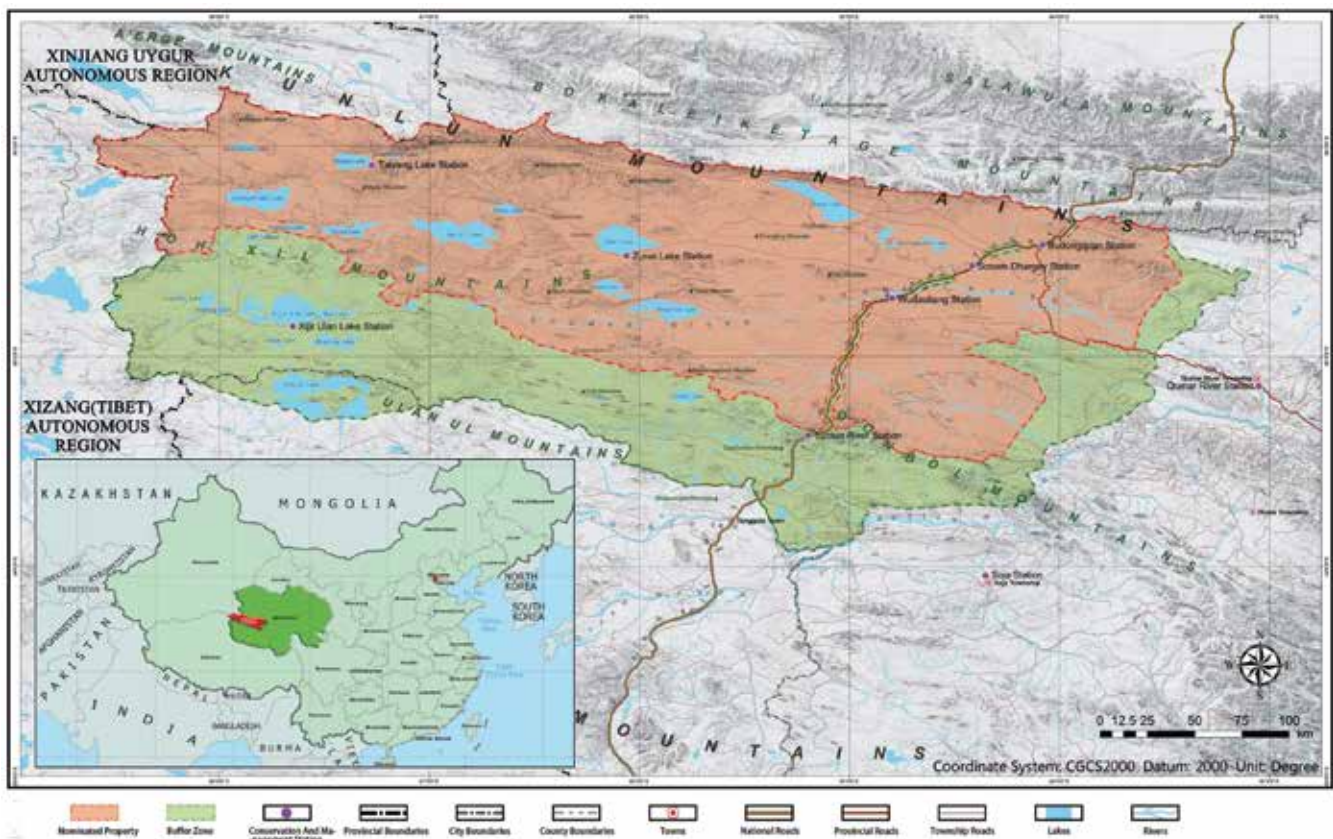


Fig. 1: The Hoh Xil nominated area.

Map: Hoh Xil World Heritage Nomination

The Chinese government is seeking UNESCO World Heritage status for a vast area of lakes, wetlands and wildlife in Tibet, as big as Denmark and the Netherlands combined, known as Hoh Xil in Chinese and Kokoxili in Tibetan. The area is in the middle of three major nature reserves that increasingly exclude normal Tibetan land-use such as nomadic herding, designate the state as the sole agency of control, and encourage mass tourism and industrial development.

The bid before UNESCO is for the 45,000-square-kilometer Hoh Xil nature reserve and the 32,000-square-kilometer Sanjiangyuan, the Three Rivers Reserve, encompassing the headwaters of the Yellow, Yangtze and Mekong rivers. Known as the earth's "third pole" because it has the largest reserves of fresh water outside the Arctic and Antarctic, the Tibetan plateau is the source of most of Asia's major rivers

and, particularly given northern China's water scarcity, of critical strategic significance to the People's Republic of China (PRC). The Hoh Xil, Sanjiangyuan and Changtang (Chinese: Qiangtang) nature reserves stretch across the TAR and Qinghai, from stony deserts in the far west to pastureland in the east, from low to high population density, from an area of lakes to the headwaters of three of Asia's greatest rivers. If Hoh Xil gains World Heritage status, China will be well positioned to then nominate the contiguous nature reserves on either side in their entirety.

Approving this nomination would set a precedent of international endorsement for China's policies of intensified development and mass tourism, and the removal of Tibetan nomads from their lands. UNESCO would also be effectively supporting the criminalization of such traditional activities

leopards, bears and wild yaks. While China proclaims itself the protector of the antelopes, under China’s control their numbers plunged from one million to as few as 65,000. They were protected only by the Tibetan nomads of Kokoxili and nearby pastures risking – and losing – their lives to protect Tibetan antelopes from the slaughter of hunters making fortunes from their downy underfur.²

China’s current land-use policies create further dangers for wildlife – the habitat and mobility of Tibetan antelopes have been threatened in recent years by large-scale poaching and by fencing off the grasslands as part of the settlement policy outlined above.³ Despite the evidence and scientific consensus, the Chinese government seeks to convey the impression that the creation of nature reserves and removal of nomads from the land has the aim of environmental protection and conservation, even climate change mitigation, although the opposite is the case.

China’s official nomination proposal requires UNESCO Committee members to accept a framework that specifically labels traditional pastoral land-use a threat. Its application for UNESCO status states: “Human activities such as harvesting,



Fig. 3: Tibetan antelopes were killed by the thousands for their valuable underfur, and it was the Tibetan nomads who protected them against the poachers. Photo: XinhuaBancroft Media

2 Documented in Lu Chuan’s popular 2004 movie, ‘Kekexili: Mountain Patrol’ (Columbia Pictures/Warner)

3 This is documented by numerous sources, including Joseph L. Fox, Kelsang Dhondup and Tsechoe Dorji, ‘Tibetan antelope *Pantholops hodgsonii* conservation and new rangeland management policies in the western Chang Tang Nature Reserve, Tibet: is fencing creating an impasse?’ *Oryx*, 2009, 43 (2), 183-190.



Fig. 4: Tibetan nomads of Kokoxili: Will they have to go?

Photo: wikiwand

hunting, herding, road building and urban construction still impose negative impacts on nature; the affected ecosystems and wildlife habitats can’t recover fast enough.”⁴ Official hostility to Tibetan nomadic practices is explicit in the application: “Grazing, in particular, threatens the existence of the pristine ecology and wildlife in the core zone. Grazing can deteriorate wildlife habitat and competes with wildlife for land.”⁵

Kokoxili was among the first substantial part of the Tibetan plateau in Qinghai to be formally set aside for “conservation” by the Chinese authorities, which excludes grazing and human use under regulations set in the 1990s – despite the consensus among experts that the traditional ecosystem knowledge of nomadic pastoralists protects the land and livelihoods and helps restore areas already degraded.⁶

Under the relocation policies, many Tibetan nomads from Kokoxili have already been removed from their land to the industrial town of Gormo (Chinese: Golmud) in Qinghai, where they live in concrete compounds and face increasing difficulties, lacking skills or language ability to compete with Chinese workers, and leading to increasing poverty, environmental degradation and social breakdown.⁷ The continued presence of Tibetan pastoralists has been documented in Kokoxili in recent years, with nomads from the TAR moving into the Qinghai part of Kokoxili. It appears that the Qinghai authorities sought to intervene to remove them as the UNESCO bid was being made.

4 P 137

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6 Article 26 of a set of official regulations promulgated in 1994 governing the creation and administration of nature reserves states: “In nature reserves, such activities as felling, grazing, hunting, fishing, gathering medicinal herbs, reclaiming, burning, mining, stone quarrying and sand dredging, shall be prohibited unless otherwise stipulated by relevant laws and regulations.”

7 International Campaign for Tibet report, ‘Xi Jinping visit to Qinghai reveals strategic importance of Tibet’s water, minerals; highlights CCP’s advanced plans’, September 6, 2016

UNESCO status as a boost to mass tourism and infrastructure construction in a fragile landscape

Previous UNESCO inscriptions have demonstrated that the Chinese government uses World Heritage listing as “branding” to boost and promote mass tourism, while at the same time allowing no meaningful input into the construction in World Heritage landscapes of dams, grids and resorts. China defined the boundaries of the Three Parallel Rivers World Heritage site to exclude the actual rivers, resulting in a configuration that allowed China to go ahead with massive damming projects. In 1992, the Jiuzhaigou valley became a UNESCO World Heritage site partly as panda conservation habitat – although no panda had been seen there for 20 years. It is now surrounded by luxury resorts, with a high-speed railway under construction, and billed as “the eastern Davos”.

The mapping of the Hoh Xil bid prioritizes the multi-modal transit corridor connecting inland China with the TAR, known as the Qinghai Tibet Engineering Corridor, bisecting these contiguous nature reserves, with 250 km running through Hoh Xil. This carries the only railway to central Tibet, a major highway, an oil and petroleum pipeline, fibre-optic cabling, and an ultra-high voltage power line bringing electricity from Qinghai to Lhasa. The mapping of the Hoh Xil World Heritage site excludes a massive cobalt deposit.⁸



Fig. 5: The railway line dissecting the nominated area from north to south.
Photo: kekexili.typepad.com

According to China’s nomination papers, the rail line has four stations already built, with nine more to construct, which are likely to be used for tourism for domestic visitors arriving by

train from China’s major cities. For China, Tibet has become a mass tourism destination, with official media claiming that as many as 15 million tourists now visit TAR annually, five times the resident population. Yet tourism remains heavily concentrated in Lhasa, with few other destinations known to the market. China’s planners have invested heavily in recent years in airports and transport hubs outside Lhasa in areas including Mt Kailash. According World Heritage status to a wild landscape between Lanzhou and Xining, on the way to Lhasa, would contribute towards plans to make the TAR a tourist circuit, attracting a heavier footfall.

Recommendations

- While we fully support the aim of protecting biodiversity in the UNESCO application, there is no justification for removing nomads or seeking to block passage of herders through the area, or for using the UNESCO brand to boost tourism and infrastructure while doing so. The involvement of Tibetans – and nomads in particular – as stewards is essential to sustaining the wildlife, the long-term health of the ecosystems, and the water resources that China and Asia depend upon. China’s UNESCO proposal for Hoh Xil denies the Tibetan human presence in Hoh Xil, and the long history of Tibetans sustainably curating the land.
- For the reasons outlined we recommend that the World Heritage Committee should not inscribe Hoh Xil at this time but defer the nomination for “more in-depth assessment or study, or a substantial revision by the State Party”, according to Article 160 of the Operational Guidelines.
- Consistent with this guideline, an “in-depth assessment or study” should be made about the presence of Tibetan pastoralists in the core zone of the nominated area, involving a representative number of the affected Tibetan herders and international experts. The rights of Tibetan nomads to use the area for traditional grazing and to co-manage the area must be fully guaranteed before the process of inscribing the Qinghai Hoh Xil nomination is taken forward. This is consistent with the stipulations in the World Heritage Center’s manual on the involvement of local people and stakeholders (2.3).

The authors will publish and release to the media a more detailed and comprehensive study of the context of the Hoh Xil bid online at: www.savetibet.org prior to the 41st Session of the World Heritage Committee in Krakow, commencing 2 July 2017.

⁸ Chengyou Feng, Wenjun Qu, Dequan Zhang, Re-Os dating of pyrite from the Tuolugou stratabound Co(Au) deposit, eastern Kunlun Orogenic Belt, northwestern China, *Ore Geology Reviews* 36 (2009) 213–220

III. Cultural Landscapes and Mixed Sites

World Heritage at Risk: The Upper Middle Rhine Valley

Klaus Thomas, Elke Greif-Gossen and Mario Pott,
Bürgerinitiative Rheinpassagen

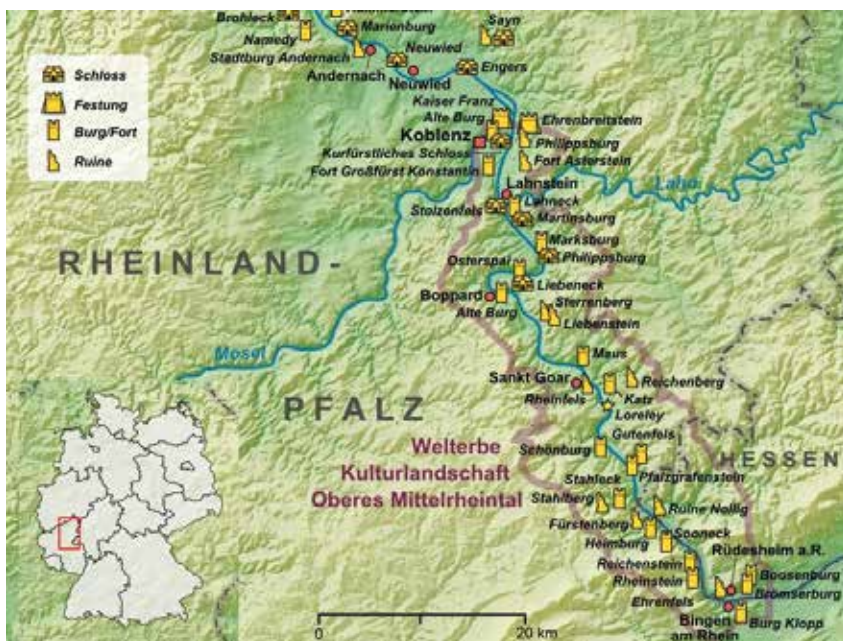


Fig. 1: The Upper Middle Rhine Valley WH Site.

Map adapted from Lencer / wikimedia commons

The Rhine River has been an important traffic route since pre-historic times. Due to the exchange of economic and cultural goods, numerous villages and small towns have developed in a confined area, thus shaping this unique, distinctive and much praised landscape through the continuous interaction between human settlement and nature over a period of many centuries. In 2002, the Upper Middle Rhine valley was inscribed on the UNESCO World Heritage list. The effects of modern traffic were already described in the documentation leading to the property's inscription: "Especially in the narrow Middle Rhine valley, the railway lines and roads as traffic installations and sources of noise cause impairment to the landscape and urban development and have become a burden on the local population and on tourism." The ICOMOS "World Report 2011-2013 Heritage at Risk on Monuments and Sites in Danger" demands action to reduce the noise level.

The effects of present and future traffic will have such a serious negative effect on the unique, universal value of this World Heritage site as to make immediate counter-measures absolutely essential.

Rail traffic

The European Union has designated freight corridor A between Genoa/Lyon and Rotterdam/Antwerp through the World Heritage site of the Upper Middle Rhine valley as an essential traffic route of the "Trans-European Network (TEN)". The Gotthard base tunnel has now been completed. From 2017 onwards, up to 300 trains will pass through it every day. With the completion of the New Transalpine Rail Link (NEAT), rail traffic will increase still further. The freight transport volume will double to about 40 million tonnes per year. Compared with 2002 (the year of the valley's inclusion in the World Heritage List), the number of trains going through the Middle Rhine valley will increase at least four-fold to a daily average of 600 trains. The "European Rail Traffic

Management System (ERMTS)" will provide the technical prerequisites for further acceleration of the railway traffic and for an even higher numbers of trains.

A proposal for building a new railway line to shift freight transport away from the Rhine valley has not been taken up by the German Federal Government.



Fig. 2: Freight trains run through the entire Middle Rhine Valley night and day, such as here in Hirzenach.

Photo: Bürgerinitiative Rheinpassagen

Freight trains regularly generate sound levels of 100 decibels or more. This enormous amount of noise is harmful to human health. Moreover, the vibrations caused by the heavy freight trains are detrimental to the environment. Two expert opinions published by the State of Rhineland-Palatinate in 2013 showed excessive vibrations of up to 120 times the permissible limits. These vibrations can also be measured at great heights. Therefore they will probably have an impact on the slopes of the Rhine valley and either by themselves or together with other factors may cause or contribute to landslides. Other measurement results have not yet been published, but would be required for taking preventive action.



Fig. 3: A slope near Boppard has been concreted in order to prevent further landslides. Photo: Bürgerinitiative Rheinpassagen

Landslides endanger trains and roads. To protect the railway line from masses of loose rocks, the German railway company DB AG is building wire fences on a large scale throughout the entire World Heritage area. The slopes of the Rhine valley have been altered substantially by the addition of concrete foundations, huge support structures, and the extensive use of wire netting. The visual impact is enormous. The appearance of the historic towns and villages has already been severely affected by the construction of "noise barrier walls".

Some of the freight trains transport considerable quantities of hazardous substances, such as gases, flammable liquids and explosives. An accident involving such goods could have disastrous consequences.

Proposed actions: The State of Rhineland-Palatinate must be requested to take immediate action to reduce the noise caused by rail traffic and to measure vibrations. A management plan must be established to stipulate the actions taken to reduce the environmental impact caused by the rail traffic, such as noise and vibrations, and to describe the effectiveness of such actions.

Middle Rhine bridge

The expert opinion prepared by RWTH Aachen to assess the traffic-related effect of a bridge across the Middle Rhine near St Goar was submitted to UNESCO in 2009. It examines and describes the effects of local traffic crossing the bridge. This assessment does not include super-regional traffic. However, it estimates a considerable increase in daily local traffic from the 2000 motor vehicles that use the current ferry service to 7000 motor vehicles moving across the bridge.

In 2017, the State of Rhineland-Palatinate renewed its plans for a bridge to be built across the Middle Rhine near St Goar. The aim is to add a new main East-West traffic artery to the traditional North-South route along the Rhine, and to integrate it into a super-regional road network. The intention is to send a major portion of the traffic flow on the main roads and motorways on the right bank of the Rhine via the Middle Rhine bridge, with the long-distance traffic network on the left bank and via the Hochmosel crossing already under construction with Luxembourg/Belgium, France and the North Sea harbours of Rotterdam and Antwerp. The expert opinion, the State Development Plan IV of Rhineland-Palatinate, and ICOMOS Germany all confirm this concept of a super-regional connection. All essential prerequisites for the new traffic artery have been completed. With the Rhine crossing



Fig. 4: Photo montage of the projected bridge across the Middle Rhine Valley, which is disputed for its many detrimental effects on the integrity of the valley. Photo / Montage: Südwestrundfunk

via the Middle Rhine bridge near St Goar – St Goarshausen, the last gap will be closed.

A bridge with super-regional motorway traffic connections will lead to a significant increase in road traffic, especially trucks. In that case, the through roads in towns and villages along the Rhine must be classified as motorway-access roads with a high traffic volume. This contradicts claims about a local character for the bridge.

The expertise of RWTH Aachen from 2009 can no longer be used to assess the effect of a bridge across the Middle Rhine on traffic. This also applies to the environmental compatibility study and to the assessment of the bridge by an expert opinion concerning visual impairment (both expert opinions were previously submitted to UNESCO).

Proposed actions: Environmental pollution caused by road and rail traffic such as noise and vibrations must be reduced; they must not be allowed to increase any further.

For an assessment of the traffic-related effect of a bridge across the Middle Rhine, a traffic survey must be presented, which includes super-regional and international traffic, as well as an extensive environmental-compatibility study and description of the visual impact. The effects of concentrating rail and road traffic in a single traffic area must also be described.

Ferries

Four ferries running about every 15 minutes currently connect the two river banks with each other in the World Heritage area of the Upper Middle Rhine valley. The ferry companies earn their income exclusively from ferry traffic. They receive no subsidies. If the motor vehicle traffic is transferred to a bridge, the ferry companies will no longer be able to cover their costs. The ferry services will then have to close down. The State Government has been informed of this.

With the end of ferry traffic, the entire volume of traffic along the 65-kilometre stretch of the river within the World Heritage area will be channelled exclusively across the bridge near St Goar. In this way, Rhine crossings would be restricted to motor vehicle traffic only. In the interest of the desired structural improvements, which are necessary to preserve

World Heritage values, it is vital to improve the facilities for crossing the river rather than restricting them to a single bridge.

Proposed actions: Ferries are the backbone of traffic that crosses the Rhine and must be preserved on a long-term basis as an integral part of the World Heritage area. A long-term guarantee for the ferries is imperative in the interest of security for the ferry companies and should be granted



Fig. 5: The entire plateau of the Loreley Rock, part of the historic cultural landscape, will be remodeled, with unclear effects.

Photo: Südwestrundfunk

without delay. The ferry service must be optimised (longer running hours). From a traffic-related and economic point of view, the optimised ferry service is, as a decentralised solution, considerably better for most local residents.

A regional mobility concept should be prepared as soon as possible to examine whether a bridge would improve living conditions and to ascertain who really needs a bridge and whether it would be compatible with World Heritage values.

Loreley Plateau

In the course of remodelling the highland area (memorial zone) on the Loreley rock in 2000, the identified excesses of tourism were curbed in favour of a landscaping design compatible with the natural environment. Currently, work to remodel the plateau at the top of the rock has started again. A new hotel with 200 beds will be built on a site of 28,000 square metres. According to a visual impact study, the hotel will not be visible from the bottom of the valley. However, it will be in plain view from the neighbouring high points, such as Loreleyblick Maria Ruh and the Spitznack lookout point next to it, or from the high points of Urbar and Oberwesel, with the Oelsberg hiking trail and fixed-rope climbing route. The view from the edge of the cliff on the right bank of



Fig. 6: The visual integrity of the Loreley Rock, and the famous „postcard view“, are being severely impaired by the construction of an oversized stage and roof. Photo: Bürgerinitiative Rheinpassagen

the Rhine towards the Loreley over Katz Castle has been described as a “postcard view” of the Rhine valley. Whether or not it will be preserved has not been investigated.

New car parks and roads will be built, a panorama trail and a nature park are planned, and some old buildings have already been demolished. Several hundred trees will also be felled.

The combined considerations of protecting a historic monument and conserving nature, and the value to tourism of an

intact cultural landscape, have so far protected the Middle Rhine valley from being subjected to radical change. The Loreley rock is the central point of the World Heritage area, enhanced by enchantment, the songs of Loreley, myths and fairy tales. Any further development of the rock requires utmost care. All changes must harmonise with the landscape and complement it. The plateau must not be sacrificed to zeitgeist. The project is accompanied by protests.

The new hotel building promoted by the State of Rhineland-Palatinate will further reduce the current utilisation rate of hotels in the Middle Rhine valley of only 36% and thus further weaken their financial strength for investing in modernisation. The new hotel building subsidised with state funds will contribute to the decay of settlements and slow down the development of tourism in the valley.

Proposed actions: A development plan with guidelines for long-term design must be prepared for the development of the Loreley plateau. It must include the definition of a future-oriented concept for structural interventions on the Loreley plateau. The obligations specified in the Rhine Valley Charter, to preserve, maintain and develop with great care the natural and cultural heritage of the Rhine valley, must also be included.

Spaces Of Flows: The Water and Green System In Minsk

Oxana Gourinovitch

Minsk was the first city to nominate its socialist post-war heritage for the UNESCO tentative list. The city's main axis, a transit road connecting Moscow with Warsaw, makes up the core of the biggest existing coherent ensemble of the socialist-realist architecture, the Independence Prospect. The nomination has since been removed from the tentative list, but the label of the "Most Socialist City in the World" sticks.

The city planning, though, has more to offer than a Stalinist take on the concept of architectural space. The landscape axes of the city, crossing the Independence Prospect, feature a remarkable development. The city's so-called Water-and-Green-System (WAGS, 1960s-1980s) is totally antagonistic to the Stalinist concept, embodying an alternative Soviet urban planning practice and, probably, representing the most outstanding achievement of Soviet open-space architecture.

The WAGS is the centerpiece of a large regional water-redistribution system called into life in 1968 to prevent an imminent environmental catastrophe caused by the increase in water consumption by heavy industry in Minsk. The extensive industrial complexes, including a tractor factory, a heavy-vehicles factory and a refrigerator factory among others, relied heavily on the underground water resources, until overuse led to the dramatic lowering of the underground water table, followed by subsidence of the city ground-level by up to one metre due to decompression. A system of water-accumulating reservoirs at ground level was conceived in order to guarantee the water balance required for regeneration of the underground water-levels.

The rivers Viliya and Svislotch were dammed to create such a reservoir network in the Minsk region. The largest one, the Vilejskoe impoundment, covers an area of about 65 square kilometers (which corresponds, for instance, to 20% of the Krakow city area – or 16% of Belarussian capital). A system of pumps and channels lifts the water collected here 75 meters to the next impoundment, whose nickname, the Minsker Sea, fittingly describes its size as well as its recreational importance to the capital. From the Minsker Sea the water flows south-eastwards, passing through a chain of smaller artificial lakes, meandering through the city center to finally hit the industrial districts, located in the capital's south-east.

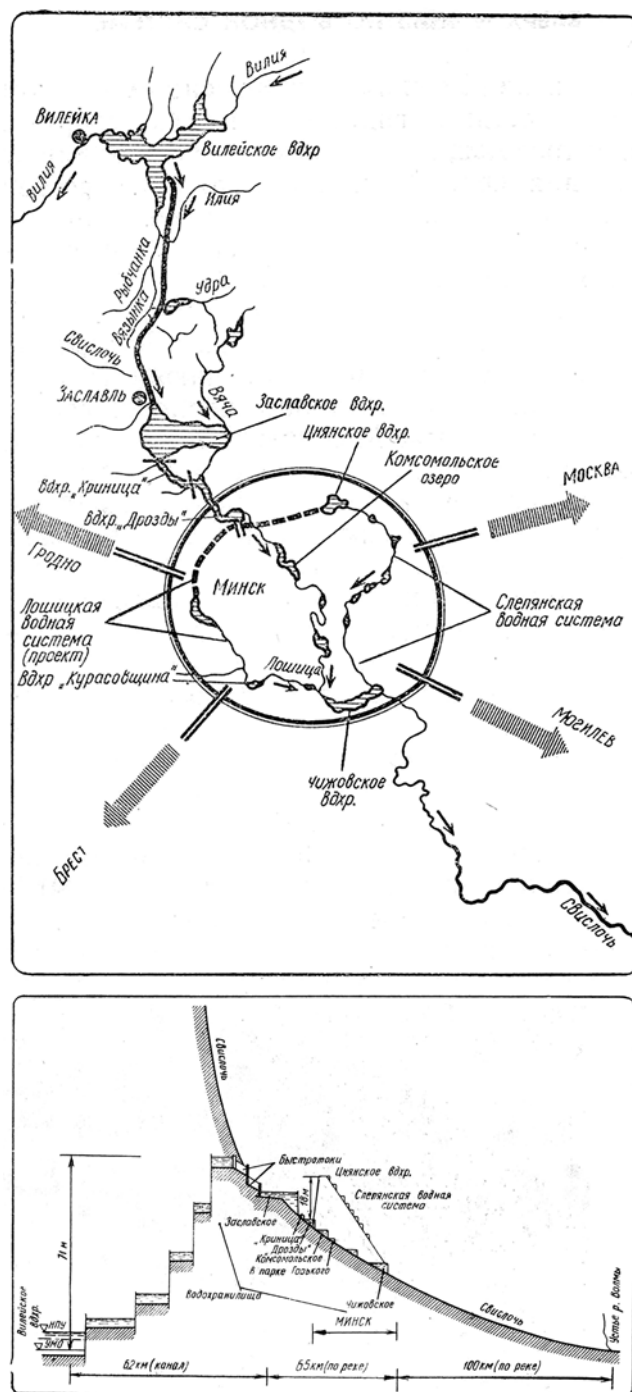


Fig. 1: Plan of the Regional Water Redistribution System. Source: „Vilejsko-Minskaia vodnaia sistema”

V.N. Pluzhnikov, R.A. Stankevitch and others, Minsk, Universitetskoe Publ., 1987



Fig. 2: River Svislotch, Komsomolsk Lake and Victory Park as seen from Hotel Belarus in 2016. Photo: Oxana Gourinovitch

This ambitious water-engineering project was used by the architects as an opportunity for a symbiotic development of urban open spaces for the various users. The impressive quantities of water, brought into the city for purely industrial purposes, were initially meant to be delivered to the consumer channeled through underground pipes. Fortunately, the architects succeeded in convincing the city executives to turn it into the source of a brilliant urban landscape design. The industrial water resources were applied to transform a humble water network, consisting of the shallow and narrow river Svislotch and a web of streamlets encircling the city, into a buoyant system of city spaces along the exuberant water arteries.

The idea of urban waterscapes was not completely new to Minsk. The construction of the first impoundment of the river Svislotch, Komsomolskoe Lake, began at the eve of the WWII and was due to open on the 22th of June 1941 – a date unfortunately coinciding with the beginning of the German invasion. After the war, the project was resurrected by the WAGS and today marks the center of a ring-and-diameter structure which outlines the basic framework of the project.

In this scheme, the Svislotch River forms the meandering “diameter”, crossing the city and connecting several hydro-parks situated on its waterfronts. Today it offers a spectrum of public greens, varying from the city forest and landscape parks to amusement parks and national memorials. The composition of the open spaces along the axis undergoes a constant transformation, signifying the vitality of the project up to this day.

The original plan, fully accomplished in 1976, included many green spaces. The “forest-park” at the water reservoir Drozdoy presented an urban wild-nature-fantasy, with a largely pre-

served stock of trees that was extended by local tree-species. Its artificiality was revealed mainly in playful geometrical designs of the water cascades, implemented in beton brut and local boulders. About five kilometers further south, the landscape park, full of “clumps and dots”, was laid around the lake Komsomolskoe Lake and on its artificial islands, whose design evokes Capability Brown’s romantic English parks not only by its cultivated “natural” appearance, but also by the magnitude of the reshaped environment.

Within a vicinity of less than two kilometers, this park is followed by a sequence of three memorial parks that highlight the crossing of the main avenue, the Independency Prospect, by adding an ideological colouring. First, a pocket park named after Marat Kazei, features a bronze depiction of the young war hero at the moment he lifts a grenade to kill himself and the Nazi soldiers surrounding him. Second, a park dedicated to the major Belarussian poet Yanka Kupala evolves around his 12-meter-high bronze statue and some bronze representations of his poetic images. Third, the amusement park, eponymous with the Russian writer Maxim Gorki, welcomes the visitors with the writer’s sitting bronze figure at the park’s entrance.

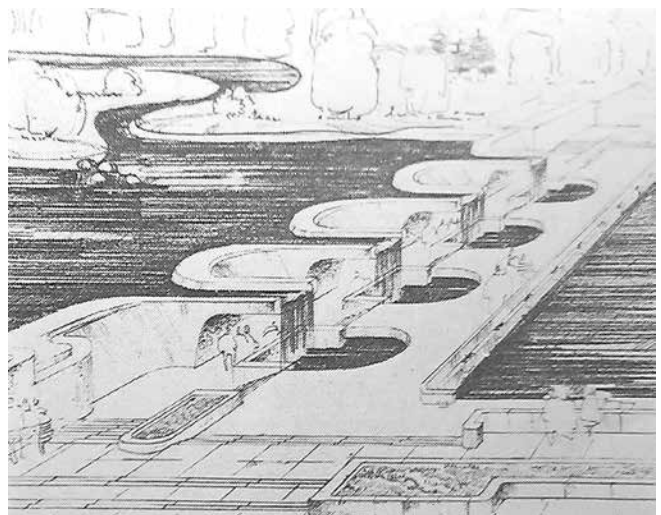


Fig. 3: Waterfall

Design by N. Zhlobo, B.Jurtin

Today, the diameter is still a vital framework for further open-space projects. Recently, a few new parks extended the repertoire of open spaces, reflecting changing symbolic values of the city. An extensive Aquapark now neighbours

the Drozdy forest-park at the northern end of the diameter. The 18th-century historical park landscape of Loshitza was reconstructed at its south end; meanwhile, a small park adorned with a figure of the Russian poet Alexander Pushkin was laid in its midst.

In the city semiotics, the water diameter is one of the major image-building agents. It transects and mirrors not just the city geography, but also its historical and cultural strata. The original design and further development of the Water Diameter transcribe the basics of the city identity: it starts at the city border with the representations of its natural background and culminates in the center, flagging the city's cultural foundations. Its waters reflect all main spatial representatives of the city of Minsk, from the typical species of the contemporary city's flora to the image-coining edifices of the architectural complexes, embodying the city's virtues and, often controversial, narratives. The remains of the 11th-century fortifications, major exhibition venues, the Palaces of Sport and of Youth, the Opera House, and the House of the First Assembly of the Bolsheviks are all situated along the meandering flow of the dammed river Svislotch, mingling with its parks.

Regretfully still unfinished, the ring structure of the WAGS enriches the city's open spaces with completely different, though complementary qualities to those provided by the Water Diameter. It was supposed to stitch through the belt of the vast prefabricated "sleeping districts" of the Belarusian capital. Its 22.5-kilometer-long north-eastern semicircle, Slepjanskaya System, has been implemented to the present day. The western pendant remains unfinished. The Slepjanskaya System starts from the 94-hectare Znjanskoe reservoir, a popular and heavily-used recreational place with bathing and boating facilities, surrounded by pine forest in the vicinity of three Mikrorayons with a total population of about 50,000. The rowing facility with spectator tribunes, planned next to it, was never completed, its location overtaken in the 1990s by posh suburbs. The water, channeled from the Reservoir Drozdy by means of the pipes-and-pumps system, sonorously enters the Znjanskoe reservoir through a circular water cascade, equipped with viewing places on the top of the rubble-work support wall.

The next spectacular appearance of the system is in the neighbouring Mikrorayon cluster. The channel takes off from the small dam lake mirroring a multi-leveled water cascade whose expressive monumental appearance, mingling archaic with bold modernist forms and beton brut with boulders, distantly resembles the Falling Water House. The height of the waterfall is 4.3 meters and, as if aware of the spectacle it presents, provides enough space for the visitors alongside to enjoy picturesque views over the lake and the open channel. The channel and the accompanying park line the foot of the residential districts, situated on the steps of the slope,

rising from the open space of the Water System to the massif of an urban pine forest.

The channel is regularly interrupted by stepped circular water-access platforms. Before it changes its straight course to the serpentine, the channel widens into three elaborate cascading basins, decorated with fountains. The meandering part features variously designed crossings, bridges and islands. Its concrete slab curbs are alternately decorated with erratic blocks of natural stone and shaded by weeping willows.



Fig. 4: Waterfall at Tikotskogo Str. in the 1980s. Photo from the private archive of N. Zhloba

The next dam lake of the Water System is also enhanced by a conspicuous waterfall. The difference in water level of 2.3 meters secures just enough space for a passage, walled by the falling water. Within the bow of this lake a sport center and sportsmen's hotel "Agate" are situated. The dark forest background enhances their non-rectangular forms. On the opposite side, the lake is framed by skyline, pierced by four exposed residential towers.

Similar planning methods were applied to the rest of the 22.5-kilometer-long semicircle, connecting in total 14 artificial lakes whose total difference in water level of 31 meters is spanned by 13 elaborately designed cascades.

The playful and beautiful waterways of the semicircle, stitching through the vast prefabricated residential districts, reflect these areas and yet disrupt the controlling logic of the commuting-working-sleeping cycle they impose. Despite the bleak condition of the building stock, the Mikrorayons in its vicinity remain very attractive residential areas.

In 1989 the architects' collective around Nicolai Zhloba was awarded the State Prize of the USSR for their planning of the eastern semicircle. The project became the only architectural object in the Belarusian capital ever distinguished with the



Fig. 5: Waterfall at Philimonova Street.

Photo Oxana Gourinovitch

highest Soviet architectural award. National and international recognition for the whole outstanding architectural open-space project realized in Minsk is yet to come.

In its uniqueness and coherence, the Water and Green System of Minsk is a long overlooked but potent candidate for the UNESCO tentative list. It is a living landscape with a well-preserved structure and prevailing large parts of the

original design. Unfortunately, planning for the maintenance of the System and its segments was never organized and there is no efficient architectural supervision for its continued development, whose neglect takes its toll on the actual state of its elements. However, international status would be an immense and very timely boon for the preservation of this prominent achievement.

Ohrid Lake: World Cultural and Natural Heritage in Peril

Emilija Apostolova Chalovska and Nadezda Apostolova, Ohrid SOS



Lake Ohrid is the oldest, deepest and most important lentic ecosystem in Europe. Considered a „museum of living fossils“, it contains 212 endemic species which have evolved in isolation during several million years¹. Lake Ohrid is among the oldest inland waters on the planet, a condition that has served to create systems of global significance: regional wetlands as refugia for rare plants, underwater springs that supply Galapagos-like evolutionary processes as well as the presence of endemic flora and fauna making this “hot-spot of evolution” one of the most ecologically diverse on Earth. It is located in close vicinity to Prespa Lake, a RAMSAR site since 1985, itself also extremely rich in endemic species and likely as old as Ohrid Lake²². The two lakes are separated by Galichica Mountain (2265 m), declared National Park in 1958, 72% of whose territory belongs to the Ohrid UNESCO World Heritage Site, itself subject to many international designations for its extremely high conservation value

The town and environs of Ohrid, one of the oldest human settlements in Europe, is marked by a rich history, extraordinary cultural features, monumental architecture and archaeological finds. Ohrid has experienced uninterrupted development since prehistoric times: the oldest settlements date back to 5000 b.C. So far, 244 archeological sites have been identified in the wider Ohrid region³. The largest concentration of monuments is located in the historic urban core of Ohrid, with features from Hellenistic, Roman, Christian, Byzantine and Ottoman times and cultures.

The exceptional values and importance of Ohrid Lake led to its inscription on the UNESCO World Heritage List under natural criterion (vii) in 1979. In 1980, this property was extended to include the cultural and historical area under cultural criteria (i) (iii) (iv), resulting in the inscription of the property as the “Natural and Cultural Heritage of the Ohrid Region”⁴ with an area of 83,350 ha. Only 3.3% of the 1052 UNESCO World

Heritage Sites have been granted a mixed (cultural-natural) designation, which makes the Ohrid region a truly exceptional place.

In 2010, the government of the Republic of Macedonia (RM) adopted the Law of Management of the World Natural and Cultural Heritage of the Ohrid Region⁵ and the associated Management Plan defining the boundaries of protected areas and buffers.

Ohrid Lake – a unique natural sanctuary at risk

Ohrid Lake has come under severe anthropological pressure. Existing legislation has proven absolutely ineffective in preserving the natural values of the area. Institutional incapacity and poor decision-making are among the main reasons for neglect and continuous degradation of the lake, with numerous processes that have jeopardized World Heritage status, including:

- a) Ongoing inappropriate urbanization of the lakeshore is destroying habitats and the natural appearance of the shore in many areas. The portion of urbanized shore is close to UNESCO’s permitted limit. Natural beaches have been replaced by concrete and there are even plans for the construction of Mediterranean-type beaches which include covering the natural rocky area with imported marine sand. Large areas of the natural coastal reed belt have been destroyed.
- b) Introduction of alien species of fish and plants.
- c) Overfishing. While the numbers of the Ohrid trout have been supported by hatcheries since the 1930s, the threat of overfishing has put its survival in doubt.
- d) Improper functioning of the collector system for sewage water has increased the risk of pollution and eutrophication of the lake. The uncontrolled construction of buildings along the lake’s shore increases the amount of liquid and solid waste.

1 Albrecht, C. and Wilke, T. 2008. Ancient Lake Ohrid: biodiversity and evolution. *Hydrobiology* 615: 103-240.

2 Wagner B. and Wilke T. 2011. Evolutionary and geological history of the Balkan lakes Ohrid and Prespa. *Biogeosciences* 8: 995-998

3 Natural and Cultural Heritage of the Ohrid Region World Heritage Site Management Plan: 188-194.

4 UNESCO Decision 30 COM 8B.9, 2006.

5 Official Gazette of RM No. 75/2010.

Ohrid Lake is also facing several plans for large-scale developments. These imminent projects of macro-urbanization supported by the local authorities and the government of RM are meant to boost tourism and economic prosperity; however they will undoubtedly endanger World Heritage values of the region. The plans include:

- Construction of a large tourist ski complex and resort on Mount Galichica.
- Building of expressway A3 on Mount Galichica, part of which could be financed by the European Bank for Reconstruction and Development (EBRD).
- Drainage of Studenchishte, the last remaining 50 ha of wetland on the shores of Ohrid Lake, a hydro-geological relic that contributes to the biodiversity of the lake and functions as a natural water filter/buffer. The drained land will be used for construction projects of residential and tourist buildings and a water park.
- Building of a port (marina) in Ohrid bay in connection with the tourist facilities planned for the nearby drained Studenchichste area.

The realization of these projects has inevitably included important political decisions which are reflected in the proposed changes to the region's planning instruments. Several NGOs and citizen initiatives in RM have stood firmly against these developments, launching a campaign to protect the Ohrid-Prespa region. The citizens' initiative Ohrid SOS, which consists of concerned scientists, NGO members, university professors, local community members and individual activists, was established in January 2015 in response to multiple environmentally damaging development proposals for the Ohrid-Prespa region. Over the last two years, the initiative has worked around the clock, raising public awareness about Ohrid in RM and abroad. For this, a large number of international experts and institutions have been contacted and most of them have publicly granted their support, thus making a compelling case for disqualifying the projects currently envisaged.

The town of Ohrid – a cultural cradle facing deterioration

The main threats to the cultural heritage of Ohrid are:

- a) Uncoordinated, uncontrolled and often illegal urban development. The cultural heritage of the old town is heavily influenced by intensive urbanization of its buffer-zone in the valley and along the shore of the bay of Ohrid, blocking the views and the natural air currents from the lake, generating constant traffic through the protected area and compromising the access points to the old urban nucleus. The overall coherence of the property, and particularly the relationship between urban and

natural landscape, is vulnerable to the lack of adequate control of new development. According to official statistical data, housing construction has steadily increased in the last 15 years, adding an average of nearly 50,000 square metres of built housing yearly in the Ohrid region. Urbanization in the region involves illegal constructions. Authorities have initiated a particularly troubling process of legalizing such buildings, including inside the 50-metre green belt, which theoretically precludes permanent constructions within this sensitive zone of the lakeshore. Many of these buildings are not connected to wastewater systems.

- b) Lack of ongoing conservation/maintenance interventions. The crown-jewel of Ohrid's cultural heritage, the medieval monumental architecture, has been preserved to an acceptable level. However there is a general lack of maintenance, monitoring and regular conservation activities, with little having occurred since the 1950-1960 period. Even less attention has been focused on the vernacular residential architecture that has suffered the most. The Advisory Body Evaluation Report issued by ICOMOS in 1980 states that: *"The town's architecture represents, with its old typical streets and houses and its particular atmosphere around old squares, the best preserved and most complete ensemble of ancient urban architecture in this part of Europe."*⁶ However, the recent tendency has been to demolish desolated buildings in the old urban nucleus followed by "reconstruction". These interventions severely impact the Outstanding Universal Value (OUV) of the old town, as authentic materials, crafts and traditional construction methods disappear. Atypical architectural elements, such as mansard or steel-clad roof-tops, solar panels and heaters and PVC window frames not only influence the ambient value of the property, but also demonstrate poor management by the authorities.
- c) Increasing population. The population of the Ohrid more than tripled in the second half of the 20th century, creating constant demographic pressure on the Lake's shores.
- d) Tourism pressure. According to official statistical data, the number of registered tourists has almost tripled in the last 15 years.

Problems recognized by UNESCO and the responses of the State Party

An assessment by the IUCN concluded that the situation in the Ohrid region is of "significant concern" and "deteriorating". In 2016, UNESCO stated that the tourism and infrastructure developments in the Ohrid area "would represent a case for inscription of the property on the List of World Heritage in Danger."⁷ Taking into account the 2013 UNESCO mission to

⁶ Advisory Body Evaluation Report, ICOMOS, 1980: 1.

⁷ WHC/16/40.COM/7B: 123.

the property, the World Heritage Committee has expressed several concerns:

- A Strategic Environmental Assessment notes that construction of the A3 highway would lead to additional pressures on the property, particularly if combined with the Galichica Ski Centre.
- Large-scale visitor accommodation and associated infrastructure, including the Galichica Ski Centre, associated ski lift base and the Gradishte Lakeside Village, would conflict with the World Heritage status of the property.
- The State Party is urged to finalize the Management Plan and to establish the envisaged Commission which would provide a management structure to coordinate actions at different levels. An Integrated Protection Plan for the Old Town Nucleus of Ohrid is needed.
- Impacts arise from housing, tourism, recreation and large numbers of visitors.

A further great concern is caused by the “Instauration of St. Clement’s University at Plaoshnik” project, constituting a massive construction site at the archaeological site of Plaoshnik. In response to the advisory mission’s suggestions, local authorities have somewhat reduced the project’s footprint. However, the irreversible construction system chosen contradicts international guidelines regarding built heritage. A positive development is the cancelation of plans for coastal development at Ljubanishte. Also, a recent public evaluation of the proposed changes to the General Urban Plan of Ohrid for 2014-2024 confirmed the status of the Studenchishte wetland as a protected area pending a valorization study.

However some of the most problematic projects remain. UNESCO’s request to halt the planned construction of the Galichica Ski Centre and Resort and consider alternative locations outside of the protected area has not been met. The A3 highway proposal has not been canceled. UNESCO’s call for an assessment of the cumulative effect of all proposed projects on Mount Galichica and the lake’s shore has not been answered. The proposed marina has not been abandoned.

A joint Reactive Monitoring Mission (RMM) by UNESCO, ICOMOS and IUCN visited Ohrid in April 2017 and received a SOC Report by the State Party. Despite requests, the SOC report is not publicly available and the authors of this study do not have access to it. The SOC report and the report by the RMM will enable the World Heritage Committee to consider, at its 41st session in Krakow, the danger to the property’s OUV and the possible inscription of the property on the List of World Heritage in Danger.

Figure legend

Location of “Natural and Cultural Heritage of the Ohrid Region” and indication of its major threats.

1. Water pollution is probably the main threat to the lake’s ecological stability. Parts of the littoral zone of Ohrid Lake are under substantial anthropogenic pressure, such as the area where the river Sateska discharges into the lake, and display water pollution and changes in trophic status. Photo credit: Darko Cvetanoski.
2. “Instauration of St. Clement’s University at Plaoshnik” project, a massive irreversible construction site located directly at the archaeological site of Plaoshnik (early Christian ruins) in the historical centre of the town of Ohrid. Its construction is opposed to international guidelines relevant to conservation and protection of built heritage. Photo credit: Kalimero.mk.
3. Cathedral of St. Sophia (XI cent.): current state of preservation. The medieval monumental architecture has been preserved to an acceptable level; however a major general lack of maintenance, monitoring system and regular periodical conservation activities has to be acknowledged. The byzantine churches of Ohrid suffer dampness, vegetation growth, filth, vandalism, structural debilitation due to earthquakes and material fatigue.
4. Studenchishte Wetland, the last remaining 50ha wetland on the shores of Lake Ohrid, purifies inflowing surface and ground water to Lake Ohrid and provides habitat for important biodiversity elements in the area. Agricultural activities already influence the wetland, but the current plans for urban development would result in greater deterioration because they include complete drainage of the area.
5. At least 7 of the 17 native fish species Ohrid Lake are endemic. The most famous one is the Ohrid trout whose numbers have decreased dramatically over the last years mainly due to overfishing, a phenomenon related to the lack of awareness of the population and of solid fishing legislation regarding the lake. If the mesmerizing trend continues, the Ohrid trout will face extinction in the near future.
6. National Park (NP) Galichica. Several ecologically questionable/unsustainable infrastructure projects are envisaged for Mount Galichica and within the territory of the NP including construction of a highway, partly financed by the EBRD, and building of a ski resort for which dozens of square kilometers of land of incalculable ecological value will be eliminated or downgraded from their original protected status. Photo credit: NP Galichica (www.galichica.org.mk)



Conclusions and recommendations

Sustainable development requires a well-founded scientific basis and integrated urban planning. These requirements cannot be met by management institutions in RM due to a lack of awareness, qualified staff and funding. Recent decisions to boost tourism in the area are a direct violation of the guidelines of the Management Plan as well as government legislation. To protect the unique biodiversity and OUV of the Lake Ohrid area, several actions should be urgently undertaken:

- a) Implementation of a moratorium on all large-scale construction and urbanization projects. As recognized by the 2013 UNESCO Advisory Mission, “uncontrolled interventions and development, as well as extensive reconstructions, have eroded the conditions of authenticity and integrity, but still not to a degree where they have been fully compromised”⁸. A moratorium will prevent further degradation of the property and make possible the revitalization of both the cultural and natural heritage of Ohrid.
- b) Implementation and enforcement of the General Management Plan to ensure long-term integrated and sustainable use of the town, the lake and its watershed.
- c) Establishment of Core Conservation Areas (CCA), official reserves with the highest conservation priority, including underwater reserves.
- d) Coastal Zone Management of areas that would constitute buffer zones for the CCA. Also, in accordance with the issue of integrity addressed by all UNESCO mission reports so far, the area designated as World Heritage must be enlarged to include the whole watershed and Galichica National Park in its entirety⁹, as opposed to past tendencies to minimize it¹⁰.

- e) Establishment of a Commission as an advisory body “which would provide a management structure to coordinate actions at different levels.”¹¹ This Commission could be effective only if it comprises an independent body of representatives from the scientific community (nature and cultural heritage specialists), the NGO sector, ecologists, protected property owners, the local community, tourist workers, as well as representatives from the local and central government as crucial decision-makers. An example of good practice in another World Heritage site, such as *El Consorcio de Toledo*, Spain¹², could present a basis for the organization of such a Commission. The diverse background of Commission members would guarantee thorough examination of all important decisions and prevent harmful political influence.

The above proposed measures for the improvement of the state of conservation of the Ohrid region – above all the new management, coordination and control tools – can reverse harmful processes, plans and projects. Therefore, we consider that the World Heritage status of the Ohrid region is crucial for future developments. “Often the international attention and enormous prestige associated with the World Heritage status have been critical in saving properties from the forces of destruction and ignorance”¹³. Let us hope that Ohrid will overcome these same forces and persist for many more millennia.

8 Report on the Advisory Mission to the World Heritage Property “Natural and Cultural Heritage of the Ohrid Region”, December 2013: 20.

9 WHC-98/CONF.203/8.Rev: 36, WHC-08/32.COM/8B.Add: 1

10 UNESCO Decision 33 COM 8B.40, 2009, WHC-08/32.COM/INF.8B1.Add.

11 WHC/16/40.COM/7B: 122.

12 <http://consorciotoledo.com/mcomunicacion/index.asp>

13 International Conference “The UNESCO World Heritage and the Role of Civil Society”, Bonn, Germany, 26-27 June 2015, Final Document.

The Challenges in Preserving Cultural Heritage in Upper Svaneti Communities (Georgia)

Maqi Kvitsiani, Blue Shield Georgia



Upper Svaneti represents an important part of Georgia's secular and sacral heritage. Historical villages and their building complexes together with the landscape constitute an integral whole. The values associated with the natural and cultural heritage of these areas create the need for preservation regulations to protect these assets. This article is mainly concerned with the preservation works carried out in the last couple of years in Upper Svaneti, as these activities have been discussed quite actively.



Fig. 1: Ushguli, Europe's highest-situated village, against the backdrop of the towering High Caucasus mountains.

Photo: Dávid Somosi

Due to its unique architectural heritage, the Ushguli community in Upper Svaneti has become the subject of state protection with the establishment of professional services for cultural-heritage protection in Georgia. In 1970 the site was listed as the Ushguli-Chazhashi Reserve. In 1982 Ushguli was granted the status of historical-architectural complex and became part of the G. Chitaia Open Air Museum of Ethnography and Vernacular Architecture. An inventory of heritage sites of Svaneti took place between 1983 and 1985 and that is when most of the sites were documented and listed. In the 1970s and 1980s sev-

eral sites were documented in detail and conservation works were carried out, the last until recently.

Chazhashi, a community in Ushguli, is a body of dwelling complexes with a distinct defense function, where not only single buildings are protected, but a unified fortification system for the entire village has been created. Chazhashi has a strategic importance in the entire Ushguli settlement. It is distinct for its compact planning.

Chazhashi became a site of national importance in 1986. In 1996, soon after Georgia became part of the World Heritage Convention, it was inscribed on the UNESCO World Heritage List under criteria iv and v for its cultural values. The inscription says:

Preserved by its long isolation, the Upper Svaneti region of the Caucasus is an exceptional example of mountain scenery with medieval-type villages and tower-houses. The village of Chazhashi still has more than 200 of these very unusual houses, which were used both as dwellings and as defence posts against the invaders who plagued the region.

In 1999, a conservation plan for the property was developed by ICOMOS Georgia based on interdisciplinary research and the study of the special architectural characteristics of district of Chazhashi. The plan included a vision for the site's future development but was never legally adopted.



Fig. 2: The region of Upper Svaneti in Georgia.

Map: jw.org / Martin Lenk

In 2015, Chazhashi was included in the annual national program for safeguarding cultural heritage and the four most endangered dwelling houses of the so called “*darbaz-machubi*” type were restored. The detailed process of their restoration can be traced in the report by the National Agency for the Protection of Cultural Heritage of Georgia. The building complexes were cleared of vegetation; the towers and “*machubis*” were repaired with lime mortar; wooden and slate roof structures were repaired. Concealed concrete belts reinforced the roofs, and the wooden floors were also restored. The works could be carried out only seasonally due to the harsh climate.

The National Agency has evaluated the undertaken works as high quality and thus has not considered the prospect of a UNESCO mission for evaluation of the state of conservation of the property. A study on cultural landscape is scheduled to be carried out in the near future. So far, a thorough study has been undertaken only on the intangible cultural heritage of the Upper Svaneti.

Lately, a number of individual cases of unlicensed construction works in neighboring districts to the Chazhashi community have triggered an alarming situation which led to the recent decision of the state to prohibit any construction in the cultural-heritage zone of Chazhashi. The decision follows recent chaotic developments in neighboring communities and provides for a moratorium on construction up until the year 2019 when completion of the Master Plan for Ushguli is scheduled.

Another challenge for the tangible cultural heritage in the Upper Svaneti is the lack of a unified database of heritage sites. The existing one lacks information and is inaccurate in parts. This especially concerns secular sites that consist of vernacular dwellings of various architectural types and from different periods of history. Research of this subject matter is lacking. As part of the Blue Shield Georgia program, an inventory and photo documentation of this vernacular architecture was carried out in a number of communities in Upper Svaneti (Mestia, Latali, Becho, Nakra) in August 2016.

Dwellings of the Darbaz-Machubi type were inventoried, and local owners of these houses as well as local self-government officials and people working in cultural heritage were interviewed. The aim of the interviews was to identify the stakeholders’ role in maintenance of this type of heritage. The study revealed that most of the vernacular architecture in those areas has not been inventoried and that their cultural and historical significance has not been studied or properly defined. The physical state of conservation is critical, especially in Mestia, a district of Laghami, where repair works are most urgent. This area is listed as a cultural heritage site and includes buildings of diverse functions and artistic-historical values.



Fig. 3: Historic buildings are often left to decay mostly because they lack modern amenities and are unfit for habitation. Lagami suburb of Mestia. Photo: Giorgi Parkosadzes

Meanwhile, since late 2016, an Urban and Land Use Master Plan (ULUMP) has been commissioned for Mestia-Mulakhi and neighboring communities for which urban documentation has also been carried out. These works are carried out in phases. In the initial phase, meetings are held with the local population. The ULUMP is being developed by a company called “Geographic” which says the inventory phase is underway and that the next steps are to define protection zones based on the law of cultural heritage of Georgia, and to draft respective recommendations for intervention. The working group is scheduled to finish the draft by end of January 2018.

It is of utmost importance to come up with strict regulations in order to avoid the sort of chaotic development associated with tourism that is already visible in Mestia and some parts of Ushguli. Illegal intrusions here have significantly diminished the integrity of the cultural landscape. It is crucial, until the regulations are in place, that the state has constant contact with the local population as well as the business sector and cooperates with them to avoid unlicensed interventions which fail to consider the local architectural specifics, the



Fig. 4: Inappropriate new construction as a result of a lack of regulation and oversight. Lanchvali suburb of Mestia. Photo: Davit Tsintsadzes

significance of the site, and the special skills required for repairing historical fabric. Sustainable development of the area should be based on the conservation of cultural heritage sites, preserving the local craftsmanship and enabling local development. Analysis of recent negative experiences should be taken into consideration when planning future action. Figure 4 illustrates an example of an unlicensed addition to a site in Mestia which is out of keeping with the area's heritage status. There are many other cases where the negative results of aggressive tourism development have impacted on the cultural landscape and environment.

Despite the fact that the national strategy for tourism development places major importance on the cultural and natural heritage assets of Georgia, the recent practice shows the opposite. It is beyond dispute that some of the recent developments in the tourism sector can be characterized as chaotic and severely neglecting the intrinsic environmental

and cultural values of the region. Unfortunately this issue has not been sufficiently discussed or communicated.

While there is a lack of action locally, which local civil society and the media should address, international attention on the World Heritage site of Upper Svaneti has also been minimal. During the decades since its inscription, there has never been a UNESCO mission to the property. A periodic report from 2014 revealed some of the challenges faced by the site and defined necessary future actions. Nonetheless, the situation has not improved; indeed, the challenges identified have become more critical.

I think the future prospects of conservation and development of the Chazhashi World Heritage site definitely require wider discussion that involves all the relevant stakeholders – in this case, the international cultural heritage community, including ICOMOS and the UNESCO World Heritage Center.

Growing Pains of the Cultural Landscape of Bali: Key Priorities Towards Sustainable Tourism

Wiwik Dharmiasih, ProjectKalpa and Yayasan Konservasi Sawah Bali (YKSB)



Yunus Arbi, Ministry of Education and Culture of the Republic of Indonesia



The UNESCO World Heritage site located in the heart of Bali is called The Cultural Landscape of Bali Province: The Subak System as a Manifestation of the Tri Hita Karana Philosophy. It is a region of 19,520 hectares with 1455 hectares of buffer zone. It comprises rice fields, temples, forests, lakes and villages located in four clusters dispersed through five different districts in Bali. Achieving the listing of such a complex living heritage site required convening numerous stakeholders. Since it was inscribed in 2012, the site has undergone dramatic change, however, much of which has been prompted by expanded visitor growth.

ble tourism strategy. In this article we first begin by describing the Cultural Landscape of Bali Province. Second, we examine the ways that over-emphasis on tourism development has changed parts of the property, and the ways that such precedents may cause further changes. Third, and importantly, we examine the ways in which the current approaches to managing the site have overlooked local community concerns. Finally, we end by presenting a pathway for implementing a sustainable tourism strategy for the property.

The Cultural Landscape of Bali Province: A newfound tourist destination

The Cultural Landscape of Bali Province consists of 17 (now expanded into 23) subaks that were inscribed on the UNESCO World Heritage List. Subak is a unique social, religious and ecological institution. It is premised on the manifestation of the Tri Hita Karana Philosophy, an ancient Balinese philosophy that provides guidance on how to live in harmony with nature, the spiritual world and society. This balanced relationship is believed to be the source of happiness and prosperity. In practice, the subak is a self-governing and democratic organization of farmers who share responsibility for the just and efficient use of irrigation water to grow paddy rice (Ministry of Culture and Tourism and Government of Bali Province, 2011).

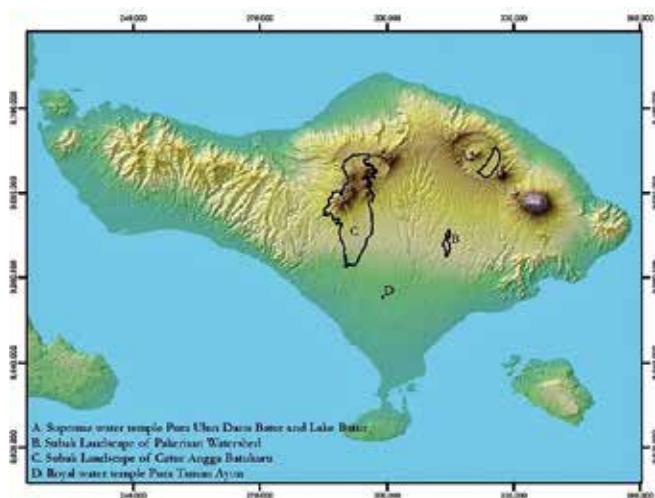


Fig. 1: The subak landscapes of Bali.

Map: <http://whc.unesco.org/uploads/nominations/1194rev.pdf> p. 1-6

Changes at the site highlight some emerging trends that raise key concerns that, according to the World Heritage Committee (Decision 39 COM 7B.66, Bonn 2015), include:

1. the lack of coordination in relation to land-conversion processes and changes in land use, including new developments, and
2. the absence of a comprehensive tourism strategy covering all districts.

Unless these concerns are addressed, the pace and direction of growth could threaten the overall integrity of the site. It is therefore necessary to rethink approaches toward a sustaina-

Certain sites in the property had long served as tourism destinations. For example, the Water Temple of Tirta Empul and the Subak Landscape of Jatiluwih had attracted visitors prior to the UNESCO designation. Upon inscription these sites received a spike in visitors and with the new marketing, the tourism industry saw new opportunities for growth. Infrastructure development to accommodate this growth is causing changed land-uses.

These concerns about the property were predicted during the initial designation. The ICOMOS/ICCROM Advisory Mission Report (2015) identified the vulnerability of the property to potential pressures from land conversion and tourism.

The mission advised the Indonesian Government to develop a sustainable tourism management approach. Before discussing this, we first examine the challenges associated with tourism growth.

Growing pains related to tourism

Every year Bali attracts millions of domestic and foreign visitors. In 2015, almost seven million domestic visitors and four million foreigners visited the island¹. Although there is no exact data on the number of visitors to the Cultural Landscape of Bali Province, one site in particular, the Subak Landscape of Jatiluwih, experienced an increase of 68.7 % increase in visitors in 2014 compared with numbers at the time of inscription².



Fig. 2: Tourism in the Cultural Landscape of Bali Province.

Photo: Project Kalpa

Conflict over land development began to occur at the Subak Landscape of Jatiluwih and surrounding areas. The conflicts were about how to accommodate visitors and shape the tourism industry around the additional opportunities. Conflicts pertained to the type and placement of restaurants, small shops and other tourism facilities in and around the rice fields. The way in which such development has taken place is recognized as a violation of World Heritage guidelines because of changes to the integrity and purpose of the site. One significant clash occurred in 2015, when a productive rice field was converted to a parking lot without the consent of the head of the subak (pekaseh) who serves as the local management unit (Dharmiasih & Arbi, 2016). This event shows that subak and village authorities do not always share the same views of their roles in the management of the site as a whole. It also allows other landowners to convert productive rice fields to other commercial enterprises, such as shops, that accommodate the growing tourism opportunities.

1 Bali Government Tourism Office, 2017

2 Bali Government Tourism Office, 2017; Dharmiasih & Arbi, 2016

Pathway to a sustainable tourism strategy

To address these changes affecting the site, a Sustainable Tourism Strategy for the Cultural Landscape of Bali Province was initiated in 2015. It was part of UNESCO's efforts in Southeast Asia to introduce more community-based sustainable tourism through the UNESCO World Heritage and Sustainable Tourism programs (WH+ST)³. It was coordinated by the Ministries of Education, Culture and Tourism of the Republic of Indonesia together with the UNESCO Office Jakarta. Stakeholders within the World Heritage property were convened to identify challenges and expectations for tourism management in each cluster. These challenges were then discussed among stakeholders through a series of workshops. One of the challenges in the development of the strategy was to build similar perceptions among different stakeholders with different interests and policies.



Fig. 3: Discussing a Sustainable Tourism Strategy.

Photo: Ministry of Education and Culture

The following five strategic objectives were established:

- To ensure that all stakeholders have a common understanding and appreciation of the property's Outstanding Universal Value (OUV) in order to promote the protection of the property according to sustainability principles;
- To ensure that all development (relating to tourism, infrastructure, housing etc) supports the authenticity of the Cultural Landscape of Bali Province, minimizing negative impacts, enforcing land-use policy, strengthening site management, and monitoring impacts through collaborative and participatory efforts;
- To empower local communities to directly engage in sustainable tourism to improve their welfare;
- To develop a visitor management-system that minimizes negative impacts and enhances the visitor experience;
- To encourage the development of sustainable tourism products and services which respect local cultural values⁴.

3 UNESCO Office Jakarta, 2016

4 UNESCO Office Jakarta, 2016



Fig. 4: Youth Camp at the Subak Landscape of Jatiluwih.

Photo: Project Kalpa

These strategic objectives were formulated into action plans for the various stakeholders in the Cultural Landscape of Bali Province.

ProjectKalpa, a youth organization based in Bali, helped to implement this strategy by conducting the first youth camp at the Subak Landscape of Jatiluwih. Both international and local students were invited to learn and experience the traditional farming system in the region. Farmers explained the inner workings of the *subak* system and taught students how to create traditional tools used in farming. Farmers also described the relationship between subaks and the village. A farm-to-table experience was offered to the participants to introduce local cuisines. ProjectKalpa closely involved local farmers and villagers in this activity so that they could directly benefit and consider opportunities for establishing another source of income to complement farming. “Forum Pekaseh Catur Angga Batukau”, a group consisting of the head of the *subaks* (*pekaseh*) at Catur Angga Batukaru cluster, is currently hosting religious tours to local temples related to the subak system in cooperation with a number of hotels throughout Bali. These are just some initial examples of the activities initiated to implement sustainable cultural tourism in the World Heritage property.

Conclusion

The success of inscribing the Cultural Landscape of Bali Province on the World Heritage List has brought new challenges. The development of tourism opportunities has raised questions about the management of the site. In response, the development of a Sustainable Tourism Strategy is underway. This strategy is important for sustaining the integrity and authenticity of the World Heritage property. The strategy will actively engage the local community as an impor-

tant stakeholder in the management of visitors. It also allows for greater opportunities to engage tourists in the local cultural practices and wisdom associated with the property.

During the drafting process of the Sustainable Tourism Strategy for the Cultural Landscape of Bali Province, the customary villages were recognized as having an important role in the future management of the site. Their involvement, together with the subak management units and temples, provides a more holistic representation and understanding of the cultural landscape. The

involvement of stakeholders such as farmers, priests and villagers is important in the management of the property as an integrated tourism destination. By directly engaging with key local community institutions and people, it is also possible to map and identify tourism attractions within their regions, allowing tourism destinations to develop without threatening the OUV of the site. The implementation of the Strategy will therefore provide an opportunity for local communities to maintain their traditional way of life while also potentially benefiting from other sources of income on their own terms. Non-governmental organisations can help facilitate the necessary capacity-building at the local level in the implementation of programs related to culture preservation and sustainable tourism management. Success in implementing the strategy will depend on the levels of commitment and cooperation between each stakeholder.

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The Tasmanian Wilderness: Honouring Commitments to Protect Wilderness

Vica Bayley, The Wilderness Society (Australia)



The Tasmanian Wilderness is a very large mixed property on the island of Tasmania in Australia, first listed in 1982 and significantly expanded since. It is listed for its glaciated mountains, wild coastline and pristine karst-systems; ancient life-forms and giant trees; and over 35,000 years of occupation by the Tasmanian Aboriginal people.

Of 1052 World Heritage properties, 35 are mixed properties and only one – the Tasmanian Wilderness – includes the word ‘wilderness’ in its name. The property’s wilderness character was a defining feature of the nomination dossiers and is an essential part of its Outstanding Universal Value (OUV). Formal management plans have long articulated maintaining wilderness as the ‘primary means’ to ensure the protection of both natural and cultural values (Department of Parks 1992, PWS 1999).

Over recent years, management of the Tasmanian Wilderness has attracted the attention of the World Heritage Committee. A minor boundary modification proposed by the State Party in 2014 sought to delist 74,000 hectares of the property so that it could be logged. After being summarily rejected by the Committee, the Tasmanian Government, as the jurisdiction responsible for the land management of the property, announced a review of its Management Plan. In early 2015, it produced a draft plan that for allowed logging and mining, and comprehensively diminished the recognition afforded the wilderness character of the property.

Tasmania is currently experiencing a boom in tourism visitation. In large part, this is stimulated by demand for nature-based experiences and an appeal that is founded on the beauty, seclusion and personal inspiration derived from immersion in nature and an apparent absence of human influence. The term “wilderness” features heavily in brand promotion.

In this context, nature and the attributes of landscapes appearing in a largely natural setting are regularly confused and conflated with wilderness. Despite common technical definitions describing wilderness areas as being large, remote, intact and free of significant modern impacts and mechanised access (e.g. PWS 1999), the term wilder-

ness is regularly misused to describe experiences that are demonstrably contradictory to this concept. For example, in Tasmania we have a wilderness railway, numerous wilderness lodges and boat-based wilderness journeys, powered by multiple high-energy four-stroke outboard engines.

The Tasmanian Government and tourism industry are seeking to capitalise on the mass-appeal of nature, ironically with perverse impacts on wilderness. Through an “Expressions of Interest” process, Government is inviting development proposals for private commercial tourism developments inside Tasmania’s reserve system, including the Tasmanian Wilderness. Round one of an ongoing process has elicited twelve commercial proposals within the property.

While not all of these proposals generate significant concern over their potential impact on OUV, analysis demonstrates that several would have a serious, negative impact on the wilderness character of the property. This includes exclusive, private commercial accommodation developments such as ‘huts’ and lodges, and increased access for helicopters and seaplanes into remote, secluded wilderness areas.

In response to the 2015 Draft Management Plan and concerns raised by civil-society groups, including environmental and Aboriginal representatives, the World Heritage Committee adopted a clear resolution requiring protection of wilderness as a critical element of OUV:

Also urges the State Party to review the proposed new management plan for the property to ensure that it provides adequate protection for its OUV, including:

a) Recognition of wilderness character of the property as one of its key values and as being fundamental for its management

...

c) Establishment of strict criteria for new tourism development within the property which would be in line with the primary goal of protecting the property’s OUV, including its wilderness character and cultural attributes; (39 COM 7B.35, July 2015)

To 'review and provide advice for the revision of the management plan', the Committee also requested a Reactive Monitoring Mission (RMM), which duly visited Tasmania in late 2015.

In its report, the RMM made a number of explicit recommendations regarding the treatment of wilderness in a finalised Management Plan for the property. This included the retention of the word 'wilderness' in the name of the property (rec 8) and the retention of a 'Wilderness Zone, as currently used and interpreted' in the zonation of the property (rec 9). Additionally, the RMM reiterated the desire of the Committee to have strict criteria against which to assess new tourism developments to ensure that the protection of OUV, including wilderness character, is the "primary goal" of management.

This report was welcomed by the Wilderness Society. In a joint statement, the responsible ministers from the State Party and the Tasmanian Government said "the report provides 20 clear recommendations that will help the way the (Tasmanian Wilderness) is managed and we accept these recommendations". (Hunt/Groom 2016)

Subsequently, in its 2016 State of Conservation (SOC) report, Australia assured the Committee that 'the new management plan for the property for the property... will reflect the recommendations of the mission and past decisions of the World Heritage Committee.' The SOC report expanded, giving specific assurances regarding wilderness protection and its explicit consideration as a criterion for development assessment. The State Party was saying all the right things so, in July 2016, the Committee commended Australia for its 'commitments made in response to the recommendations of the 2015 joint IUCN/ICOMOS Reactive Monitoring mission' and requested that it 'implement all of the mission's recommendations'. (40 COM 7B.66)

However, when the final Management Plan for the Tasmanian Wilderness was published in December 2016 it revealed a disturbing level of duplicity and deceit. Several recommendations of the RMM, including a ban on logging and mining within the property, had indeed been adopted, but provisions to protect wilderness character remained non-existent, weakened or otherwise evaded. For example, in an astonishing snub to the World Heritage Committee, the finalised Management Plan contains the removal of a long-standing prohibition on hut construction in the Southwest National Park, and the explicit provision for up to seven commercial huts to be constructed and operated on the South Coast Track.

The South Coast Track is one of the world's great coastal wilderness walks (Fig. 1). It is remote, spectacular and, as mapped in the final Management Plan, is designated as high-value



Fig. 1. The wilderness of Tasmania's South Coast Track, where the Government plans to establish commercial accommodation. Photo: Grant Dixon

wilderness with a measure of wilderness character consistently in the highest two possible categories (DPIPWE 2016, p.176). The development of a hut, albeit for private commercial use, may sound innocuous, but the scale of the structure and associated use of helicopters for construction, maintenance, visitor access and servicing would have a significant detrimental impact on wilderness character and the amenity of other users. Recent experience of hut construction in the Tasman National Park (outside of the Tasmanian Wilderness) has demonstrated the scale of such developments. The size and impact of commercial "huts" on the Three Capes Track (Fig. 2) shocked many users. GIS analysis has demonstrated that the three "huts" have destroyed some of the last remaining high-value wilderness in south-eastern Tasmania.



Fig. 2. An accommodation complex described as a 'hut' on the Three Capes Track, Tasman National Park, Tasmania. There is concern such complexes could be built within the World Heritage property. Photo Grant Dixon

Expert analysis of the impact that the development of huts would have on the wilderness character of the South Coast Track demonstrates a 'ripple effect' of diminishing wilderness values emanating from putative hut sites (Figs. 3, 4 and 5). Existing users would be significantly impacted by new, regular sites of intrusive aerial access and the negative impacts on the experience of isolation and serenity.



Fig. 3: Mapping of Wilderness Character demonstrates high wilderness-value along Tasmania's South Coast.

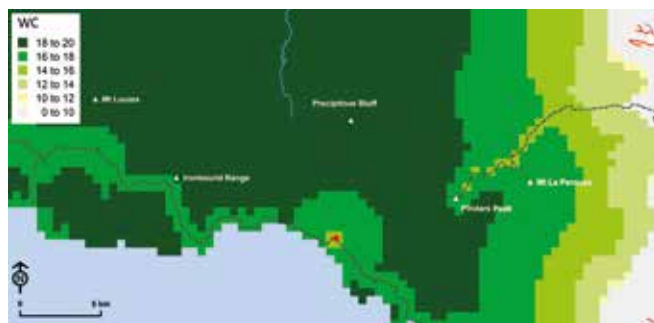


Fig. 4: The impact of a single modest 'hut' (red dot) on the wilderness character of the South Coast Track



Fig. 5: The impact of a single 'hut complex' (red dot) of the sort illustrated in Fig. 1 on the wilderness character of the South Coast Track

A number of other provisions of the final Management Plan directly contradict the recommendations of the RMM and subsequent undertakings of the State Party. While a 'Wilderness Zone' has been retained in the zoning of the property and it still prohibits visitor accommodation, its boundary has been amended to excise specific areas to accommodate projects that would be non-compliant with the Wilderness Zone prescriptions. No overarching objective to 'maintain and enhance wilderness quality', a primary objective of the preceding management plan (PWS1999), has been retained in the new plan and there are no explicit wilderness-protection criteria noted in the assessment process for tourism developments.

In fact, parallel changes to Tasmania's land-use and planning legislation have removed independent assessment of developments inside Tasmania's reserve system, including

the Tasmanian Wilderness. This removes the previous guarantee of public consultation on development proposals; strips away previous rights for public appeal of development approvals; and leaves a single assessment as the responsibility of the Parks and Wildlife Service, an agency woefully underfunded and part of the government of the day.

The Tasmanian Wilderness is not on the agenda of the Committee in 2017. An updated State Party report on the State of Conservation is due by 1 December 2017. Given the demonstrable flouting of RMM recommendations and Committee decisions, there appears to be an important role for the Advisory Bodies and World Heritage Centre to highlight inconsistencies between formal expectations, official Government reassurances, and actual implementation in order to seek redress.

The Tasmanian Wilderness is a truly remarkable place meeting seven of the ten criteria for OUV, the equal highest shared with just one other property. Wilderness is a core part of its OUV, central to its inscription, and a fundamental tool of management. It stands apart from many other incredible places in the world, unique for its vast tracts of intact country, free from roads, tourism developments, aerial flight paths and other impacts of modern society. It is a place where nature dominates and Aboriginal cultural heritage has remained intertwined with natural values for millennia, protected by the virtue of remoteness.

Few places on Earth retain these qualities. If they are to be protected, Australia must be held accountable for its failures. The World Heritage Centre should therefore work with the State Party to ensure that the decisions of the Committee are fully implemented, as per the written assurances of the State party in its State of Conservation report. Intervention now to ensure compliance with Committee decisions can avoid the issues resurfacing in the 42nd session of the Committee and consuming additional time and resources of the Committee, World Heritage Centre and its advisory bodies.

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IV. Historic Cities

Liverpool Maritime Mercantile City – Inscribed UNESCO World Heritage Site Since 2004

Gerry Proctor, Engage Liverpool



Engage Liverpool is a civil society actor and not-for-profit social enterprise representing and working with the city-centre resident population which currently stands at about 40,000. This brief report will reflect from that perspective and not from the position of the State Party with whom we have little or no influence. We would very much like to share with the members of the UNESCO World Heritage Committee our deeply held conviction that many people in the city would like to see Liverpool hold on to and value our inscription on the World Heritage List.

It is a sad reality that even in a democratic society such as ours the levers of power are not always sensitive to the values and perspectives of its citizens. There are other concerns and priorities which often take precedence over the views and feelings of ordinary people. However it is true to say that if Liverpool is deleted from the World Heritage List it will be mourned mostly by those people of the city who care about our heritage and value and appreciate the honour conferred on us by UNESCO in 2004. There will be others, among them those who are currently engaged in the planning process, who will find a deletion from the List to be to their advantage. Citizens find it extremely difficult to make their voice heard when the media and the leaders of business, commerce and politics are agreed that the city needs the development which they perceive UNESCO to be curtailing. It is extremely unfortunate that the debate has been framed in this one-sided way.

It seems fair to say that UNESCO's voice has never been properly heard in the city, except perhaps in the negative way in which the 2012 decision to put the city on the List of World Heritage in Danger has been reported. Had we invited UNESCO to speak to people in the intervening years then we might not have ended up with the debate being framed in an either/or, binary position between economic development or heritage, growth or stagnation, progress or being held hostage to the past. Is it too late for civil actors to enable UNESCO's voice to be heard in the city and to see if there is a possibility of shifting the debate to clarify what is genuinely at stake with the present In-Danger Listing? Much of the debate around World Heritage status seems to have been conducted mostly between officials on both sides, which has meant in practice that, during the "delicate negotiations", citizens have in effect been side-lined and excluded from having a say during this important period. We have in reality been waiting for others to make a decision that will safeguard our World Heritage status.

In this period, stories have been carefully placed in both local and national media outlets that reflect the dominant political and developer viewpoint. As stated for many years, people trusted that the State Party has wanted the best for the city and that involved protecting the World Heritage inscription. It has taken a long time for citizens to realise that by leaving everything in the hands of the State Party and allowing them the space and time for differences to be worked out it seems to us now that nothing has been resolved in these intervening years and we continue to be at risk of losing our World Heritage status.

We understand the difficulties involved in organising public engagement in World Heritage. The UNESCO World Heritage Committee rightly has its own processes and procedures and these we respect. However it saddens us that the effect and impact of this process in Liverpool means that the UNESCO voice we have heard sounds discordant to our ears. We are told by UNESCO that the only way of securing removal from the list of World Heritage in Danger is to rescind the Planning Approval for Liverpool Waters and develop a new Master Plan. This position was accompanied by a call for the City Council to agree to a moratorium on all new planning deci-



sions within the property. Sadly, this is both unhelpful and unrealistic – for some it was seen as antagonistic, which for the many who want to be supportive of our World Heritage status is deeply regrettable.



Even though as a civil actor in the city we are not party to the serious negotiations between the State Party and UNESCO, we are aware that much work has been put into reaching a compromise with Liverpool City Council, Peel Holdings and Historic England. It was hoped that compromise would be acceptable but despite everyone's best efforts so far nothing has been resolved. We feel that there is genuine openness on the part of most people in this process who want to be able to continue engaging in a dialogue with a view to a resolution that satisfies all parties.

We wonder if it might be possible to consider another option, not explored as far as we are aware, and that is the example of the Design Commission for Wales¹, which if brought across to the Liverpool World Heritage site could offer robust and highly professional guidance with regard to design and heritage considerations. There needs to be an independent body that is respected and accepted by all parties that can offer serious and reputable scrutiny to preserve and protect World Heritage assets going forward. It is important that we not only think about the architectural and structural content of the built environment but also that intangible value of "place", which is so important to people like us who live within the World Heritage area. It is crucial to us that we start creating neighbourhoods within the city centre and waterfront that are places for health and well-being and not just places of high land-value for the enrichment of a few. We believe it is possible to design a new neighbourhood area of growth and development for the city on the World Heritage land and buffer zone at Liverpool Waters that truly benefits the future health and well-being of a growing city-centre population of residents and workers. Contemporary development needs to support and add to the Outstanding Universal Value (OUV) of the asset, the urban fabric, and not merely be neutral.

¹ <http://dcfw.org/design-review>

It is unfortunate that it appears that the entire UNESCO World Heritage status is being held hostage to this one part of the site on the Waterfront, when the site is extensive and spread across many different areas of the city centre, none of whose owners have expressed the desire to see World Heritage status removed from the city. It isn't clear to citizens what is really going on behind the scenes, in the corridors of power, behind closed doors where decisions are made. However what is clear is that the time has come to express our feelings and to make the civic case for preserving and protecting the status UNESCO has conferred on the city. It is obvious to everyone that we haven't made the most of the status that we have as a UNESCO World Heritage site.



On a very positive note, Liverpool WHS Steering Group is belatedly publishing a World Heritage Site Management Plan which is very welcome and though we would have preferred a longer and better organised consultation process, it contains some excellent recommendations and guidelines that we are keen to support and work with. At this stage it isn't yet clear what resources will be required to implement the various suggestions and strategies in the Plan. We are indeed glad to see that something is happening at last and that there appears to be in some quarters a renewed will to try and turn a page on the recent past.

There have been few if any attempts to connect the World Heritage site with tourism and the visitor economy and no figures are available to show the potential financial asset that World Heritage status is to the city economy. This has meant that many businesses in the city region are unaware of the value of heritage assets to their annual turnover. We don't have a dedicated World Heritage Site Officer and it is a sad fact that with such serious cuts from the national government to the city budget this will be a difficult position for the city council to fund. However there is no doubt that we need this level of resource if we are to be taken seriously in our determination to protect World Heritage status. The University of Liverpool has a Heritage Theme Lead who is determined to engage academics in the issues surrounding the World Heritage site and this is to be welcomed. Perhaps

a greater involvement from academics will mean that the Historic Urban Landscape standards and processes will be better understood in the city and they will be used to improve our management of the site.



City-centre residents and citizens from across the Liverpool City Region need to know more about the basic principles of the Heritage Cycle. This virtuous cyclical process aims to make the past part of the future by showing that by understanding the historic environment people value it; by valuing it they will care for it; through caring for it people enjoy it; and from enjoying the historic environment there comes a desire to understand more about it. This is something we can all work with and indeed are committed to realising. The first stage is understanding, which then leads to valuing.

Engage Liverpool is organising a number of activities to promote both the understanding and valuing of the World Heritage site. Every year in the autumn we facilitate a three-part seminar series bringing international and national speakers to contribute to an issue that residents feel concerned about and this year the decision was made to focus on World Heritage status because it is so obviously at risk. We have agreed that we will bring UNESCO-connected speakers to the city in order that UNESCO can have an unrivalled opportunity to share its perspective and concerns with the general public. Speakers confirmed include national and international experts who are highly qualified in the field of heritage conservation in an urban setting.

We would expect to have between 120-150 participants in each seminar and have been fundraising to enable us to mount a strong media campaign to support the seminar series. But this isn't all. We will also bring to Liverpool the designer of a board game called Urbing, a most creative way of achieving participatory engagement between the urban population and the historic built environment. Workshops

will be organised in the city between August and September to deliver a unique project that will be available for the use of students, young people and families as well as tourists and visitors. This will be financed from resources we have been able to draw from European funders.

Liverpool City Council and probably the State Party will already have informed UNESCO about the workshop organised with the help of Prof Foxhall, the Heritage Theme Lead at the University of Liverpool on 28 June 2017. This is a clear indication of the efforts being made to turn a page on the recent past, and Engage Liverpool supports all these efforts and will work with them to add to the growing number of voices in the city who want to make sure we are not deleted from the prestigious UNESCO World Heritage List. As citizens and residents we are trying to encourage our council to show a real commitment to the assets we hold in trust. We want to work with them to change perceptions and make greater use of the World Heritage listing to add value to the economic and social fabric of the city.



In the light of Engage's programme, and the many other efforts that are being made to keep our Listing as a World Heritage Site, we respectfully ask that the World Heritage Committee make a decision that gives us time to bring about some of the changes that both yourselves and ourselves as cultural and civic actors desire. You hold the future of our status in your hands and it is the people of the city who ask you today to think of us and not only of the official parties that you continually work with and in whose hands also lies the future direction of Liverpool Maritime Mercantile City UNESCO World Heritage Site. This is our city as much as theirs and our status as much as, if not more than, theirs.

Can you possibly send out a signal that UNESCO supports the efforts of ordinary people to play a significant part in protecting and preserving a status that means so much to us? We cannot change that which we have no power to change but we can change that which is within our remit to change and that is what we want to do. Please assist our efforts and give us a reason to hope and to work hard.

Historic Centre of Vienna Under Heavy Pressure of Real Estate Development

Herbert Rasinger, Initiative Stadtbildschutz



The Historic Centre of Vienna (Austria) was inscribed in the World Heritage List in 2001 under criteria (ii), (iv) and (vi) for the Outstanding Universal Value (OUV) of its streetscapes and architectural ensembles which include churches, other grand buildings, monuments and parks from several key periods of European history.



Fig. 1: Aerial view of Vienna with the core zone of the World Heritage property marked in red and the buffer zone marked in blue. Image: Initiative Stadtbildschutz

However, the property's World Heritage values are in danger of being destroyed by a huge real-estate project in its core zone. The project includes the erection of two high-rise buildings in a city area where buildings erected in the second part of the 19th century have a general height of 26 metres. Our concerns (in line with recommendations of the World Heritage Committee) are as follows:



- The planned high-rise buildings have heights of 66.3 metres and 47.3 metres and would therefore dwarf the buildings in the immediate vicinity, such as the concert hall (Konzerthaus) and the Mönich-Larisch Palace, now the Embassy of Iraq (Fig. 2).

One of Vienna's most important visual axes, the axis from the upper Belvedere, will be heavily damaged. The view from the hill of the Belvedere down to the city has been praised for centuries by painters and writers and is part of Vienna's identity and its Outstanding Universal Value (OUV) as a World Heritage property (Fig. 3).



Fig. 3 (top) View from the upper Belvedere towards Vienna's city centre, April 2016. (bottom) The same view with the planned hotel project.

Images: Kupf / Initiative Stadtbildschutz

In 2002, the Vienna city council decreed an exclusion zone for high-rise buildings in the World Heritage site. The city council reiterated its promise on 4 July 2008 to reject any construction of high-rise buildings in the core zone of the property, notably in the area of the Heumarkt, between the Vienna Intercontinental Hotel and the Konzerthaus.

But then the real-estate tycoon, Michael Toyner, appeared. He is also a hedge-fund manager with the support of money lenders who are not happy with the interest rates they get from commercial banks. He made a bid for the relevant plot

of land with a size of 9,727 square metres. The land was sold by a fund under the directive of the Ministry of the Interior for only €4.2 million. This low price of 432 € per square metre in one of the best inner-city locations close to a subway station was heavily criticized by the Court of Audit in a 2013 report.

Nevertheless, this smart real-estate developer was able to change the mayor's opinion, thereby enabling the planning of high-rise buildings on the site called "Vienna Ice Skating Club – Intercontinental Hotel – Vienna Konzerthaus" in 2012.

Public criticism

After the project was disclosed to the public, it came under heavy fire from environmentalists, architects and city planners. Due to a financial connection between Mr Toyner and the owner of Austria's biggest newspaper, he managed to influence public opinion to a certain extent.

Two big rallies have occurred, the first on 25 September 2014, and the second on 24 September 2015, each attended by about 500 people. They called for the protection of their city's cultural heritage and for the destruction of their heritage to stop. Further rallies in 2016 and 2017 took place, appealing to the city government to stop the planning of this huge building project.

Since 2014 the general public has also voiced its discontent over the planned high-rise building project in four different petitions to the city council. The first three of them were flatly rejected by the council. The last petition, launched in March 2017, was signed by nearly 1000 Viennese, much more than the required 500 persons. Viennese citizens have been invited to present their arguments on 7 June 2017, but the city council says it will make its final resolution on 1 June 2017.

UNESCO's World Heritage Committee and the threat to Vienna

This excessive building project in Vienna was discussed in 2015 at the 39th session of UNESCO's World Heritage Committee in Bonn. A Reactive Monitoring Mission (RMM) visited Vienna in November 2015 and prepared a comprehensive report. The Committee discussed the project again in 2016 in Istanbul, arriving at the following decision:

The World Heritage Committee:

... 9. expresses its concern that the proposed project remains inconsistent with the recommendations of the 2012 mission and would adversely affect the OUV of the property, if implemented in its current form, and also urges the State Party to facilitate a major revision of this project design to:

- Reduce the height of the proposed building to comply with the recommendations of the 2012 mission report,
- Harmonize the project design with the attributes of the specific location, which is an integral part of the property,
- Reduce the visual impact of the proposed building on both the close urban context and views of the Historic Centre of Vienna. (Decision 40.COM/7B.49)

The City of Vienna responded with the following statement: *It was a concern of the City of Vienna to react to the criticism voiced by ICOMOS and the World Heritage Committee, most specifically with regard to the height of the projected building. The revision process was concluded by December 2016 and the results were presented to the general public on 13 December 2016. The results are as follows:*

- The number of storeys of the residential high-rise was decreased. Instead of the originally planned 75 metres, the building will now be no higher than 66.3 metres.

In its current, revised form, the building planned for the Vienna Ice-Skating Club / Intercontinental Hotel site, in keeping with the suggestions of the Advisory Board, reflects the heights of the already existing high points in the immediate surroundings.

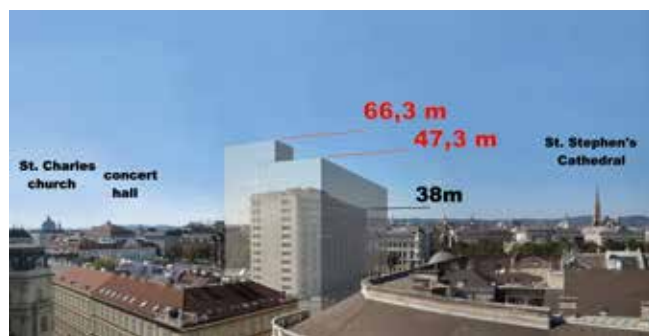


Fig. 4: The hotel project as seen from the top floor of the Trade and Industry Building. According to the investor, it is a "harmonious ensemble respecting and complementing the historic urban landscape".
Image: Kupf / Initiative Stadtbildschutz

The project was revised in summer 2016 by the real-estate developer, but the revised design still does not comply with the recommendations of a 2012 mission or of the 2015 RMM by ICOMOS. A minimal reduction of the planned height of the building by 8.7 metres (from 75 metres to 66.3 metres) is negligible compared with the number of storeys and the impact of the "reduced" project on the property's OUV.

The State of Conservation SOC report of 31 January 2017 of the government of Austria is a mixture of promises, palliation and positive assertions. It did not cancel the high-rise project, despite the excessive building heights of 66.3 and 47.3 metres. The maximum allowable height promised by Vienna in its Management Plan is 35 metres (UNESCO might allow 43 metres). Vienna has therefore failed to follow its

own Management Plan submitted to the World Heritage Committee in 2002.

Vienna has also expressed its contempt for citizen participation by scheduling the hearing of the citizens' petition against the high-rise buildings on 7 June 2017, one week after the city council's decision on the high-rise buildings. Clearly, such a hearing should come before – not after – the decision.

Similarly, instead of entering into serious discussions with the World Heritage Committee before deciding on the high-rise project, Vienna will decide on that matter on 1 June 2017, thus leaving no room for discussion. In other words, Vienna does not want to listen to UNESCO's opinion and has thereby expressed its contempt for the UNESCO World Heritage Committee.

Conclusion

The planned height of 66.3 m for the high-rise building exceeds the maximum of 43 metres recommended by the World Heritage Committee and should therefore not be approved. This development project will negatively impact the Outstanding Universal Value (OUV) of the property. The World Heritage site "Historic Centre of Vienna (Austria) (C 1033)" is therefore in danger of being eliminated from the UNESCO World Heritage List. If Vienna continues to support the real-estate developer and his project and does not reduce the height to the promised 35 metres (or no more than 43 metres), the consequence must be the elimination of Vienna from the list of World Heritage.

Heritage Under Pressure: The Case of the Bypass in the Historic Town of Gjirokastra, Albania

Kreshnik Merxhani and Valmira Bozgo,
Forum for the Protection of the Values of Gjirokastra



This article presents the views of a professional movement opposing an approved major new road known as the “Bypass”, whose construction will endanger the Historic Center of Gjirokastra, inscribed in the World Heritage List in 2005. The project’s initial aim is to divert automobile traffic from the Bazaar, turning it into a pedestrian zone. However, after a few procedural problems were noted, it became clear that the project would not fulfil its aim, and furthermore would pose a threat to the historical center. During the only public consultation meeting held for the project, these shortcomings were identified but were not considered further by the responsible authorities. A detailed technical report has been drafted by the “Forum for the Protection of the Values of Gjirokastra” in collaboration with the wide participation of different professionals who have studied the multi-layered effects of the project. The Forum’s report introduces five main arguments and enough supporting evidence to demonstrate how this project will jeopardize the entire cultural heritage ensemble of Gjirokastra. What follows is a summary of the technical and legal arguments that demonstrate the threats to the structural integrity and Outstanding Universal Value (OUV) of the city of Gjirokastra.

Procedural and administrative problems

The project is in breach of its initial Terms of Reference, which specifically requested a transport solution in the *surroundings* of the Historic Center and Buffer zone. However, the footprint of the approved project stands on a protected green zone *inside* the Historic Center itself and potentially inside an Archeological Zone. The winning project announced by the competition and the approved version significantly differ from each other: the latter doubles the estimated cost, and has a different route (almost 100m reduction). Also, two traditional houses – cultural monuments of 2nd category – have been removed from the List of Monuments due to the fact that they stand in the route of the Bypass. However, the Administrative Court of the First Level of Gjirokastra has repealed the administrative order which removes the traditional houses from the cultural monuments list due to procedural violations.



Fig. 1: Original proposal of the competition.

Image: Forum Gjirokastra / Merxhani



Fig. 2: Current proposal as approved by the Albanian National Council for Restoration.

Image: Forum Gjirokastra / Merxhani

Legal problems

The project violates (i) the Law on “Cultural Heritage” No. 9048, date 7.4.2003 (amended), specifically Article 29 that prohibits interventions and new constructions inside Historic Centers and Protected Zones, (ii) the Albanian Charter on

Restoration¹ – criteria and principals that request transport solutions to be designed outside of the Historic Centers and the Bazaar Zone, and (iii) the Regulation on the “Protection, Integrated Conservation and Management of the Historic Center and Protected Areas of the City of Gjirokastra”², and more specifically Articles 5, 8 and 9 that prohibit any new and permanent constructions within the Historic Center and their green areas.

Technical and professional problems

There are at least eleven studies starting from the 1980s showing the planned project area as geologically vulnerable and in need of immediate intervention. These studies describe a deep geological tectonic fault passing underneath the castle, making this a problem area in terms of geology and seismicity.

Additionally, this project has a very high impact on the landscape, transforming a view which currently serves as the Emblem of Gjirokastra Municipality, the Gjirokastra Regional Council and several other organizations in the city. The retaining walls of the new planned road would visually compete with the Castle, thus violating its aesthetics and those of the surrounding monuments (Fig. 3).



Fig. 3: The view of the approved “Bypass” and how it competes with the castle by completely transforming the characteristic landscape of this area.

Image: Kreshnik Merxhani

The project is not in accordance with UNESCO’s recommendations, which request that a thorough transportation infrastructure study of the Historic Center of Gjirokastra be prepared prior to any decision for the Bypass. This recommendation was made by the World Heritage Committee at its 39th session in Bonn³. The Bypass is not based on a detailed study of the infrastructural or mobility situation in

the Historic Center and Protected Zone of Gjirokastra. There are further potential negative impacts on the environment which the project documents do not take into consideration.

Disagreements with the priorities of the Protected Historic Center of Gjirokastra

The project has been approved notwithstanding the lack of a management plan for the Historic Centre (a repeated request from UNESCO) and the Protected Area. Furthermore the project is not in accordance with the priorities and urgent needs for the preservation and conservation of the World Heritage property. A 2015 study prepared by an international NGO in collaboration with the local office of the Regional Directory of National Culture and Epoka University shows that there are 169 monuments of Categories I and II in a state of high risk of total collapse in the Historic Center of Gjirokastra.

The negative impact on Outstanding Universal Value

Gjirokastra was declared a World Heritage Site in 2005 under criteria (iii) and (iv) for OUV. The Bypass project directly affects these criteria through an aggressive intervention that is not harmonious with the urban and natural environment, degrading the cultural values that are an integral part of the property. This impact is made worse by the proposed demolition of two vernacular houses, monuments of Category II status, while transforming the urban typology of the historic zone.

The latest development concerning this project exacerbates its severity. On the 8 February 2017, the National Council of Territory, with a Board of Ministers chaired by the Prime Minister, approved the General Local Plan of Gjirokastra, which includes the route of the Bypass, thus giving the project the highest level of approval.

The Forum for the Protection of the Values of Gjirokastra worked extensively to raise support for the inclusion of Gjirokastra on the World Heritage List. Now, almost 12 years after its inscription, following in the footsteps of the Forum, a new professional movement has formed in direct response to this damaging project, and is asking for the repeal of the Bypass. As a result, responsible national and international authorities have been called into action by means of public forums, technical meetings and official requests in order to abolish the project. This measure was promised in the most recent meeting, held on 30 March 2017,

1 D.C.M No.426, Date 13.7.2007

2 D.C.M No. 619, Date 7.7.2015

3 39 COM 7B.45

in the presence of national and local authorities. The appropriate follow-up legal acts have yet to occur.

What we aim to achieve by this movement is the effective use of public money to preserve the unique cultural-heritage ensemble of Gjirokastra. The Bypass, if planned correctly, can not only fulfil the original aim of diverting traffic from the Bazaar, but could also aid public services such as waste collection and management, improvement of emergency and risk responses, and the renewal of urban transportation in Gjirokastra. A better allocation of this investment can be envisaged for the improvement of the infrastructural network to offer alternative solutions for mobility. An essential prerequisite for this to occur is completion of the Management Plan for the Historical Center and the Protected Area of Gjirokastra, and the mobility/infrastructure study.

A History of Neglect

For many years both before and after its inscription on the World Heritage List, Gjirokastra has suffered from neglect and official denial of the problems facing its cultural heritage as well as a lack of policies and misappropriation of both public and private funds. As a result, the city is now in imminent danger of losing its OUV. In 2012-13, a major construction project was planned and implemented for the redesign of the Fantazia Complex, one of Gjirokastra's most visible landmarks, when a hotel and café were built on the site of a carpark without prior notification of the World Heritage Committee as requested in Article 172 of the Operational Guidelines.



Fig. 4: A large number of vernacular houses protected as cultural monuments are rapidly deteriorating and in need of emergency intervention. Photo: Stephan Doempke

Clearly understanding Gjirokastra's critical state, the World Heritage Committee indicated in 2011 that Gjirokastra would be placed on the List of World Heritage in Danger if it did not

meet certain requests, including the development of a management plan: <http://whc.unesco.org/en/decisions/4490>⁴.

None of these requests have been met (with the exception of a moratorium on new constructions in 2014). In particular there is still no Management Plan, no Tourism Strategy, no Urban Development Plan and no Conservation Plan that would meet essential criteria for such documents.

Recently, out of the 559 vernacular buildings officially listed as cultural monuments of Category II located in the core and buffer zone of the World Heritage property, more than 200 (!) have been deleted from the list of cultural monuments without proper study, consultation with experts or transparent decision-making process, stripping the historic center of about one-third of its substance in cultural monuments and opening the way for further loss of authenticity and integrity.⁵

Recommendations

There is a continuing loss of cultural monuments in Gjirokastra through a lack of conservation efforts, a continuing lack of policy, and the entirely insufficient financial and human resources allocated to resolving the city's problems. We therefore urge the World Heritage Committee, at its 41st session, to:

- Request that the State Party of Albania stops the Bypass road project until a comprehensive study of traffic flows and mobility needs has been carried out, and alternative solutions have been investigated and examined by the Committee and its advisory bodies;
- Request that the State Party reviews its decision to de-list over 200 Category II cultural monuments, and instead develops methods, in consultation with ICOMOS and ICCROM, for their restoration, reconstruction and re-utilization as applicable;
- Establish a reinforced monitoring regime for Gjirokastra;
- Inscribe the Historic Cities of Berat and Gjirokastra in the List of World Heritage in Danger.

⁴ Especially see point 9 in this document: <http://whc.unesco.org/en/decisions/4490>

⁵ Interviews with Emin Riza, Moikom Zeqo, and the Architects Association at SOTNews & BalkanWeb, Feb. 2017 (<http://balkanweb.com/site/lista-e-monumente-te-gjirokastres-shoqata-e-arkitekteve-jemi-te-shqetesuar/>; <http://balkanweb.com/site/lista-e-monumente-te-gjirokastres-shoqata-e-arkitekteve-jemi-te-shqetesuar/>; <https://sot.com.al/kultura/hartuesi-i-dosjes-s%C3%AB-unesco-emin-riza-ministria-e-kultur%C3%ABs-t%C3%AB-gjej%C3%AB-236-monumentet-kulturore>).

Destruction of the Old City (Suriçi) of Diyarbakır Since 2015 and its Current Status

Ercan Ayboga, Sur Conservation Platform

Located on the transition line between Anatolia, Mesopotamia and the Ararat plateau, Diyarbakır lies at a junction where main caravan routes have intersected from ancient times to the present. The first fortress is assumed to have been built by the Hurritaens in the 3rd century BC. Housing numerous civilizations and states during its history, the city also functioned as a regional capital (center) for the Persian, Roman, Sassanian, Byzantine and Islamic era empires thanks to its geopolitical importance. With its multi-lingual, multi-cultural and multi-layered character the city hosts various cultural properties in urban archaeological sites, which include distinctive civil architecture, public structures, and religious architecture comprising the structures of mosques and churches. The fortified old city (Suriçi) has a total of 595 registered structures, of which 147 are monumental and 448 others are examples of civil architecture.

In 1988, Suriçi, involving the citadel (Inner Castle), was officially put under conservation as the “Diyarbakır Urban Archaeological Site”. The first protection-oriented development plan made in the Suriçi area in 1990 was revised as the “Surici Urban Conservation Plan” in 2012. After the nomination of the “Diyarbakır Fortress and Hevsel Gardens Cultural Landscape” for the UNESCO World Heritage List in 2012, a Site Management Plan was worked out based on a participative approach with municipalities, related governmental institutions, NGOs, initiatives, scientists and neighborhood mayors in the city. During the 39th session of the UNESCO World Heritage Committee in Bonn/Germany in June/July 2015, the property was inscribed on the World Heritage List.

Conflict period in the walled old city (Suriçi)

The end of the 2.5-year-long ceasefire and negotiations for a solution to the Kurdish question between the Turkish government and the Kurdistan Workers Party (PKK) in July 2015 had grave impacts on the World Heritage Site, particularly Suriçi. The armed conflict quickly reached the city of Diyarbakır. For all or certain parts of Suriçi, the buffer zone of the World Heritage site, curfews were declared six times for several days each from September 2015. These curfews were 24-hour-a-day blockades and led to clashes between

Turkish state forces and Kurdish rebel groups, resulting in the deaths of hundreds of people and serious destruction of the affected area. The last ongoing curfew from 11 December 2015, accompanied by the use of heavy military weapons such as tanks, mortar and artillery by the government, was the most devastating one. Numerous historical buildings and monuments – as well as the integrity and authenticity of Suriçi – suffered damage and destruction. The state operations finished officially on 10 March 2016, but a blockade of the five neighborhoods Dabanoğlu, Fatih Paşa, Hasırlı, Cemal Yılmaz and Savaş continues.

Experts from the observation and control commissions of the World Heritage Site Management body – at that time situated in the Diyarbakır Metropolitan Municipality – have carried out three examinations of the affected neighborhoods and have prepared reports on their findings. Since 11 December 2015, due to the refusal of access to the affected area for Site Management personnel, all assessments of damage and destruction due to armed conflict have been carried out based on news reports in the local and national media, limited individual observations, talks with displaced people from the affected area, and information and images shared by the Governor of Diyarbakır. All reports have been sent to the Turkish Ministry for Culture and Tourism, the Turkish National Commission for UNESCO, the ICOMOS Turkish National Commission, and the ICORP Turkey Commission with requests to do broader assessments and take measures for improvement and conservation in cooperation with the World Heritage Site Management body in the affected areas. All requests of the Site Management have been denied, postponed or remained unanswered.

The dimension of the ongoing destruction

The intensive three-months-long armed conflict between December 2015 and March 2016 has caused serious destruction in the affected five neighborhoods of Suriçi. However, the period after 10 March 2016 has seen significantly more destruction. The Turkish government has attempted to justify the continued blockade of these neighborhoods after 10 March 2016 by referring to ongoing security problems.

But Turkish security forces and employees have entered the affected area on a daily basis. Dredges and other heavy equipment have been used on the order of the Turkish government in the affected neighborhoods for the systematic destruction of registered and non-registered buildings, of which the majority had no or light damage, and roads have been opened or broadened. In one part of the affected area, grave damage has been observed on the authentic streets, non-registered housing buildings, civil architectural elements and texture of the registered buildings.

In a larger part, satellite images and other photographs show that numerous blocks of buildings have disappeared in a large area. The neighborhoods of Fatih Paşa, Hasırlı and Cemal Yılmaz, in particular, have lost the overwhelming majority of their structures. The Turkish government has not demonstrated any serious effort even to salvage authentic elements of historical buildings and monuments among the debris which has been excavated quickly and roughly. To summarize, the authentic historic fabric of almost half of the old city of Diyarbakir has been lost forever.



Fig. 1: Bulldozed area in Suriçi.

Photo: Sur Conservation Platform

The fortress, which is the core of the World Heritage property, has suffered damaging impacts from the Turkish government and security forces. For example, poles have been put into the walls and towers, creating meter-long holes; toilets have been installed on the fortress for soldiers and police, significantly contaminating the walls with waste water; many small structures have been built at the foot of the walls; and military equipment has been installed on the towers in order to shoot into Suriçi.

Aside from the physical destruction, the continuity of community and private life has been disrupted. Production based on handicrafts and trade has been terminated. Almost 20,000 people from destroyed houses have been displaced, bringing to an end a lifestyle with a history of thousands of years.

Suriçi comprises 148 hectares, of which almost 70 hectares cover the five blocked neighborhoods. Based on a satellite image from 10 May 2016, it appears that 10 hectares have been completely destroyed. A second satellite image from 16 August 2016 shows that 20 hectares have been destroyed completely.



Fig. 2: Satellite image of Suriçi. Blue: destroyed as of 10 May 2016. Red: destroyed as on 26 August 2016.

Image: Sur Conservation Platform

This means 1519 buildings have been completely destroyed and 500 more have been partially destroyed. This includes 33 civil architectural, three cultural monument structures and 53 environmentally important buildings that have been completely destroyed. Seventeen civil architectural, seven cultural monument structures and 15 environmentally important buildings have been partially destroyed. A further 25 civil architectural, three cultural monument structures and 13 environmentally important buildings have been damaged. In total, this means 170 architecturally registered and protected buildings and structures have been destroyed or damaged. From an aerial photo dated 4 March 2017, it can be stated that destruction has continued at the same speed since the second satellite image was taken in August 2016. Approximately 35-40 hectares in the eastern part of Suriçi have been destroyed to date.



Fig. 3: Aerial photograph of Suriçi, 4 March 2017.

What should have been done in order to prevent the loss of architectural elements and texture at registered constructions sites that experienced damage due to this armed conflict? First, assessment works should have been prioritized, followed by the conservation of authentic building elements on site. These should have occurred before the commencement of any excavation. Such works should be carried out while taking into consideration the fact that the city is a World Heritage property, and by adopting a participative approach at the center of all programs and projects.

Legal issues and other developments

Parallel with the ongoing destruction, the Turkish government has taken other grave measures with respect to Suriçi. An expropriation order was issued for Suriçi by the Cabinet of Ministers on 21 March 2016. This covered 82% of the total area of Suriçi, including monuments such as churches and mosques. The remaining 18% already largely belonged to governmental institutions. To date, the implementation of this expropriation order has been started for a major part of the destroyed eastern part of Suriçi. For people in rented accommodation, the government has offered only around 2000-3000 Euros for their furniture and other possessions which they had to leave behind when they were forced to leave their houses.

The government claimed that with the expropriation Suriçi would be developed and reconstructed according to the Suriçi Urban Conservation Plan (2012). All steps taken so far have contradicted this claim. Based on the plans and projects presented to the public from 2016, it is feared that the whole demography of Suriçi would change in favor of higher social classes and unsustainable forms of tourism run by big companies. Considering that Suriçi is at the core of the public memory of Diyarbakır city, the government's approach would disrupt the cultural continuity by annihilating a collective memory based on the accumulation and hand-over of urban property that have continued for a millennium.

In September 2016 the Turkish government made a decision which put all management of cultural sites in Turkey, including World Heritage sites, under the direct control of the ministry for culture and tourism. The management body for the World Heritage site of Diyarbakır has thereby lost its independence. Two months later, the Diyarbakır Metropolitan Municipality was put under forced administration by the Turkish government after the co-mayors were arrested. This undemocratic control allowed the revision of the Suriçi Urban Conservation Plan in December 2016, thereby legalizing all destruction and other measures taken in Suriçi since the end of 2015.

The Hevsel Gardens and other parts of the Tigris Valley, which are part of the World Heritage property, have not been significantly affected by the armed conflict but are now in danger. The government has declared almost the whole heritage area and buffer zone in the Tigris Valley as an area subject to new planning. In doing so, the former Tigris Valley Project, which had been canceled after a court appeal by the Metropolitan Municipality in 2015, is taken as a basis for that.

In March 2017 the UN Committee for Human Rights published a report on human-rights violations in the mainly Kurdish south-eastern province of Turkey and accused the Turkish government of systematic human-rights violations, including the destruction of settlements and the displacement of hundreds of thousands of people. The contents of this report included the situation in Suriçi. On 24 March 2017, the UN Security Council approved a separate resolution – 2347 (2017) – on the destruction of cultural heritage by non-state and state actors.

The demands of this paper are therefore that:

- The Turkish government must immediately cancel the curfew in Suriçi, stop all activities of destruction and expropriation, rescind the revision of the Urban Conservation Plan, cover the costs of reconstruction of housing for displaced people, and implement a new site-management plan in which the active and equal inclusion of civil society must be assured;
- The UNESCO World Heritage Committee and its Advisory Bodies must immediately send a reactive mission to Diyarbakır, without requiring the permission of the Turkish government, or obtain independent and reliable information about the condition of the property otherwise. Its assessment and documentation must be carried out based on high standards of conservation through a commission with the participation of independent scientists from different fields, broad civil society, the Turkish Ministry for Culture and Tourism, and related municipalities;
- The UN Security Council must take action if the Turkish government rejects the above demands and thus call in the International Criminal Court.

Lamu Old Town World Heritage Property (Kenya)

Khadija Shekue Famau, Save Lamu

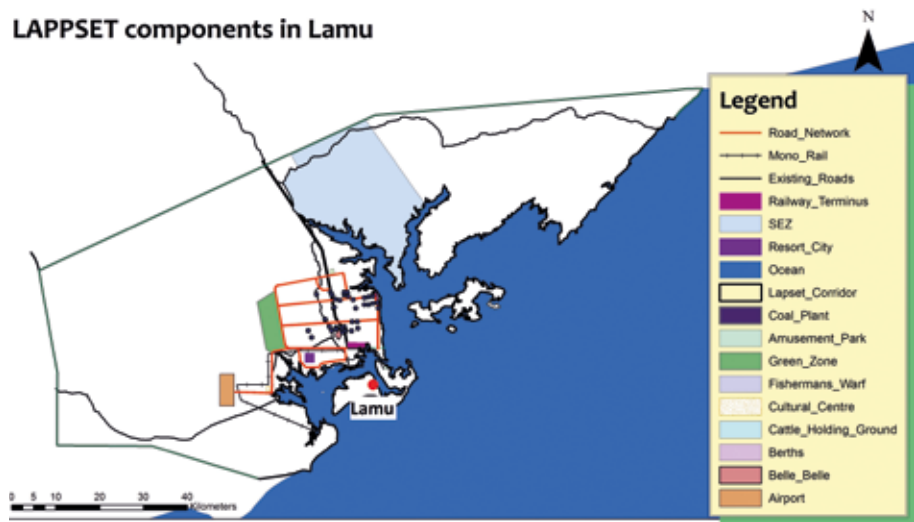


Fig. 1: Components of the LAPSSET Development Project.

Map: Save Old Lamu

The 2014 Heritage Impact Assessment

The 2014 HIA found that “there are many direct and indirect impacts effected on the setting of the WH property – the Lamu archipelago cultural landscape – and the cumulative negative effects on the natural and cultural heritage of this cultural landscape will have a permanent high negative impact on the WH property. One major impact of LAPSSET is that it will induce rapid economic growth in the county. This could be both a challenge and an opportunity for the conservation of the World Heritage

site and the retention of its authenticity and integrity.”²

Lamu Town is the oldest and best preserved Swahili settlement in East Africa (Abungu, G 2009).¹ The town lies on the island of the same name, nestled amongst other islands of the Lamu Archipelago. With its origins in the 10th century, Lamu Town has been and continues to be inhabited by Swahili people who retain many of their traditions.

Lamu Town is under threat from the Lamu Port – South Sudan – Ethiopia Transport (LAPSSET) corridor, the new Lamu Port and Metropolis Development Project, and other infrastructure projects including an oil pipeline and depot, an industrial park and transport hub that include an international airport, railway and highways, and, most recently, a proposed coal-fired electricity generating plant.

In 2014, a Heritage Impact Assessment (HIA) was prepared by George Abungu, Karel A. Bakker and Ishanlosen Odiaua highlighting the threats to the heritage site from LAPSSET. This paper briefly describes the newest threats to the Old Town of Lamu, the Swahili way of life, historical architecture, and the natural environment by a proposed 1050 MW coal plant in Kwasasi, 20 kilometres from Lamu Old Town.

The HIA also discussed a proposed 300 MW coal plant on the island of Pate “to provide power for the crude-oil pumping operations, railway and highway operations, industrial and urban activities induced in Lamu and port operations”³. The authors found that “the Environmental Impact Assessment came to a positive recommendation for the project, despite not understanding the cultural resource and therefore having no basis for assessing impact and designing mitigation.”⁴ The HIA concluded that “any change in character and quality of the Archipelago’s cultural and natural tourist product, with its World Heritage label, to an industrial centre and the largest harbor in Africa, will affect the continued protection and development of the attributes that underpin the Outstanding Universal Value (OUV) as well as all other values of the area that underpin the tourism industry, is therefore of critical importance.”⁵

¹ Abungu, George. Lamu: Kenya’s Enchanted Island. Rizzoli International, 2009. p. 17

² Bakker, Karel, Ishanlosen Odiaua, and George Abungu. Heritage Impact Assessment for the proposed Lamu Port, South Sudan, Ethiopia Transport (LAPSSET) corridor and the new Lamu port and metropolis development project. 2014 p. 4

³ Bakker, 2014. p. 4

⁴ Bakker, 2014. p. 15

⁵ Bakker, 2014. p 69

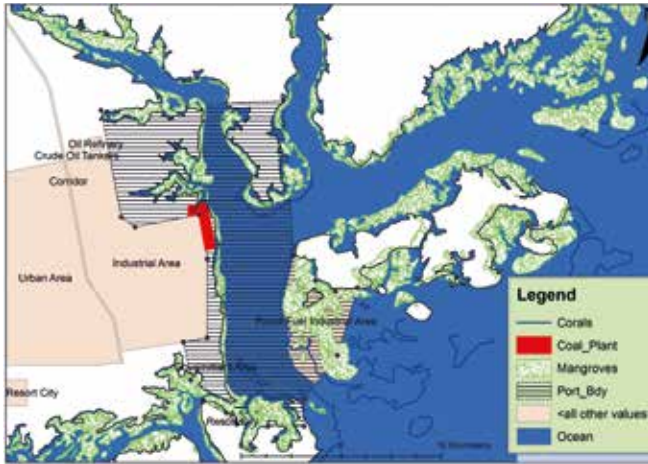


Fig. 2: Location of the planned coal-fired power plant.

Photo: Save Old Lamu

The World Heritage Committee expressed “deep concern about the likely negative impact of the LAPSET corridor and the new Lamu Port and Metropolis Development Project on the OUV of the property...” (37 COM 7B.40)

The HIA indicated that sufficient Environmental Impact Assessment was not done to evaluate impacts to the site in terms of LAPSET and that sufficient mitigation measures were not in place.⁶ We are not aware that this has been completed in the interim. The World Heritage site now faces even greater risk.

Additional risks from the proposed coal-fired power plant

The proposed Lamu Power Plant will exponentially increase the risks to the Lamu Old Town World Heritage property in the following areas of importance:

1. Built Environment. The existing historical architecture in Lamu Old Town is at risk from both the dry particulates released from coal stacks and the acid rain created when emissions combine with water in the atmosphere. The particles and acidity will cause corrosion and other damage to the historic buildings and structures.⁷

Traditional Swahili architecture in Lamu uses mangrove wood, coral rag and coral stone with lime mortar (made by burning coral stone on mangrove wood) to create beautiful buildings and public spaces⁸ The destruction of these buildings as a result of continuous and perpetual release of emissions and ash in the atmosphere would permanently damage the World Heritage site. Historical sites in the area have not been adequately audited to understand the impact

⁶ Bakker, 2014. Pp 8, 15, 138, 143, 166, 167, 25, 32, 93, 122, 125, 138, 164-166

⁷ <https://www.epa.gov/acidrain/effects-acid-rain>

⁸ Abungu, 2009. p. 53

of the coal plant and its associated infrastructure on historic grave sites, mosques and other monuments of historic value.



Fig. 3: The waterfront of Old Lamu.

Photo: Save Old Lamu

2. Natural Environment: The ecosystem of the archipelago hangs in a precarious balance. The coal plant will have a negative impact on the entire ecosystem and wholly destroy elements of the natural environment.

Through its operations, coal plants require millions of litres of water to cool the plant. After use, the heated water will be released into the ocean around Lamu. The hot water, combined with acid rain, will destroy the coral reef that provides a home to aquatic species. The coral will die and no longer support aquatic life; it will also be bleached and no longer create a destination for tourists who want to snorkel along the reef. Furthermore, the hot water will increase the overall temperature of the water in the region making the water uninhabitable for native marine life. The heated water will also have a grave negative affect on mangroves. Lamu has the best-preserved mangrove ecosystem on Kenya’s coastline and is a nursery for fish, crustaceans and other marine organisms.

Acid rain can ruin water systems and crops, plants and trees, and affect fish and wildlife. The nitrogen in acid rain kills fish and shellfish.⁹ The increased acidity and temperatures will also have negative impacts on dugong and sea turtles, already threatened and featured on the endangered-species list.

Burning coal creates ash. As a plant adds technology to reduce the toxic chemicals in its emissions, the ash produced has significantly higher levels of mercury, lead and other toxins. The plant proposes to store its ash in uncovered, lined ponds reaching a height of 25 meters over a 25-year period and to use the rest as landfill. Around the world, it has been found that when coal ash is used as landfill, the toxins leach out and contaminate the ground water which would reap further devastation on the environment and associated cultural practices, as well as the health of the inhabitants of the World Heritage site.

⁹ <https://www.epa.gov/acidrain/effects-acid-rain>

3. Culture: Part of what makes Lamu Old Town remarkable is the continuity of cultural practices and traditions. It continues to be a significant center for education in Islamic and Swahili culture. The presence of a coal plant in Lamu will have a negative impact on the culture of the region.

The most immediate impact will be the destruction of the livelihood of the fishermen who rely on an abundance of fish to feed and support their families. Today, traditional wooden sailing boats called dhow are built locally and used for all forms of work on the local waterways. The plant will raise the temperatures of the local waterways and the fishermen will need to travel farther to fish but their traditional boats are too small to travel in the open waters.



Fig. 4: Fish on the beach caught by local fishermen.

Photo: Save Old Lamu

The death of the coral reef and destruction of mangroves will have a negative impact on the ability of local craftspeople to work in these materials and to maintain their traditional arts. Mangroves are used sustainably in the structure of houses, boats and furniture by the Swahili people. With the coal plant and the increased population that is expected in its wake, mangroves and other natural resources used in the creation and continuation of Swahili culture are under threat.

The hazy pollution, which is a by-product of burning coal, limits visibility and could reduce tourism to Lamu not only due to limited visibility, but also due to tourists avoiding travel to overly polluted regions.¹⁰ This would have a negative impact not only on the scenic atmosphere of Lamu, but also on tourists' interest in attending the many cultural festivals held there.

Of particular concern in the 2014 HIA was the impact of rapid economic and population growth on the living Swahili culture. The influx of engineers, service providers, plant workers and their families will augment the already concerning impact of those persons affiliated with LAPSET.

Suggestions for Action

1. Local organizations and the community are working to prevent the coal plant from being built in Kwasasi. We would welcome outside support in terms of experience, experts, strategies and visibility.
2. The formation of a Heritage Association is desirable in order to make recommendations to utilize alternative forms of energy, particularly renewable energy, in Lamu so as to lessen the carbon footprint and sustain the World Heritage site. Such a Heritage Association should work with local government, who are the caretakers of the World Heritage property, to increase knowledge of the value of heritage sites.
3. Additional support would be welcomed to local organizations working to protect the World Heritage site and the surrounding region which contributes to the site's OUV.

Conclusion

As noted in the 2014 HIA, sufficient analysis of the impacts on the heritage site was not carried out. Alternatives were not thoroughly pursued, and mitigation is inadequate to protect the site from the impacts of LAPSET. Overall, there has been a lack of transparency which has affected the community and stakeholders. We have, for example, no information if the plant at Pate is moving forward as described in the HIA, if its location has been moved, or if it has been cancelled in favor of a proposed larger plant on the mainland.

The proposal for the most destructive type of power-generation plant – coal – will cause irreparable damage to the heritage site at Lamu. It is critical to the future of the site, the livelihood of the indigenous community, and the perpetuation of the area's culture that the World Heritage Committee help the coalitions of local associations and NGOs to protect their home and this significant historical treasure.

¹⁰ <https://www.epa.gov/acidrain/effects-acid-rain>

The Historic Center of Quito: A Disputed Space

María Rosa Muñoz Barriga

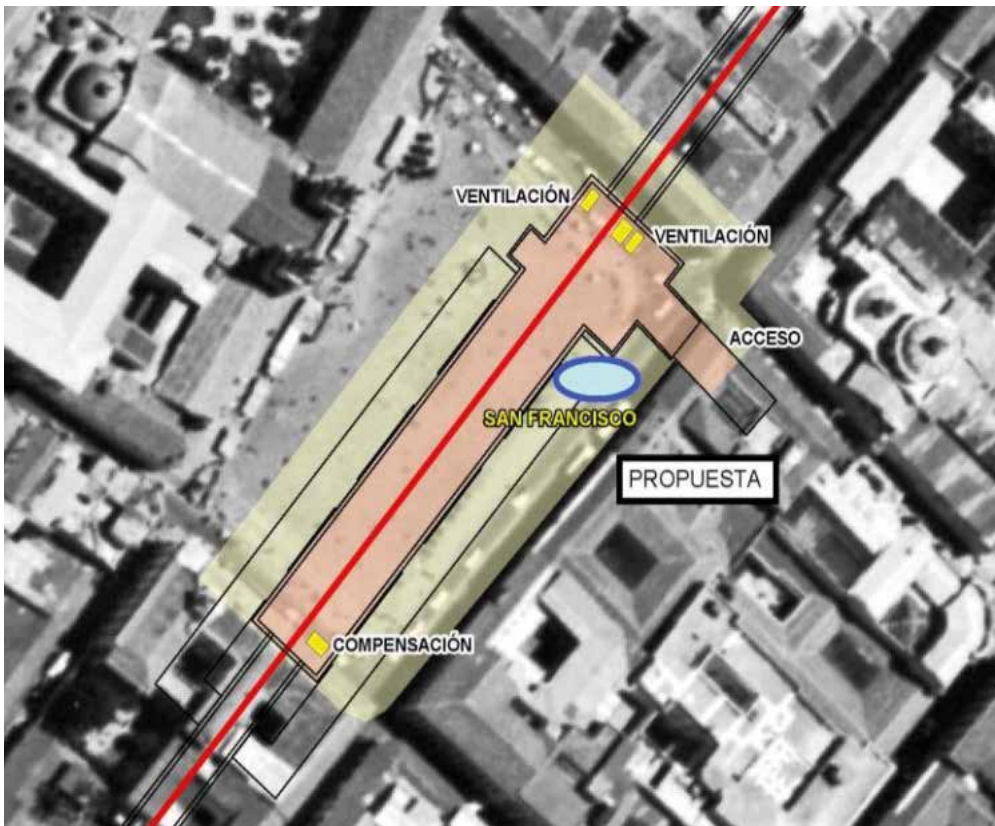


Fig. 1: Location of the subway station on San Francisco Square.

Map: Estudio de impacto ambiental de la primera línea del metro de Quito

Quito, along with Krakow, was one of the first two cities to be declared a World Heritage site in 1978. Subsequently, a lot of money has been invested to conserve the architectural value of the Historic Center of Quito (HCQ), “the best preserved and least altered historical center in Latin America” (UNESCO, 2016). However, the issues around this area are far from over.

There is high congestion on the city’s roads and the existing public-transport system has reached its capacity. In 2010, therefore, the Municipality of Quito decided to build the city’s first subway line. It will consist of 15 stations that will cross the city from north to south, passing by San Francisco Square, the heart of the HCQ. This issue has raised a lot of concerns about the impacts that such infrastructure might have on the city’s heritage value.

San Francisco Square is a symbol of the local identity as it represents the syncretism between Spanish rule and the area’s indigenous roots. According to local historians, the San Francisco Church was built by the Spanish on top of an indigenous market where the original tribes, located in the

surroundings of Quito, gathered and exchanged goods. Later, under the dominion of the Incas, the market was turned into the center of urban settlement. With the aim of preserving not only the architectonic heritage, but also the historical, cultural, social and ethnic richness of the square, some civil society groups have organized themselves to supervise and in some cases even oppose to the construction of this station.

In March 2016, with the authorization of UNESCO

and after conducting some preliminary archeological studies in the area, works commenced in the square. In September 2016, the archeologists in charge of the excavation discovered that the three existing chambers found under the square date from the 17th or 18th centuries and that they do not comprise an architectonic complex. Accordingly, the National Heritage Authority decided that the chambers must be preserved, that further research about their use should be conducted and published, and that the construction of the station in San Francisco Square can continue. Simultaneously, the Municipality of Quito signed an arrangement with the Roman Subway Enterprise to help conduct the works in accordance with proper archeological standards.

Nevertheless, the resistance of civil society groups has not ended. Some of the opposing groups state that the fragile structures of the colonial buildings surrounding the square might be threatened by vibrations during construction and operation of the subway. Another important concern regarding the San Francisco station is that it is not well connected to the existing public-transport system. The station could have

been built in the eastern border of the HCQ, in “La Marín”, which is a station where 60,000 passengers arrive every day. When asked why San Francisco and not “La Marín”, the Metro de Quito Enterprise affirmed that San Francisco was the cheapest option (Yépez, 2016).

The impact that the construction of a subway station may have on the heritage of Quito has become the main concern regarding the HCQ. Accordingly, at its 40th session, the UNESCO World Heritage Committee recommended that the State Party conduct studies to analyze the appropriateness of building the station in the San Francisco Square and to identify possible alternatives. It recommended the updating of the Management Plan for HCQ (World Heritage Committee, 2016).



Fig. 2: The construction site of the metro station in the immediate vicinity of Quito's most important cultural monuments. Photo: wikimedia

In response to this decision, the State Party submitted a report in March 2017 that presents an analysis of 10 alternative sites to the San Francisco Square, but concludes that the most suitable site, according to technical, geographical, environmental, economic, mobility and heritage criteria, is still the San Francisco Square. At the same time, the authorities incorporated the technical recommendations suggested by the Heritage Impact Assessment (HIA) in the construction process in order to reduce the risk of any possible damage to the structures of the HCQ, as well as the necessary communication strategies to keep the people informed (Vallejo, 2017). Thus, the local and national authorities have made a significant effort to comply with all of UNESCO's recommended procedures and practices to preserve the unique value of the HCQ. However, the implementation of these measures needs to be permanently monitored to ensure that they are being carried out properly.

Nonetheless, the problems of the HCQ extend far beyond the construction of the subway station in the San Francisco Square. There are some longstanding issues that have been disregarded when they should have been treated with the

same care if inclusive and sustainable development of the HCQ and the city as a whole is the objective.

So it is that, led by the idea of the “entrepreneurial city” as Harvey (1989) puts it, the HCQ has become another clear example of the “commodification of culture and heritage” in order to attract global investment, tourists and even a residential elite (Kipfer and Keil in Watson, 2009, p. 2265) inequality, informality, rapid urbanisation and spatial fragmentation, particularly (but not only).

On one hand, the HCQ is home to a marginalized and impoverished urban population that consists of street vendors, indigenous migrants, shoeshine boys, prostitutes and homeless people. A strong popular culture of craftsmen and old retail shops is also embedded in this area of the city. On the other hand, it is one of the oldest World Heritage sites.

Consequently, since the end of the 1990s, consecutive mayors of Quito, following a techno-managerial logic, have enhanced the historic center in a process of urban renewal, aiming to attract high-end tourists and thus causing a continuous process of displacement. To address the role of World Heritage sites in such processes of gentrification and displacement, it is important to implement inclusive policies that reduce the inequalities arising in these processes.

Until the 1960s the HCQ enclosed the entire population of Quito. In other words, poor and rich, white and indigenous all lived in the same area. However, the land reforms implemented in 1964 forced a migration of people to Quito, generating overcrowding and motivating the middle and high class to voluntarily withdraw and “seek refuge” in new exclusive neighborhoods in the northern part of the city. Since then, the HCQ has seen the arrival of internal migrants, of which a vast number are farmers of indigenous descent working as street vendors.

The urban poor have found that informality provides the only way for them to survive in the urban context, where neither the state nor the private sector is able to provide them with an economic alternative. In Quito, the most dynamic city of Ecuador, there are more than 20,000 street vendors (EL UNIVERSO, 2011). However, street vendors do not conform to the idea of aesthetics (order, harmony, formality and symmetry) that has prevailed in the urban form (Watson, 2009) required for an “entrepreneurial city” devoted to the tourism industry. This perspective has resulted in a series of policies that have displaced members of the most vulnerable groups of society.

The policies implemented to achieve this goal have varied depending on the political ideology of each municipal administration, ranging from relocation to regularization, but all of them have had severe impacts. In 2011, in an attempt

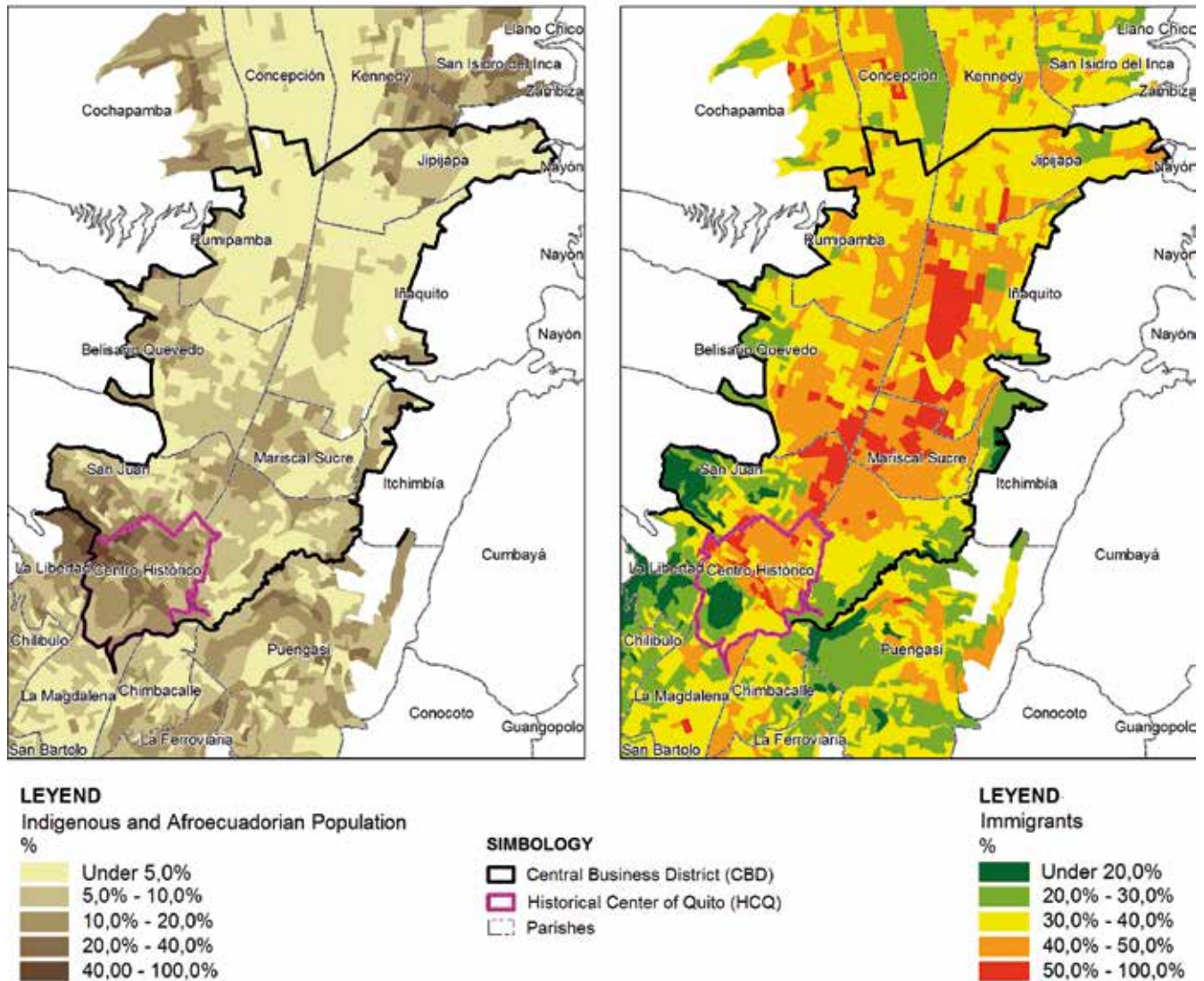


Fig. 3: Immigration and Ethnicity in Quito's inner city.

Source: Instituto de la Ciudad, 2013

to recognize their existence and regularize their practices, a new municipal ordinance was approved. It allows vendors to sell their products in public spaces as long as they obtain and renew a specific permit every year, respect the area to which they have been assigned, and pay the corresponding taxes. This ordinance also states that street vendors are not allowed to sell their products in regenerated areas of the city or the HCQ, where they have to respect the limits defined by the Declaration of the HCQ as a UNESCO World Heritage Site (Concejo Metropolitano de Quito, 2011).

Nonetheless, the HCQ is precisely the most attractive area for street vendors given the massive amounts of locals and tourists that circulate in the area. In March 2015, once again, the newly elected mayor initiated controls in public spaces by deploying 400 policemen in Quito, 180 of whom were

responsible for the HCQ (EL COMERCIO, 2015b). When street vendors are caught selling their products on the streets without a permit, their merchandise is commandeered. To have it returned, they have to pay a fine of USD 100 to 177 (EL COMERCIO, 2015a).

To sum up, the strategy around the regeneration of the HCQ has accomplished the dream of the "entrepreneurial city" by positioning Quito on the map of world tourist attractions, through which it has been entitled to several tourism prizes during the past two decades. The World Heritage status of Quito is very important for the local and national authorities. They are willing to comply with UNESCO standards and recommendations to maintain this status. The construction of a subway station in the San Francisco Square does not seem to threaten the property, but it does show a lack of

urban and transport planning by locating one of the subway stations in a badly connected area.

However, in social terms, the policies implemented by the municipality to meet UNESCO guidelines have adversely affected the urban poor, while benefiting the big corporate interests. The Historic Center of Quito is far from being the only case among World Heritage sites where exclusionary policies have been implemented, adversely affecting the lives of the most vulnerable groups in society. Heritage sites need to consider not only the value of the buildings, but also the social and economic dynamics that surround them. Therefore, a more comprehensive and inclusive concept should be implemented in order to avoid displacement and gentrification processes and to generate opportunities for all.

Finally, World Heritage Sites cannot be isolated from their urban context. In the case of Quito, the HCQ is the keystone of the local identity and therefore it should not be turned into a museum only for tourists, distancing locals from their roots. It should, rather, be converted into a local neighborhood that tourists are welcome to visit.

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Fig. 4: One of the many Native American street vendors in Quito's historic city center. Photo: Clemens Sehi

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V. Monuments and Sites

The Dilemmas of Mtskheta and the Reasons for its Listing as World Heritage in Danger

Tamar Gelashvili

One of the most important corners of Christianity, the Historical Monuments of Mtskheta World Heritage property, was placed on the list of cultural heritage sites in danger by UNESCO in 2009. Inappropriate modern interventions had occurred in the cultural spaces. The city's cultural and historical landscape was being violated; lands were being alienated by privatization in areas where this is inappropriate. Some experts lamented the intrusions of unplanned constructions into the urban fabric of the site.

In 2016, Mtskheta was removed from the in-danger list. But is the danger over? Critical issues remaining to be resolved include the proposed Master Plan for the site, the boundaries of the site, and coordination among stakeholders.

In accordance with the resolution (3 August 2015) of Prime Minister Irakli Gharibashvili, all construction, land privatization and alienation in Mtskheta have been stopped. (Fig. 1, Fig. 2) During the moratorium, the local municipality had the task of developing a general plan for land use, which would protect the property from improper development. UNESCO positively evaluated these initiatives of the State Party and removed Mtskheta from the in-danger list.

UNESCO has also granted enhanced protection for Mtskheta's historical monuments, a status shared by only 10 other sites, in the event of threats from armed conflict. The Minister for Culture and Monument Protection of Georgia, Mikheil Geiorgadze, commented on the news: "Naturally, this imposes more responsibility on us to care for the monuments and their development."

Challenges and dilemmas for today

It is known that up to 25% of Georgian territory is occupied by Russia. This creeping occupation has continued with Akhalkori, a town located about 50 km from Mtskheta. One therefore cannot state with any certainty that Mtskheta is protected from war. The site's enhanced protection is very important.

Meanwhile, in Mtskheta itself, while the moratorium has stopped degradation, the city still faces dilemmas. The municipality has not fulfilled its obligations on time. The local government, in accordance with World Heritage Committee recommendations, commissioned a company to create a



Fig. 1 and 2: Illegal new construction and privatization in the vicinity of the historical monuments.

Photos: Tamar Gelashvili



General Master Plan of Land Use of Mtskheta. However, a six-month contract became a year-and-a-half-long contract that delivered little by way of a result.

The contracting company received 160,000 GEL (approximately US\$ 66,000) for this inadequate work that was disapproved by UNESCO experts and by the municipality itself. According to the contract, the company did not have the obligation to re-generate the general plan. A representative of the local government believes that the funds were spent for nothing and that this undesirable result arose due to a lack of coordination between the authorities. He said the process was drafted without the involvement of civil society or the local government, contributing to the unsatisfactory result.

The central government has confirmed the problem of coordination, and UNESCO itself recommended improvement of coordination. A representative of the municipality has therefore called on the National Agency to convene a round table and hopes that UNESCO representatives scheduled to arrive between May and October this year will help solve the problem.

One of the reasons for the delay in preparing the Master Plan has been the unclear territorial and administrative division of Mtskheta itself. As a result of government reform in Georgia two years ago, Mtskheta became a self-governing town. This left one of the monuments within the World Heritage property, Jvari Monastery, outside of the territory of the town of Mtskheta but inside the territory of the administrative unit of the Dzegvi community. The Mtskheta self-government can set up regulations only in its own administrative community area. This has left the status of Jvari Monastery in limbo. The municipality hopes that the relevant governments will be merged, so that Jvari Monastery will be returned to the territorial administrative community area of Mtskheta, but they do not know when this will occur. Neither do they know when a general Master Plan that is in line with international standards will finally be approved.

The moratorium was prolonged until 2019 due to the delays in preparing an acceptable Master Plan. This frustrated local tourism development interests, leading to protests by local citizens, as the use of private lands and construction on them were prohibited until the Master Plan was finalized.

There are differing opinions about the moratorium. Some experts believe that the government will buy back the alienated lands; others think that it is better to have different ownership. Meanwhile, many people are concerned about the proliferation of street stalls in Mtskheta and the consequent visual impact on the streetscape, arguing that it's not just tall buildings that can disfigure a cultural landscape. A representative of the local government has confirmed that the

street trade within the Historical Mtskheta World Heritage property is illegal, but there is no political will to tackle the issue and that the street traders need to be found an alternative source of income.



Fig. 3 and 4: Unregulated and illegal street stalls marring the visual integrity of the World Heritage property.
Photos: Tamar Gelashvili

In October 2015, the Municipal Development Fund of Georgia and UNESCO signed a three-year contract. Georgia has been loaned US\$250,000 from the World Bank for this project which includes four components. The first component is for the conservation and management of the Historical Monuments of Mtskheta World Heritage property. The second component is to support ongoing activities to renew the National Tentative List for World Heritage. The third is to enhance the professional skills of town planners and architects in the broader heritage context. The fourth is for the promotion of sustainable tourism based on cultural heritage. UNESCO has prepared criteria on each component that must be taken into account by the Georgian authorities to have acceptable results. However, the fact remains that each com-

ponent comprises a difficult task for the country. Some commentators have lamented the fact that, in their opinion, little has been achieved despite good government intentions and the expenditure of significant funds.

Since the moratorium was applied in 2015, the country has not been able to make a general land-use Master Plan for a universally significant corner of Georgia and the rest of the world. How many more times will the creation of this document be suspended by the year 2019? In the 21st century, it is still an open question – when will the long-awaited Master Plan be approved for the unique city of the world?

Based on the interviews conducted for this article and on the assessment of the current state of the management of the property, there is a fear that the processes welcomed by UNESCO as positive have become stagnant and may not lead to significant changes in the near future. It is therefore hoped that the World Heritage Committee will make clear recommendations and reiterate the need for rapid resolution of pending issues such as the Master Plan, boundaries of the site, and coordination among stakeholders.

Saint-Sophia Cathedral and Related Monastic Buildings, Kiev – Pechersk Lavra

Iryna Nikiforova, Initiative for St. Andrew's Passage



Recognizing the need for urban development in the modern world, we are forced to acknowledge the fact that aggressive and often uncontrolled construction is the main threat to the preservation of cultural heritage sites located in major historical cities.

The first Ukrainian site inscribed in the UNESCO World Heritage List is Kyiv: Saint-Sophia Cathedral and Related Monastic Buildings, Kiev-Pechersk Lavra. Inscribed in 1990, it is situated in the central area of historical Kyiv. That's why the buffer zone of the property is especially "valuable" and attractive for large building corporations. The price of one square meter of housing here can reach tens of thousands of dollars.

As a result, intensive urban development, including the construction of multi-storey buildings with underground parking lots, the increase of traffic and the deterioration of ecological values, pose a significant threat not only to the existing historical environment (the buildings built in the 18-19th centuries that possess a great historical and architectural value), but also to the thousand-year-old temples of Saint Sophia Cathedral and Kiev-Pechersk Lavra.



Fig. 1: View of St. Sophia with surrounding urban development. Photo: www.askideas.com

Intrusive multi-storey buildings have a strong negative impact on the visual perception of these ancient structures, threatening their Outstanding Universal Value (OUV) and integ-

riety. Because of the high-rise constructions on the slopes of the Dnyeper River, the historical monastic landscape, which for many years was considered to be Kyiv's visiting card, has been finally destroyed. In addition, the construction of deep underground parking lots on pile foundations in close proximity to the sites has caused a significant increase in the groundwater level observed in the territory of the Preserves.

The World Heritage Committee conducts permanent monitoring of the situation in Kyiv and has expressed great concern. Recommendations to prohibit high-rise buildings in the buffer zone of the property and on the slopes of the Dnieper River are repeated annually.

Since 2009, the NGO Initiative for St. Andrew's Passage has been following the Committee's decisions and carrying out actions to encourage seeking effective implementation of the UNESCO World Heritage Convention. It has cooperated with the local authorities, the Mayor of Kyiv, Vitaly Klichko, and the Kyiv City State Administration on the preparation of a moratorium on all new development projects in the buffer zone of the World Heritage property. This moratorium was finally adopted by the Kyiv City Council in January 2015. Indeed, the World Heritage Committee had been requesting such a moratorium since 2009.

During the 39th session of the Committee, this NGO worked with the official delegation of Ukraine to successfully amend the Draft Decision as follows: "The Committee ... requests the State Party to reduce the height of non-conforming and dissonant buildings in the buffer zone of the property which threaten and/or have negative impact on the OUV of the property, by means of demolishing the already constructed storeys to the level of neighboring historical buildings in accordance with its previous decisions". 39 COM 78.85

In accordance with this decision, two storeys of a dissonant building at 3-5 Desyatynny Lane, in the buffer zone of Saint Sophia Cathedral, were demolished in 2015.

But there remain many problems to be solved in Kyiv. The most problematic issue in the buffer zone of Saint Sophia Cathedral is the construction of a 10-storey building with a

two-level underground parking lot at Gonchara str., 17-23. This huge building, situated only 50 meters from the Saint Sophia National Preserve, has negatively impacted on the OUV and integrity of the property. It does not conform with its historical surroundings and has destroyed the existing architectural ensemble of the buffer zone of Saint Sophia. Moreover, the construction of a deep underground parking lot in a zone of "severe hydrogeological regime" has caused the water table to rise within the territory of the Preserve. Experts warn that the ground water may reach critical levels in the near future that will inevitably lead to the deformation and destruction of the foundation of the cathedral and its bell tower.



Fig. 2: The new construction at Gonchara str., 17-23.

Photo: Iryna Nikiforova

In 2009, ICOMOS provided the following recommendations regarding the project at Gonchara str., 17-23:

- to immediately stop all construction activity on the site;
- to change the project, drastically reducing the upper limit of its height to that of existing close buildings, and disaggregating the total volume and façade to smaller units with free spaces among them.

In spite of these recommendations, the investment company changed the project, increasing the height of the building by up to 38 meters and doubling the construction volume.

Fig. 3 wird wohl über eine ganze Seite gehen müssen. Daher lege ich hier keine genaue Stelle fest, wo Du sie einfügst.

Fig. 3: High-rise buildings and disharmonious structures in the buffer zone of the World Heritage Property. Map: Initiative for St. Andrews Passage / Martin Lenk

The local authorities and Kyiv Mayor Vitaly Klichko strongly intend to implement the World Heritage Committee's decision to reduce the height of this dissonance building. In 2016, the Kyiv City Council established the Temporary Supervisory Commission. It found that serious violations of Ukrainian

and international legislation had been committed during the building's construction. It concluded that the investor should be forced to follow ICOMOS's recommendations to reduce the height of the building by demolishing already-constructed storeys. This decision was adopted by Kyiv City Council in July 2016.

However, the investor has no intention of complying with this decision or to follow ICOMOS's recommendations. He argued that the address "Gonchara str., 17-23" is not specified in the Committee's decisions, and that, in his opinion, UNESCO has no claims concerning the project. Moreover, in his desire to complete this scandalous construction, the investor has stooped to using some very questionable tactics.

We are absolutely convinced that reducing the height of this dissonant building in such close proximity to the property will create an important precedent for Kyiv and prevent the construction of dozens of new high-rise buildings in the buffer zone, including the new project in Sofiyska str., 20/21, just opposite the Preserve. Otherwise, construction of a 10-storey building with a three-level underground parking lot could commence in the very near future.

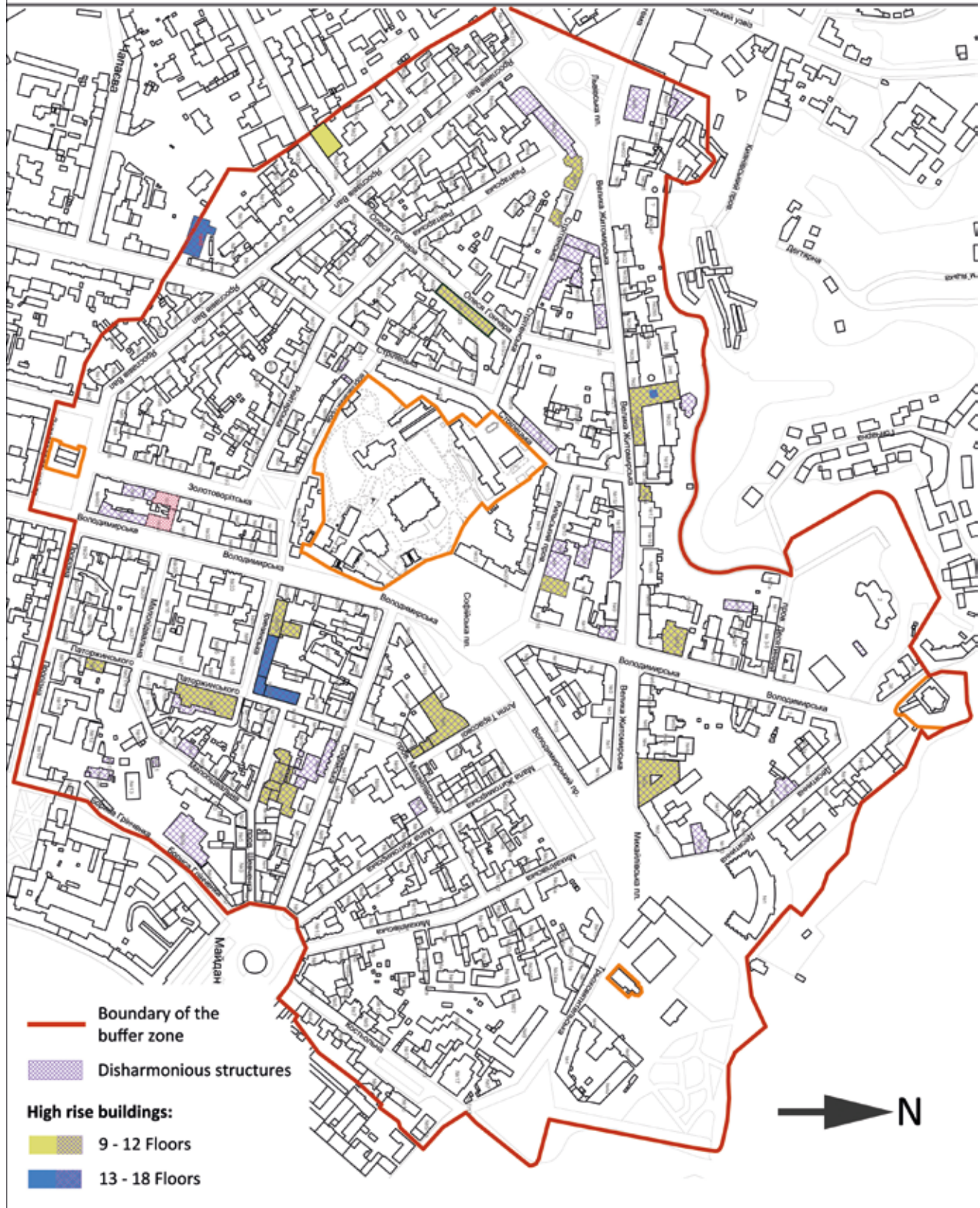
That is why civil society in Kyiv has persistently addressed the Committee with the request to provide the State Party with clear and precise recommendations with specified addresses. We are absolutely convinced that such recommendations will encourage the Ukrainian Government and the city authorities to develop a national strategy for the implementation of the World Heritage Convention in the Ukraine, including strengthening cultural protection and legislation, reinforcing the management system and, as a result, improving the protection of our cultural and historical heritage.

The situation with another component of Kiev-Pechersk Lavra seems to be even more dramatic. New constructions occurring under the guise of "reconstruction of lost buildings" is currently underway in the territory of Preserve. Besides raising the groundwater level, there is also the danger of landslides that threaten the integrity of the monastic buildings and the caves.

The buffer zone of the Preserve has been degraded by intense urban pressure – dozens of high-rise buildings have been erected in the area during past decades. The most outrageous of them is 140 meters high in Klovsky descent, 7. It is located outside of the protected buffer zone of the World Heritage property, but has a strong negative impact on the visual perception of the property. As of now, the building has been put into operation; its units have been sold and have legal owners. Thus, the only way of reducing its height is for the state to purchase relevant spaces in the building for the purposes of demolition to an appropriate scale by using

Kiev: Saint-Sophia Cathedral and Related Monastic Buildings

High rise buildings and disharmonious structures within the buffer zone of the ensemble



state-budget funds. The economic situation in the Ukraine and lack of legal mechanisms make the implementation of such actions impossible.

Flawed Ukrainian legislation and a corrupt component in state bodies have made it possible for developers to obtain the permits and approvals required to construct several multi-storey and non-conforming buildings in the buffer zone of the Preserve. Influential construction and investment companies have lobbied the top echelons of the state so that they can benefit from a permissive approach, effectively violating Ukrainian and international standards with impunity.

Despite repeated requests by the World Heritage Committee, information on these and other development proposals, including about the status of their approval, has not been provided by the State Party prior to the beginning of the construction works as required by Paragraph 172 of the Operational Guidelines. Non-government organizations keep sending information on such development projects to ICOMOS and the World Heritage Center, but the absence of direct communication and cooperation structures between UNESCO and ICOMOS makes these efforts useless and ineffective.

We ardently support and welcome UNESCO's initiative to enhance the role of civil society in the preservation of cultural and natural heritage and the implementation of the Convention. For the sustainable development and for the protection and preservation of historical and cultural heritage, it is necessary to recognize the important role of non-governmental organizations at the local, national and international levels.

In recognizing the great importance to the international prestige of the State of preserving the cultural, historic and natural heritage, and to increase the self-awareness and identity of its citizens, we are ready to cooperate with local and national authorities in the modernization and urban planning of the city. Our objectives are to reduce the negative impact of urban activities on outstanding monuments of human genius and to reduce pollution while encouraging innovation and partnerships with all the participants in these processes.

It is necessary to further stimulate an effective partnership between the public-sector agencies, the private sector and civil-society organizations, drawing on the experience and history of developed European countries and influential international organizations. We consider it necessary to enhance the role of non-governmental organizations in the preservation of cultural heritage; to use their experience and awareness in the process of adopting the decisions of the World Heritage Committee; to introduce the practice of amending plans to take account of its recommendations; and to hold international consultations with the participation of representatives of the State Parties, NGOs, national commissions and other interested organizations.

Efforts must be stepped up to make serious structural changes in order to enhance the role of civil society in the field of protection and management of heritage. Open consultations and discussions with the professional community, representatives of the local and national authorities, decision-makers and other stakeholders should be conducted. A direct dialogue should be established between the NGOs and the ICOMOS and UNESCO structures.

Prospective World Heritage Sites in the Russian City of Pskov

Marina Nikolaeva, Pskov Regional Office of Society for Protection of Historical and Cultural Landmarks



The heritage of medieval Pskov has a long history of being nominated for inscription on UNESCO's World Heritage List. Since 2002, the nomination "Great Pskov" has been on the Tentative List. Back then, the nomination included more than 200 monuments and sites. In 2012 the nomination "Russia's Kremlins" (Pskov Kremlin included) was considered by the 36th session of the Committee in St Petersburg, but was sent back for revision and never reappeared. In 2015 a new attempt was made to nominate the "Heritage of Ancient Pskov" in which the number of sites was reduced to 18 landmarks representing fortification architecture, church architecture and civil architecture of medieval Pskov of the 12th to the 17th centuries. This application was also sent back for revision and therefore will not be considered in Krakow in 2017. A new application is being prepared which is expected to be considered in 2018.

Objective

This paper aims at drawing international attention to two sites of major historical and cultural value located in Pskov that have been part of the above nominations. These are the Transfiguration Cathedral of the Mirozh Monastery (mid-12th century) and the Nativity of the Virgin Cathedral of the Snetogorsky Monastery (early 14th century).

The process of decision-making concerning World Heritage nominations in Pskov has been rather confusing. It seems there is a belief among state officials at the regional level that the responsibility is all theirs to determine which sites to include and which to exclude from the nomination. Another belief is that there is no need for media coverage of routine processes until there's a clear result. There's hardly any news in mass media to be found before the nomination is submitted. No professional advice is sought, no public discussion initiated. The time for news comes when the proposal is evaluated and there is a hope it might be a success. However experts from ICOMOS who visited Pskov in February 2017 have expressed reasonable doubts that an application containing so many different sites can be successful. The fact is that individual monuments and sites which are part of this complex proposal differ not only by way of their historical

background, but also in terms of their integrity and safety, their conservation and restoration histories, their compliance with the selection criteria, and so on.

Therefore, we consider it necessary to take over some responsibility for decision-making and to emphasize the Outstanding Universal Value (OUV) of the two heritage sites announced above and to make every effort to invite public attention (at both the national and international levels) to the following issues:

1. the safeguarding of the sites;
2. risk management (both sites are located on the banks of the river Velikaya and are exposed to hydrological risks: the risk of flood for the Transfiguration Cathedral, and the risk of bank erosion for the Nativity of the Virgin Cathedral);
3. working out mechanisms for the involvement of professional groups in decision-making and public control over the existing models of management for the sites.

Brief Description of the Sites

1. Transfiguration Cathedral of the Mirozh Monastery

The Transfiguration Cathedral of the Mirozh Monastery, which was built and decorated with frescoes around 1130-1140, is one of the first stone buildings built in Pskov. The Mirozh Monastery is situated on the left bank of the Velikaya River, near the place where it is joined by a tributary named Mirozhka, on a straight axis with the Trinity Cathedral of the Pskov Kremlin. The Mirozh Monastery still dominates the city's panorama as seen from the fortress located on the other bank. In the early 12th century, Pskov was a city where Christianity existed side-by-side with paganism. The foundation of the Mirozh Monastery and the construction of the Transfiguration Cathedral proved to be highly successful religious, cultural and educational projects comparable to the missionary role of Saints Cyril and Methodius for Slavic people's cultures in the 9th century. The creation of the Transfiguration Cathedral represents a vivid example of the way young Russian culture assimilated ancient artistic traditions of Mediterranean culture after adopting the Christian faith from the Byzantine Empire. The



Fig. 1: The Transfiguration Cathedral of the Mirozh Monastery. Photo: V. Nikitina

Transfiguration Cathedral has retained an exceptional amount of its murals (created by highly-skilled Byzantine masters), which are not only well-preserved, but also of very high quality and abundantly rich in terms of their iconographic meaning. The architecture and murals of the Transfiguration Cathedral influenced the development of Russian and North European art at the end of Early Middle Ages, while the Mirozh Monastery shaped the aesthetic identity, spatial symbolism and ideological program of medieval Pskov.

2. Nativity of the Virgin Cathedral of the Snetogorsky Monastery

The Mirozh Monastery is on the west bank of the river Velikaya upstream of the Pskov Kremlin. The Snetogorsky Monastery is located downstream of the city kernel on the right bank of the river, on a high hill. The Snetogorsky Monastery has therefore been holding a "conversation" with the Mirozh Monastery since its foundation. It is significant that the main cathedral of the Snetogorsky Monastery (the Nativity of the Virgin Cathedral, 1310) followed the architectural model provided by the Transfiguration Cathedral of the Mirozh Monastery.



Fig. 2: The Nativity of the Virgin Cathedral. Photo: V. Nikitina

The Nativity of the Virgin Cathedral is the focal point of the Monastery ensemble and the dominant point for the surrounding landscape of the valley. Like the Transfiguration Cathedral, the Nativity of the Virgin Cathedral has retained its remarkable murals created in the early 14th century, about a century and a half later than those of the Transfiguration Cathedral. The time gap is unable to impede the symbolic intercourse and spiritual consistency of the fresco images in both cathedrals; the reflections are still evident. The murals of the Nativity of the Virgin Cathedral represent the most prominent example of the Pskov school of painting of the 14th century. They were created in the early days of the Pskov Republic, at the time when Pskov's citizenry was forming its identity. The iconographic program of the murals is a valuable historical document acknowledging the intensive spiritual life of the citizens, political and theological conceptions that were employed to justify Pskov's striving for independence.



Fig. 3: Mural in the Nativity of the Virgin Cathedral. Photo: V. Nikitina

Summary of the present situation

Currently, the management of the two heritage sites is complicated and unclear. The management system is being gradually transformed to meet the interests those in charge: relevant state authorities, the Pskov Museum-Reserve, the Pskov Diocese of the Russian Orthodox Church, as well as public forces concerned with safeguarding the sites (such as individual experts, professional groups, local communities and NGOs). Any conflicts of interest between the actors involved in the sites' management can threaten the integrity of these monuments of medieval culture.

Given that both sites are owned by the state, all property issues are settled by the Federal Property Management Agency (or its regional office). The official user of the Transfiguration Cathedral of the Mirozh Monastery is the Pskov State Museum-Reserve¹. However, it is a working monastery: there are monks and an abbot; there are everyday religious and economic activities. The presence of the Russian Orthodox Church in the monastery is legal, but the relationship between the Museum and the Church is regulated only by an internal agreement between the two organisations. It means there are no mechanisms of public control over the users' activity at the site.

The right to use the Nativity of the Virgin Cathedral of the Snetogorsky Monastery was transferred to the Russian Orthodox Church in 2013². The right to ensure the user's compliance with safeguarding obligations formally belongs to the relevant state authorities, but applying control mechanisms in everyday practice is difficult. There are absolutely no opportunities for public control.

However public attention on the sites and concern about their safety appears to have increased. For example, in April 2011 a flood threatened the unique frescoes of the Transfiguration Cathedral. A large number of volunteers responded the call for help, ready to participate in mitigating the effects of the flood.

Notable public response and concerns about the safeguarding of the heritage site were generated by news that the Nativity of the Virgin Cathedral had changed its user when Pskov Museum transferred the user's rights to the Russian Orthodox Church. The Snetogorsky Monastery is a working convent today, and the long-term aim of the abbess is to use the Nativity of the Virgin Cathedral for church services. Installation of underground heating may be planned, which means safeguarding the murals is not the priority.

Public access to the Transfiguration Cathedral of the Mirozh Monastery is regulated by museum rules (the cathedral can be visited by groups up to 30 people, no more than five groups a day, with an interval between the groups of over 30 minutes). Access is limited only in case of potential risk to the safety of the frescoes (adverse weather conditions such as rain, snow or air humidity over 80%). Access to the Nativity of the Virgin Cathedral of the Snetogorsky Monastery today is not regulated and cannot be guaranteed. (To be fair, access to the Nativity Cathedral was not guaranteed before 2013 when the official user of the cathedral changed)

Access difficulties are made even worse by the poor condition of public information at the sites. There are not enough signboards, information panels or waymarks for tourists.

Suggestions:

Legislative changes at both federal and regional levels should be initiated. The user's obligations should be clearly and thoroughly defined. The user's compliance with the obligations concerning the safeguarding of the site should be open to public control. Transparency of any activity at the site should be guaranteed. This is especially topical for the situation with the Nativity of the Virgin Cathedral.

Mechanisms of public control should be worked out at municipal level. A supervisory commission should be created and should include local representatives of the Society for Protection of Historical and Cultural Landmarks as well as journalists and representatives of other NGOs. Members of the supervisory commission should have access to information relevant for safeguarding and management of the sites. The mass media should be encouraged to cover every stage of a nomination.

Apart from extensive media coverage, all means of promotion of the sites (3D modelling, mobile applications) should be employed in order to increase the general public's awareness (in Russia and worldwide) of these unique heritage sites.

Provided the above actions are taken, both sites have an extremely high chance of inscription on the World Heritage List.

¹ In accordance with Gratuitous Use Agreement # 127 dated 20/05/2010.

² In accordance with Gratuitous Use Agreement # 2/13-OKH dated 08.04.2013.

The Orange Line Metro Project, Lahore: Civil Society Safeguarding a World Heritage Site



Imrana Tiwana, Lahore Conservation Society

Lahore is the heart and soul of Pakistan, a veritable museum of culture and heritage. Dating back more than 4000 years, it proudly counts itself as one of the oldest cities in the world. Lahore is now a mega-city with a population of over 11 million people.

Lahore's Fort and Shalamar Gardens (circa 1642) were inscribed on the World Heritage List in 1981 at the 5th Session of the World Heritage Committee and protected under the UNESCO World Heritage Convention and the National Antiquities Act 1975. The property was inscribed on the List of World Heritage in Danger in 2000 after complete demolition of two of the three hydraulic works and the partial demolition of the third hydraulic work belonging to the Shalamar Gardens. In 2012, it was removed from the "In-Danger" list after a management plan was prepared to safeguard the property.

The site continues to be damaged by misguided development. The Orange Line Metro (OLM) is a rapid-transit railway being built as part of the Lahore Metro that passes directly above the Hydraulic Water Works and within the buffer zone of approximately 200 feet. It will "irreversibly destroy" the visual and historic authenticity of the property, in addition to violating the law and specific guidelines of the World Heritage Committee.

Transport – the Orange Line Metro: history and current situation

The city needs efficient, affordable urban transport, but without violating the law, damaging heritage and causing disintegration of communities. In the original plans by MVA Asia 2008, the OLM was 27.1 km long, with 20 km as an elevated viaduct and 7 km underground incorporating tunnel technology (TBM). In 2014 the Punjab Government changed the proposal. The new alignment has a total length of 27.1 km with 1.7 km semi-underground (using cut-and-cover methodology) and 25.4 km of elevated viaduct, rather than 7km underground as originally proposed. The proposal puts the overall cost of the project at approximately \$2.5 billion. The project caters to less than 2% of the population with no integrated linkage feeders.

Civil Society interventions

On 12 December 2015, civil-society organizations, activists and citizens staged a peaceful protest at Charing Cross against the Punjab Government's OLM project. With no response from the government, civil society was left with no recourse but to file a public-interest litigation. In January 2016 the court passed a "stay order" to stop construction within 200 feet of the 11 threatened heritage sites.¹ Ms. Asma Jahangir, learned counsel for the petitioners, argued that the petitioners were concerned citizens of Pakistan and residents of Lahore having fundamental rights under Article 28 of the Constitution of Islamic Republic of Pakistan, 1973 (Constitution) that their culture and heritage may be preserved.

A milestone judgment in favour of the citizens of Lahore was passed by the Lahore High Court in August 2016², saying: "Monetary loss, to say the least, can be recovered and retrieved. What cannot be retrieved and repaired is the soul of a nation".



Fig. 1: Citizens Protest Rally Shalamar Gardens.

Photo: Liaquat Ali

¹ Judgment Sheet in The Lahore High Court Writ Petition No. 39291/2015

² Judgment Sheet in The Lahore High Court Writ Petition No. 39291/2015

At a citizens' press conference held on 27 April 2017 the plaintiffs said: "The Government's lawyers have forwarded no substantial arguments to justify the completion of the OLM under its present design and technology other than pushing the fait accompli argument. Civil society lawyers rejected the government's fait accompli argument as a dangerous precedent that justified the violation. Pointing out the deliberate inaccuracies in terms of distances and vibration levels ... Shalamar will suffer high visual impact as the viaduct pylons will block the view and diminish their value."³

The lawyers also pointed out evidence of flawed planning and design with regard to the vibration analysis. This nullified government assurances of due process undertaken to ensure the safety of the monuments. Incorrect and misleading calculations were being used to cover up the high-vibration impact. The soil between the vibration source and the monument had not been tested for vibration impacts as per standard requirements for ancient monuments.

The Government of Punjab appealed to the Supreme Court which reserved its judgment on 17 April 2017. The "stay order" on the eleven heritage sites continues.

In the State Party Report there is no mention of the Advisory Committee Report or the Heritage Impact Assessment (HIA).

In a review of the Report of The Advisory Committee, Constituted Under Section 3(1) Of The Antiquities Act, 1975 and the HIA, the Lahore High Court decided that the Advisory committee was supposed to be independent of Directorate-General of Archeology. That the DG Archaeology became part of the Advisory Committee and its decision-making renders the report of the Advisory Committee as non est and a nullity.⁴



Fig. 2: Citizens Site Visit 14 May 2017. Showing raft distance at 3.4m of Hydraulic Works. Blatant Violation of 200 foot Buffer Zone. Photo: Maria Waseem

3 Press Release 27 April 2-17: www.lahoremetroaurap.org Lahore Metro, Aur Aap FB

4 Judgment Sheet in The Lahore High Court Writ Petition No. 39291/2015

The Advisory Committee Report also states: "The Orange Line track is outside the hydraulic tank premises". It also mentions "slight visual hindrance due to piers". The above statements are blatantly incorrect, the viaduct supported by heavy concrete piers will be directly above the historic structure (Fig. 2, Fig. 3). These statements certify the professional incompetence of the committee.

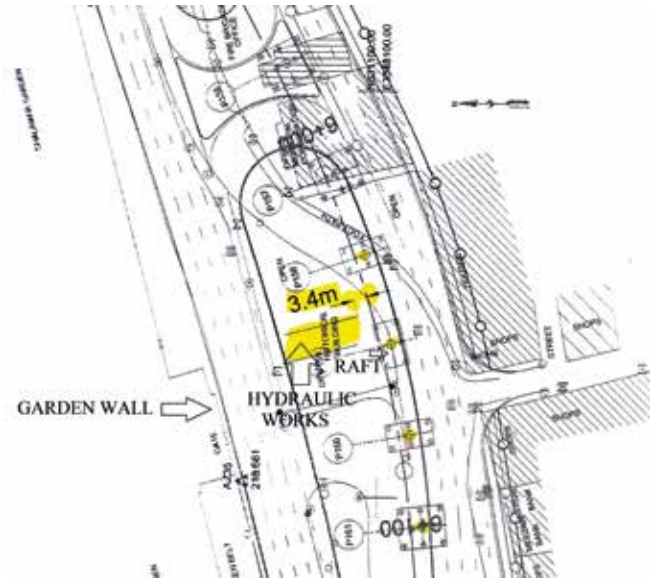


Fig. 3: Nespak Map showing piers at 3.4 m from Hydraulic Works. Violation of 200 foot "Buffer Zone". The mammoth concrete structure of the station can be seen at the rear. Photo: Imrana Tiwana

The Lahore High Court continues to state that

"The Note of Construction (NOC) issued by Director General dated 16.11.2015 under section 22 of the Act of 1975 and NOC dated 30.11.2015 issued by the giving permission to carry on construction within prohibited limits of 200 feet of protected antiquities and special premises are not only arbitrary, malafide, patently illegal, without lawful authority but same are also without application of independent mind, therefore, the entire process was just an eye wash."⁵ This compromising evidence makes it abundantly clear that the State Party was not even considering the application of the law and conventions which is breach of law.

The 'Heritage Impact Assessment [HIA] of the Lahore Orange Line Metro Train Project' conducted by Rogers Kolachi Khan & Assoc. Ltd for LDA in February 2016 itself states that the "Significance, High Risk to Fabric and Visual Impact is Very High". The Hydraulic Works are described as "the existing little piece of the huge water structures in between the two roads is just nothing but a heap of dismantled and truncated brickwork No acceptable reason is given for loss of 200 foot 'Buffer Zone'. The HIA concludes that there is 'No need to pursue the option of 'No Development'. No alternatives have been considered. The above illustrates a total disregard of the WHS by the State Party.

5 Judgment Sheet in The Lahore High Court Writ Petition No. 39291/2015



Fig. 4: Severe Visual Intrusion - Concrete Piers that will continue in front of Shalimar with Viaduct above the Hydraulic Works. Citizens Visit 14 May 2017.

Photo: Maria Waseem

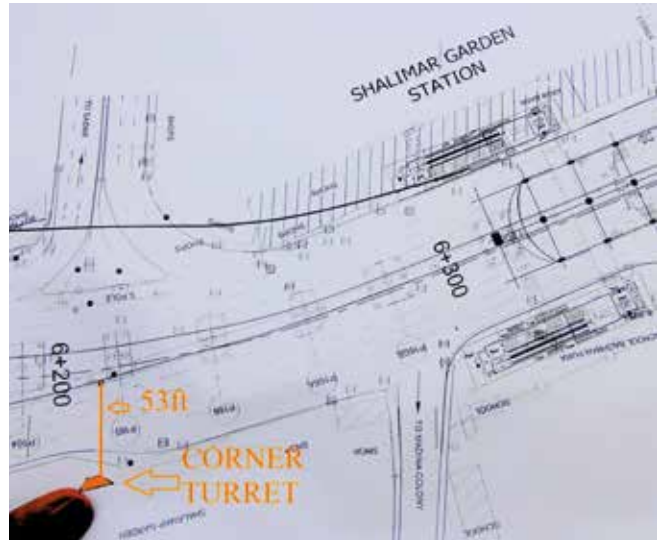


Fig. 5: Nespak Map showing raft at 53 feet from turret of Shalamar wall, the Viaduct will be approximately 30 feet from the wall at this point.

Photo: Imrana Tiwana

Review of Information Provided in The Latest Report ‘State Of Conservation of World Heritage Fort And Shalamar Gardens

The Report by the Directorate Of Archaeology, YASA&T Department Government Of Punjab, is technically inadequate, flawed and mis-representative of the ground realities and facts. There is no mention of the OLMT in the introduction. The State Party has ‘not’ conducted a ‘Visual Impact Study’ of the OLMT. The Report on the Preservation Restoration of Hydraulic Tank of Shalamar Garden, Lahore, does not address WHC concerns regarding OLMT. According to the Lahore High Court, It would bear reiteration that the above two experts [Ayesha Pamela and Dr. Javed Yunus Uppal] were appointed by the Lahore Development Authority which was their client and it was difficult to conceive that they shall be acting independently or free from the influence of the LDA or Government of the Punjab.⁶



Fig. 6: Concrete station with Shalimar at the right. This space will be inundated with pillars causing irreversible harm to the visual and historic authenticity of the World Heritage property. Citizens’ site visit 14 May 2017.

Photo: Maria Waseem

Recommendations to the World Heritage Committee meeting In Krakow, 2017

In 2016, the World Heritage Committee expressed “serious concern” about the development of the OLM and requested the State Party of Pakistan to prepare a visual impact study to be presented to the World Heritage Centre and its advisory bodies before pursuing further works associated with the Lahore Fort and Shalamar Gardens. It also reminded the State Party of its obligation to forward technical details such as a heritage impact assessment to UNESCO and its advisory bodies before commencing the works in question and sought a Reactive Monitoring Mission (RMM) by the World Heritage Centre and ICOMOS (40 COM 7B.43).

The State Party has not complied with these requests. It has engaged in other processes which have not provided an independent assessment of the impacts of the OLM. It has not provided a visual impact study of the OLM in relation to the World Heritage property. It has not issued visas to enable an RMM to occur. Nor has the State Party submitted proposals for a minor boundary modification to the property to enlarge its buffer zone or revised the conservation plan for the property, as requested by the Committee in 2014 (38 COM 7B.19). The State Party has therefore not complied with the requests of the Committee or with the mandatory guidelines pertaining to management of World Heritage properties.

The OLM must be undertaken in a transparent, ethically sound, inclusive and socially responsible way. Civil Society has demanded that the portion in front of Shalamar Gardens be taken underground using Deep Tunnel Boring Technology to protect the World Heritage property from visual Impairment and damage and to retain its OUV.

⁶ Judgment Sheet in The Lahore High Court Writ Petition No. 39291/2015

It is imperative that the State Party issue visas and confirm dates for the critical visit of the Reactive Monitoring Mission and that this be duly communicated to all parties. Indeed it is essential for all parties to rise to the occasion for a larger cause and ensure that justice be done. We respectfully observe that World Heritage belongs to all of humanity.

Flouting agreements of public trust is not acceptable. We invoke the jurisdiction of UNESCO to have a clear manifest position to expedite action on this matter of great urgency on its true merits to remove risks of irreparable harm to our shared heritage.

The Issue of the Conservation of the Picture Wall of Lahore Fort, Pakistan



Zulfiqar Ali Kalhoro, Pakistan Institute of Development Economics

Lahore, the capital of Punjab province in Pakistan, is an ancient city believed to have been laid on the remains of an old settlement by Mahmud of Ghazna and his slave-general "Ayyaz" (Nadiem 1998). The later city became an important seat of power of various Muslim dynasties. The city flourished under the Mughal emperors (1526-1707). Many Mughal rulers left behind the symbols of their power in the form of forts, tombs and mosques which still dominate the landscape. When Mughal power declined and the Sikhs occupied the Punjab, they made Lahore their capital and built many splendid structures which still pierce the skyline. This paper deals with the condition of a pictured wall, associated underground chambers and their present condition. It recommends how to deal with conservation issues related to these heritage features.

Shalmar Gardens and Lahore Fort are the gems of Mughal art and architecture. Lahore Fort, which is focus of this paper, is a UNESCO World Heritage site. It occupies the north-west corner of the old walled city of Lahore. There are three gates in the fort: Masti gate in the east, so-called Alamgiri gate in the west, and Shah Burj gate behind the British period postern. There are many buildings inside the fort which were erected by various Mughal emperors and later renovated and extended by the Sikhs in the eighteenth century. The buildings erected by Akbar (1556-1605), Jahangir (1605-1627), Shah Jehan (1628-1758) and Aurangzeb (1658-1707). They include Akbar Hammam, Shahi Hammam, Jahangir's quadrangle, Makateeb Khana, Mori Masjid, Bari Khawabgah (larger sleeping chambers), Diwan-e-Amm (hall of audience), Diwan-e-Khas (hall of private audience), Khilwat Khana (private chambers), Paien Bagh (ladies garden), Naulakha, Shish Mahal (place of mirrors), a picture wall and many other small and large structures (Hasan 2005).

The exterior of the fort wall in the north and north-west, known as Picture Wall, represents a series of mosaic tile-work panels which are unmatched in the world. According to Vogel (1920:3), Picture Wall is a lasting monument of the Great Mughals, remarkable for the vastness and variety of its decoration. Moreover, he believes that it is a striking illustration of the Great Mughals' culture in which barbarism and refinement were so strangely blended. The wall is nearly 500 meters in length and 15 meters high (Fig.1). An endless variety of subjects, designs and motifs have been depicted on the wall through the medium of glazed tiling. Some of the outstanding figural scenes include (1) horseman and wrestler, (2) dromedary led by men, (3) elephants fight, (4) horsemen and footmen, (5) fighting bulls, (6) camel led by men, (7) horseman hunting lion, (8) swordsmen, (9) goat and monkey player, (10) tiger pursuing a goat, and (11) man holding a dagger. Some panels depict hunting scenes, processions, animals, mythical beings, fairies with wings, musicians with instruments and portraits of nobles. The human figures on the wall give an idea of the various styles of the dresses in vogue during the Mughal period from royalty down to servants and gladiators.

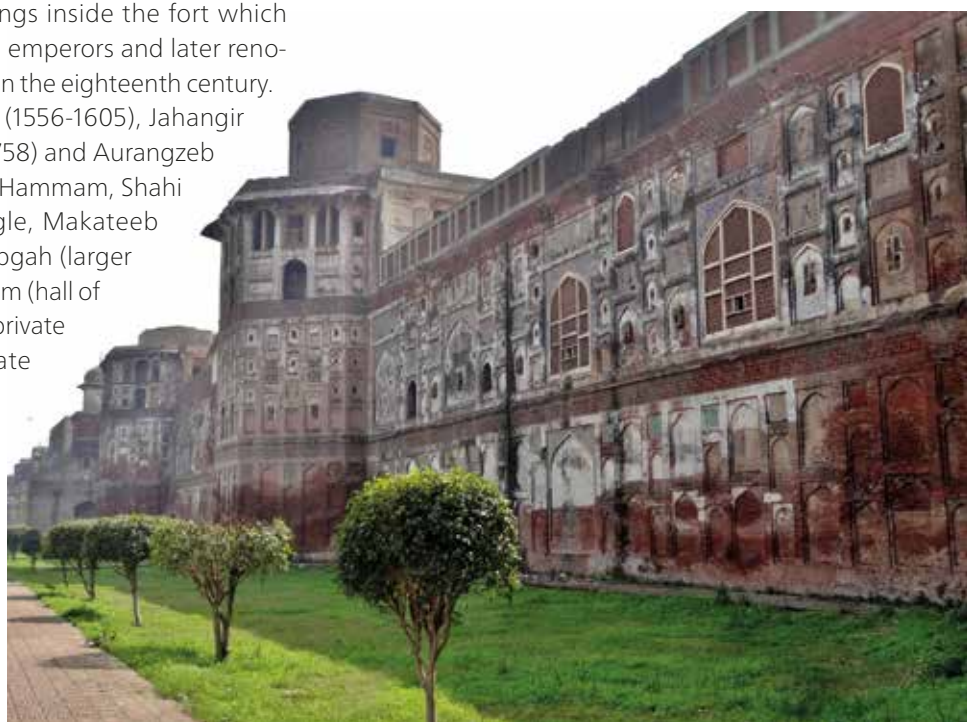


Fig. 1: View of Picture Wall of Lahore Fort.

Photo: Zulfiqar Ali Kalhoro

Current Condition and Conservation Issues

I will now highlight some of the problems in the conservation of Picture Wall. Conservation doesn't mean the use of cement or other materials which do not synchronize with the original materials used. There are few studies. For example, "The Lahore Fort Master plan" was prepared as part of the UNESCO NORAD Project for the Conservation and Preservation of Lahore. But there is hardly anything proposed as to how to conserve the Picture Wall and its underground chambers.

The most important issue concerns the conservation of the underground chambers whose crumbling state was brought to public attention by Rustom Khan in his report (2011) that has never met with any formal response. I have visited the fort many times but for this article, I re-visited the site in March 2017. I met a site manager of the fort and asked him about the underground chambers of the Picture Wall. He seemed barely concerned about them. He was more interested to preserve features visible to the donors and visitors that will obviously earn accolades from the concerned authorities for preserving the Picture Wall. I suggested that the most important priority was to protect the underground chambers first because if they are not properly restored, the huge picture wall above them may collapse in the near future.

We know that in 2009, a corner tower or burj of the fort collapsed because it had developed cracks which escaped the attention of the concerned authorities. The same is the case with the underground chambers which have also escaped the attention of concerned authorities. There was some restoration during the British period when supporting pillars were built to protect the ceilings of the underground chambers but those are also in a very poor state of preservation. These chambers were conserved in the 1990s but no documentation work is available for the heritage manager of the Lahore Fort to know more about the conservation techniques employed.

Moreover, the Picture Wall has also not been properly conserved. The wall has a three-storied appearance. The lower storey or portion of the wall has also been damaged in the name of preservation. Those panels and spandrels from which tiles have fallen (Fig.2) have been plastered with cement. The sad state of preservation can also be seen on the lower portion where modern red ceramics have been used even though they have no match with the upper or flanking panels. This does not synchronize with the original panels (Fig.3). Rather, these red tiles have damaged the original beauty of the wall. The glazing of most of the tiles has disappeared due to weathering. Some of the tiles have also broken (Fig.4). Wherever these tiles have broken or come off, pilaster has been used as a ready technique for conservation. Unfortunately, restoration of some stucco panels was poorly

done (Fig.5). Stucco work decorated some of the buildings inside the Fort. We need to avoid using quick and easy techniques and to follow instead the model of how the tomb of Humayoun has been conserved which I saw in Delhi in 2016.



Fig. 2: Panels of the lower part of the wall have been cemented. Photo: Zulfiqar Ali Kalhoro



Fig. 2: Panels of the lower part of the wall have been cemented. Photo: Zulfiqar Ali Kalhoro

UNESCO World Heritage Committee processes

There is no mention of the conservation of the underground chambers in the State Party's State of Conservation (SOC) Report submitted to UNESCO. This means that the government believes there is no urgent need to start conservation work on the underground chambers! The report also says little about the conservation of the Picture Wall. It only mentions that the Walled City Lahore Authority (WCLA), in collaboration with the Agha Khan Culture Service Pakistan (AKCS-P), carried out architectural surveys, condition assessment and reports. Unfortunately, the report does not even share any of the information about conservation works on the Picture Wall carried out in 2014-2015 by the WCLA.

This conservation work on the lower section of the wall does not meet international standards so was criticized by con-



Fig. 4: A tile mosaic in bad state of preservation.

Photo: Zulfiqar Ali Kalhoro

servationists and civil society in Lahore. A highly-qualified civil-society activist told me that conservation of the Picture Wall does not meet international standards of conservation and that the wall has been poorly conserved. This information about the Picture Wall was not shared with UNESCO.



Fig. 5: Poor quality of restoration in a room of the Lahore Fort. Photo: Zulfiqar Ali Kalhoro

The WCLA has recently entrusted the Agha Khan Culture Service to conserve the Pictured Wall. Work has started. The same pattern of conservation, in which the middle section of wall is restored, is being followed. This should be brought to the attention of UNESCO. The submitted report to UNESCO mentions only the work on public facilities carried out when I visited the site. The State Party does not appear to have worked on the minor boundary modification to the property, requested by UNESCO (38 COM 7B.19), which would have included an enlarged buffer zone.

Conclusion

The underground chambers of Picture Wall have not yet received attention from the heritage managers and conservationists. It must be crystal clear that if these underground chambers, which largely bear the load of the wall, are not preserved in time then the wall could be in danger of collapsing. Currently this huge Picture Wall has developed cracks which may be related to the fragile construction of the base-

ment chambers. It is suggested that the basement chambers should be protected immediately by adding more supporting pillars and filling the cracks, especially the sections of three-storied chambers which may cause damage to the buildings above. The buildings above the Picture Wall include Lal and Kala Burj (Black and Red Towers), Paeen Bagh (Ladies' Garden), Naulakha pavilion and Shish Mahal (place of mirrors). Conservators are paying more attention to these buildings, ignoring the underground chambers which bear the load of all these beautiful structures and monuments of the Mughal period.

The application of cement on various panels of Picture Wall adversely impacts on the beauty of the wall. Similarly, the use of red tiles against the original tiles that depict a variety of scenes add more to destruction than restoration of the original beauty. This affects human, animal and mythical figures as well as Mughal hunting scenes.

These suggestions and recommendations should be taken into serious account by heritage managers. The measures spelled out in the document of the Lahore Master Plan 2006-2011 should be implemented and put it into practice. What happens if we use cosmetic measures to conserve heritage sites? Cosmetic measures such as applying cement and whitewashing those parts or portions of the monuments where paintings have peeled off are not the measures that will achieve the desired state of conservation.

Unfortunately, apart from the Picture Wall, there are many monuments inside Lahore's fort which have been poorly conserved. Lastly, I reiterate that paying less attention to the sad state of preservation of the underground chambers and more to the decoration of the Picture Wall and other buildings on top increases the real risk that the wall might collapse as a result of major structural instability.

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Heritage Recovery in Nepal's Kathmandu Valley – The Present Situation

Alok S. Tuladhar, HimalAsia



In the aftermath of the 2015 earthquake, Nepal suffered its worst loss of heritage since the earthquake of 1934. Major monuments in Kathmandu's seven World Heritage Monument Zones were severely damaged and many collapsed completely. In addition, in more than 20 districts, thousands of private residences built on traditional lines, historic public buildings, ancient and recently built temples and monasteries, were affected by the disaster, 25 percent of which were destroyed completely. The total estimated damages to tangible heritage is US\$ 169 million. The earthquake affected about 2,900 structures of a cultural, historical and religious heritage value.

Vulnerabilities and Effects on Intangible Cultural Heritage

Preservation efforts in general are not well-funded. Recent urban development programmes within the city showed a shift from preservation to addressing issues of 'modernization'. Even before the earthquake there was already a huge backlog of cultural sites that needed restoration. Over the years religious institutions have lost their land for various reasons. The loss of income from landholdings that traditionally supplied funds for religious activities caused further pauperization of historic sites. Some traditional festivals and rituals have suffered because of decrease in financial support from communities and the government.



Fig. 1: Satwa Puja at Kathmandap after the Earthquake.

Photo: Alina Tamrakar

The intangible cultural aspects of worship, rituals and festivals were severely interrupted at temples that completely collapsed. Loss of important tangible heritage is related to the loss of intangible heritage and identity, just as the loss of traditional family dwellings is bound to have an impact on the day-to-day lives of the people. Traditional architectural styles of building, just like clothing, are integral to ethnic and cultural identity of the people, and the displacement of people will further weaken their links to community centres and rituals.

Post Disaster Need Assessment 2015 and Recovery Framework 2016

According to the hurriedly-written Post Disaster Needs Assessment (PDNA) published by the National Planning Commission of the Government of Nepal in 2015, the long-term recovery plan envisages complete restoration of all damaged structures with a view to building back better through the use of high grade materials and seismic-strengthening structural features. The cost of reconstruction has been calculated at the estimated value of damages plus 20 percent to build back better. The cost of recovery also includes the professional services provided by technical experts, capacity-building support to the Department of Archaeology (DoA), the Ministry of Culture, Tourism and Civil Aviation (MoCTCA), and initiatives to document and revitalize the wide spectrum of crafts and cultural traditions that come under the rubric of intangible cultural heritage (ICH) by enabling craftspeople and local communities, among others.

Based on the PDNA findings and recommendations, the Cultural Heritage Sector Action Plan of the Post-Disaster Recovery Framework (PDRF) outlined a 6-year recovery period was identified for the complete recovery of approximately 2,000 damaged or collapsed monuments, monasteries and temples in 16 districts. According to the PDRF, the DoA as the main custodian and implementing government agency will retain its authority in planning, managing and supervising the rebuilding and restoration process. The framework said, "This will include carrying out necessary investigations, research, defining guidelines and procedures

including ensuring appropriate quality control mechanisms. The implementation of the rehabilitation process will include to a large extent local stakeholders ensuring local community participation in the rebuilding of the heritage sites and monuments. Rehabilitation is not solely about reconstruction; it's a gradual healing process."



Fig. 2: 17th century Hanuman statue within the temporary shoring at Hanumandhoka.
Photo: Alina Tamrakar

The Ground Reality

Though well-articulated in the PDRF - a major policy document - none of the mechanisms mentioned above are being implemented by the DoA at present. The National Reconstruction Authority (NRA), the legally mandated agency for leading and managing the earthquake recovery and reconstruction, has approved reconstruction and renovation of about six dozen cultural heritage sites and monuments so far, half of which are in various stages of implementation. Most of the monuments under DoA-funded renovation and reconstruction, especially the larger ones, however, are facing massive criticism from conservationists, culture experts, local communities and the public in general.

The main reason for the public uproar is that the reconstruction contractors were awarded to commercial construction companies - with no prior experience whatsoever in working with heritage buildings - who bid the lowest amount for the contract. The DoA's justification for this was that existing government procurement laws did not allow them to implement the contracts in any other way, which is a glaring example of its lack of sensitivity and initiative in helping the concerned government bodies to modify or create laws and procurement mechanisms that are conducive to heritage reconstruction. Furthermore any consideration for research, quality control, local community participation and intangible cultural heritage practices in the course of the implementing the reconstruction works were non-existent. In some cases, concrete and steel were used to replace

traditional construction materials to rebuild ancient monuments of national importance.

The following are some of the major points which have not been fulfilled by the authority while taking ahead the reconstruction and restoration of heritage monuments:

1. The engagement of local community group is very insignificantly addressed. The living heritage of the valley are in close relationship with the local people. The participation of these people is important from the very initial steps of reconstruction in order to give them a sense of ownership which will further result in the proper maintenance and continuation of the legacy that has been carried out from centuries.
2. Although the Earthquake has brought down the immense loss, it is equally important to note that earthquakes are a regular feature of the Kathmandu Valley. The valley has been dealing with it every 80-100 years. This cyclic process of building back has been carried out the local craftsmen and manpower using the traditional technique and material over time. It is hence the responsibility of the current time to follow the same path and engage local manpower, technique and materials to revive what is lost. It is the opportunity to encourage and revitalize the local manpower and skills to engage them in rebuilding the heritage while uplifting the socio-economic condition of the local residents.
3. With the huge damage caused to the heritage monuments, different approaches are taken through different experts bodies. A plan of Action through coordination of experts is required with on-site training to put these into practice.

Public Advocacy Movement

Spontaneous, informal groups have sprouted up in various communities across Kathmandu valley in recent months, all of whom lobbied voluntarily seeking to get the government to treat heritage reconstruction with the sensitivity it deserves. These youth-led groups' activities include social and mainstream media campaigns, mass public meetings, protest rallies, submission of petition to the authorities and actual undertaking with small-scale reconstruction projects with community funding (that eventually attracted financial inputs from government agencies). Coordinated efforts from these groups have collectively yielded some visible results already - enough to get national media attention, which will most likely force the government to introduce bylaws or modify existing laws to find a viable alternative to the lowest-bidder system of awarding contracts for heritage reconstruction in the months ahead.

There are already indications in recent weeks that the community's demand of greater public participation and trans-



Fig. 3: Public declaration of rebuilding Kasthamandao with community initiative and oath-taking in front of living goddess Kumari on 25th April 2017. Photo: Alina Tamrakar

parency in heritage recovery will actually be incorporated in the new implementation mechanism that the government is expected to roll out. In less than six months of reconstruction-gone-wrong, the youth initiative has created unprecedented ripples in public awareness about heritage issues. This movement has successfully lobbied elected Members of Parliaments and influential political leaders at the national level, and it is expected that the cabinet, via the NRA route, will make some decisions very soon that will bring at least some improvements to the very insensitive mechanisms currently being implemented for heritage reconstruction. The community-led initiative has come forward to claim the authority to rebuild Kasthamandap - Nepal's oldest, largest public monument - with its own funds in the aftermath of the youth movement.

Challenges Ahead

Though the scenario ahead certainly looks brighter than the present situation, there is much uncertainty about how the higher political elite and the top-level bureaucracy will treat the results yielded so far by the public lobbying. There is a possibility for the government to squash the public demand altogether, or just make cursory and inadequate adjustments to prevailing procurement mechanisms. On the other hand, the burgeoning but not-yet-institutionalized youth movement, in lieu of a clear and strong leadership, may get discouraged and fizzle out over time due to lack of solid results.

Conclusion

For centuries, communities in Nepal have built, maintained and rebuilt historic buildings. Following the same trend, we feel the community should rebuild monuments and sites damaged by the 2015 earthquake, where the government

should play an enabling role by providing guidelines and technical supervision. In this way, the general public, especially the youth, will be targeted and encouraged to get involved in the intangible aspects: research, documentation, promotion and revival. This will result in a much greater level of public consciousness and reattachment to the rapidly diminishing values of one's historical and cultural values.



Fig. 4: Volunteers inventorying the wooden elements salvaged from Kasthamandap and later covering them to secure from the monsoon rain. Photo: Rajeev Bajracharya

“Rebuild Kasthamandap” amidst the rising debate about the ill-process followed for reconstruction of heritage monuments, has come up with the determination to bring community ahead in the reconstruction process of heritage monuments. The institution initially came up as a campaign to stand up against the government's tender awarding system to the lowest bidder is setting up an example on how the process should be carried out. With local person in lead, the team is working with active participation of volunteers from all age group to rebuild Kasthamandap. It is not only a process but growing day by day to be the model which shall be followed by other communities to soon adopt the same process. Rebuild Kasthamandap's latest achievement where National reconstruction Authority officially handed the authority to the community to take the lead role, with DoA and Kathmandu Metropolitan City (KMC) facilitating the rebuilding process with guidelines, monitoring and contribution of some physical resources is a step towards a better future of the heritage monuments.

Links

Post Disaster Needs Assessment Volume A: http://nra.gov.np/uploads/docs/PDNA_Volume_A.pdf

Post Disaster Needs Assessment Volume B: http://nra.gov.np/uploads/docs/PDNA_volume_BFinalVersion.pdf

Post Disaster Recovery Framework: <http://nra.gov.np/uploads/brochure/5EM7J61bqj160705112241.pdf>

Annex

The Authors

Leburu Molatedi Andrias

Leburu Molatedi Andrias is a human rights activist from the //Anikhwe San community, a marginalized and critically endangered Indigenous peoples' community in the Okavango Delta, Botswana. Through his advocacy work, he has attended international conferences such as the UN Permanent Forum on Indigenous Issues, the Expert Mechanism on the Rights of Indigenous Peoples, the UN Climate Change Conference, and sessions of the World Heritage Committee. As a former fellow of the +OHCHR Indigenous Fellowship Programme (2015 Fellow), he has done crucial work for various non-governmental organizations including Letloa Trust, the Trust for Okavango Cultural and Development Initiatives (TOCaDI), and the Ngamiland Council of Non-Governmental Organizations (NCONGO). Currently he serves on the IPACC Executive Committee as the Regional Representative for Southern Africa.

Contact: andriasleburu@gmail.com

Emilija Apostolova Chalovska

Emilija Apostolova Chalovska, MSci is an architect working as an assistant-researcher of vernacular architecture at the University Ss. Cyril and Methodius, Skopje, Republic of Macedonia. She has a Masters in Conservation of Architectural Heritage and is currently working on a PhD. Since 2015 she has taught at the Faculty of Architecture in Skopje in the area of Documentation, Conservation and Revitalization of architectural heritage. A member of ICOMOS, she has participated in international scientific conferences, and is author of several papers in scientific journals as well as conference proceedings. She has worked as an expert in various projects concerning research, documentation and promotion of architectural heritage in Macedonia.

Contact: apostolova_ema@yahoo.com

Yunus Arbi

Yunus Arbi (56) is a cultural-heritage specialist with background studies in archaeology and museology. His work focuses on the preparation of the World Heritage tentative list, the nomination process and the management of cultural World Heritage sites at the Ministry of Education and Culture of the Republic of Indonesia. He has been involved in the nomination processes pertaining to the Cultural Landscape of Bali Province since 2008. He actively initiated coordination among experts, stakeholders and communities to con-

tinue the nomination process focusing on subak system and water-associated temples. He has continued to support the management of Bali's Cultural Landscape since its inscription in 2012 by organizing studies on participatory mapping of the sites, stakeholder meetings and publications.

Contact: yunusarbi@gmail.com

Ercan Ayboğa

Ercan Ayboğa (41) grew up in Germany as a child of Kurdish-Alevi worker migrants from Turkey. After studying at the Technical University of Darmstadt he worked as an environmental engineer on several projects in Germany. In 2006, while he was living for two years in Diyarbakir in Turkish-Kurdistan, he co-founded the Initiative to Keep Hasankeyf Alive, which is campaigning against the destructive Ilisu Dam Project on the Tigris. From 2007-11 he completed his PhD at the Bauhaus University of Weimar. From 2012-14 he was involved in two jobs on hydrology and nature conservation. In February 2015 he moved again to Diyarbakir, where started work with the Diyarbakir Metropolitan Municipality. At the same time he became involved in the Mesopotamian Ecology Movement where he is in charge of international relations.

Contact: e.ayboga@gmx.net

Vica Bayley

Vica Bayley is the Tasmanian Campaign Manager for the Wilderness Society, an organisation that has led conservation campaigns in Tasmania and across Australia since 1976. Vica was born and raised in Tasmania and worked in the primary and secondary schooling sector, teaching outdoor and environmental education, before joining the Wilderness Society's campaign team in 2001.

Contact: vica.bayley@wilderness.org.au

José-Martial Betoulet-Bangala

José-Martial Betoulet-Bangala is the local coordinator of the bi-cultural youth organization Ndima-Kali based in the South-Western Central African Republic. Previously, José-Martial has been engaged as a community outreach worker for the Dzanga-Sangha National Park administration APDS, which forms part of the Tri-National de la Sangha (TNS) World Heritage site. He belongs to the local Sangha-Sangha fishing community and has launched an association on its

behalf. He speaks French, Sango (the national language of CAR), Sangha-Sangha (his mother tongue) and Aka, the language of the indigenous hunter-gatherers of the region. Martial has been instrumental in the foundation of Ndima-Kali and has, together with the Orig Nations team, accompanied the youth group in all its activities since 2012.

Contact: martial@ndimakali.org

Valmira Bozgo

Valmira Bozgo (1982) graduated in Construction Management from Brigham Young University in Utah. She began her professional career working in the construction of City Creek Center, a project that introduced mixed-use buildings to downtown Salt Lake City. After two years at City Creek, giving heed to the environmentalist in her, Valmira went on to earn a two year Master's Degree in Environmental Engineering and Sustainable Infrastructure at the Royal Institute of Technology in Stockholm, Sweden. She then decided to apply her knowledge in Tirana, Albania working in the non-profit sector with projects funded by the UN and the EU aiming at environmental conservation. For more than 3 years now she has been working as the Head of the Solid Waste Sector in the Ministry of Urban Development. This sector is responsible for waste projects as related to territory planning, thus falling under the first of six government priorities; that of land development.

Contact: vbozgo@gmail.com

Nigel Crawhall

Dr Nigel Crawhall is currently Director of Secretariat for the Indigenous Peoples of Africa Coordinating Committee (IPACC) based in Cape Town, South Africa. He served as the IUCN Inter-Commission Chair for the Theme on Indigenous Peoples, Local Communities, Equity and Protected Areas (TILCEPA). He currently chairs the IUCN CEESP Specialist Group on Religion, Spirituality, Environmental Conservation and Climate Justice. He has previously been a consultant to the UNESCO Division on Cultural Policies and Intercultural Dialogue on intangible heritage, indigenous knowledge systems and participatory cultural mapping. He holds a PhD from the University of Cape Town in historical sociolinguistics.

Contact: ipacc.africa@gmail.com

Robert Cyglicki

For many years Robert Cyglicki has advised organizations and institutions on environmental issues and energy policy. An expert in the field of civil energy development, he has worked for amendments to energy laws. In 2014, he initiated and coordinated the installation of photovoltaic panels on primary and other public buildings, thus helping local communities to develop renewable energy. Recently, he

has participated in two major conservation campaigns that have helped the development of civil society. As a member of the Steering Committee for Strategic Evaluation and Pan-European Transport Corridor, Via Baltica, he helped defend a unique European wetland area in the Rospuda Valley. He has been campaigning as part of Greenpeace Poland to protect Białowieża Forest from logging.

Contact: robert.cyglicki@greenpeace.org

Wiwik Dharmiasih

Wiwik Dharmiasih (34) is a lecturer at the Department of International Relations, Universitas Udayana in Bali, Indonesia. Her research focuses on political geography, conflict transformation and community-based natural-resources management. She provided social and legal analysis for the World Heritage nomination of the Balinese irrigation system, subak (2010-2011) and was the Coordinator for Program and Planning at the Governing Assembly for Bali's Cultural Heritage (2012). She was involved in the establishment of Forum Pekaseh Catur Angga Batukau and helped design the monitoring and evaluation system for management of the World Heritage property in Bali. She has actively supported community participation and youth involvement in the management of this property by initiating Project Kalpa and subak preservation with Yayasan Sawah Bali, an NGO based in Bali.

Contact: wiwikd@gmail.com

Mohamed Ewangaye Didane

Born and raised in Dan-Bouzou, Mohamed Ewangaye Didane obtained a Masters degree in Culture and Society from Stanford and a Masters degree in African General History from UCLA. He is researching the Nilotic and Abyssinian presence in the Tuareg civilization for his PhD. He currently works as a technical adviser to the Peace Building High Authority (Niger Republic Presidency). During the armed civil conflict in Niger, he formed part of the forces that demanded an independent state in the Western Sahara. Later, he became one of the founding members of the Indigenous Peoples of Africa Coordinating Committee and since February 2017 has served as the Vice President of the organization. Since 2006, he has worked on a research project on the history of Indigenous peoples, notably the Keltamachakh (Tuareg) in the Sahel-Saharan region of Africa and the Arabian Peninsula.

Contact: med.bayazene@gmail.com

Oksana (Oxana) Engoyan

Oksana (Oxana) Engoyan (1970) is an economist who graduated from Altai State University in 1994. She has subsequently undertaken full-time post-graduate studies at the Altai State Technical University (2009-2012). She served as head of the center of the technologies alternative for the Altai Territory Ecological and Cultural Public Fund "Altai – 21

Century". She participated in sociological surveys and now works with the informal initiative group "Altai - 21 century".

Contact: engoyan.oz@gmail.com

Humberto Fernández Borja

Humberto Fernández Borja was born in 1964 in Mexico City where he resides. He studied economics and specialised in environmental conservation, cultural management and sustainable development. He is co-founder and Director of Conservacion Humana AC, a Mexican non-for-profit independent organisation founded in 1995. Its mission is the conservation of the bio-cultural corridor of sacred routes and landscapes of the Huichol Indigenous Peoples. He has collaborated in projects related to the MaB as well as to the programs of UNESCO's Division of Ecological Sciences "Natural Sacred Sites: Biological Diversity and Cultural Integrity". He has participated in symposia and publications on World Heritage since 1998 and has coordinated the development of two nomination files to the World Heritage List.

Contact: huiricuta@yahoo.es

Cecilia Gas Páramo

Cecilia Gas Páramo (1990) is an MA Candidate in Development Studies, specializing in Sustainability and Development at the Graduate Institute of International and Development Studies (IHEID), Geneva. In recent years, Cecilia has actively collaborated with the non-profit organisation Conservación Humana AC in the promotion and safeguarding of World Heritage sites in Mexico, contributing in particular to the development of the World Heritage nomination file for the Tehuacán - Cuicatlán Valley: original habitat of Mesoamerica. In addition, she worked at the Permanent Delegation of Mexico to UNESCO where she was deeply involved in the process of revitalization of the 1970 Convention against the illicit trafficking of cultural property.

Contact: c.gasparamo@gmail.com

Tamar Gelashvili

Tamar Gelashvili has a Bachelor's Degree in European Studies from Ilia State University and in 2012 obtained a Masters in the Media and New Technologies Program at Tbilisi State University. She has worked as a journalist for several years, currently for Studio Monitor, an independent media organization covering topics such as corruption, misuse of power by government representatives, problems concerning people, and issues that interfere with social, economic and cultural development of the country of Georgia.

Contact: tgelashvili14@yahoo.com

Oxana Gourinovitch

Oxana Gourinovitch (1975) is an architect who has carried out post-graduate research into national modernism and post-war Soviet architecture. Since 2016 she has been a member of the Graduiertenkolleg "Identität und Erbe", TU Berlin / Bauhaus Universität Weimar, and is also a member of ICOMOS Belarus and DOCOMOMO International.

Contact: oxana.gourinovitch@tu-berlin.de

Elke Greiff-Gossen

Elke Greiff-Gossen (1961) is an information scientist from the Technical University of Dortmund and the executive director of go_on Software GmbH in that town. Ms. Greiff-Gossen's family has owned a house in St. Goarshausen on the Rhine river - near the Loreley Rock - since 1589, which is a protected cultural monument. She is a member of the "Rhine Transit Routes Citizens' Initiative" and operates several websites and blogs on the Loreley Rock, castles and ferries on the Rhine.

Contact: greiff-gossen@go-on-software.de

Panut Hadisiswoyo

Panut Hadisiswoyo is the Founding Director of the Orangutan Information Centre (OIC), an Indonesian based NGO working with local communities surrounding the Leuser Ecosystem in Northern Sumatra. The OIC restores orangutan habitat, responds to incidents of human-orangutan conflict, conducts forest patrols and campaigns locally and internationally to raise awareness about critically-endangered Sumatran orangutans and their super bio-diverse rainforest homes. In 2015, Panut received the Whitley Award for international nature conservation and has also received the Ashoka and GRASP Ian Redmond Conservation (UNEP) awards for his efforts to protect orangutans. In 2012, Panut was nominated as a finalist in the Forest Hero award of the UN.

Contact: panut@orangutancentre.org

Joseph Itongwa Mukumo

Joseph Itongwa Mukumo is an indigenous Walikale from the North Kivu province in the Democratic Republic of Congo. He graduated in Rural Development and is currently the coordinator of the Network of Indigenous and Local Communities for the Sustainable Management of Forest Ecosystems in Central Africa (REPALEAC). Joseph has been director or coordinator of several local or provincial organisations defending human and indigenous peoples' rights.

Contact: ipacc.africa@gmail.com

Arkadiy Vasilyevich Ivanov

Ivanov Arkady Vasilyevich was still at school when he first became involved with efforts to protect nature. He worked with the Nature Conservation Guards of the Moscow State University (2008-2014), where he dealt with acute environmental problems, including the pollution of Lake Baikal from the Baikal Pulp and Paper Mill. He graduated from the Faculty of Geography of Moscow State University (2007-12). He was head of the Baikal program for Greenpeace Russia (2012-2015). Currently he is an expert in the Forest Department. His main environmental interests include the protection of forests and rare species, as well as the conservation of Lake Baikal and its surrounding areas.

Contact: arkadiy.ivanov@greenpeace.org

Zulfiqar Ali Kalhoro

Dr Zulfiqar Ali Kalhoro (39), an anthropologist, is head of the Department of Development Studies at the Pakistan Institute of Development Economic (PIDE). Before joining PIDE he worked in the Taxila Institute of Asian Civilizations where he studied and documented monuments, carved wooden coffins, mosques and petroglyphs in Gilgit-Baltistan. He has worked on the art and architecture of three regions of Pakistan – Sindh, Gilgit-Baltistan and Potohar (Punjab). He is the author of books and many articles published in national and international journals about Islamic art and architecture, and about the Sufism, Hindu and Sikh heritage of Pakistan. He is actively involved with the Endowment Fund Trust (EFT) to preserve, restore and document Sindh Heritage. His most recent research has been on sati and hero stones in tombs and monuments of southern Pakistan.

Contact: zulfi04@hotmail.com

Heorhi Kazulka

Heorhi Kazulka is a biologist, ecologist and nature-protection activist from Belarus who lives at Belovezhskaya Pushcha (Bialowieza Forest). He is a coordinator of the Public Initiative Project "Belovezhskaya Pushcha – 21st Century" which develops policy on the forest protection. He also works as an auditor for the Forest Stewardship Council. From 1985 to 2001 he worked at Belovezhskaya Pushcha, the final three years as Deputy Director for Science. Since 2003, he has developed the international public campaign for the defence of Belovezhskaya Pushcha and for an expansion of the strictly protected zone and World Heritage property, collaborating with international NGOs. He has worked with experts from the World Heritage Committee and also participated in the International NGO Forum on World Heritage sites in St Petersburg in 2012.

Contact: kazulka@tut.by

Mikhail Kreindlin

Mikhail Kreindlin (1970) is a biologist and lawyer. He participated actively in the work of the Nature Protection Squad (Druzhina) of the Faculty of Biology of the Moscow State Lomonosov University in the period 1986-98. In 1991-2002 he worked in state structures dealing with management of protected areas. He works now as Protected Areas Campaign Coordinator for Greenpeace Russia and has been involved in work related to natural World Heritage properties since 2001. He has conducted various court cases connected with the protection of the natural World Heritage properties.

Contact: mikhail.kreindlin@greenpeace.org

Maqi Kvitsiani

Maqi Kvitsiani (1990) has a BA in the History of Art from Tbilisi State University, Georgia. She now studies at the Tbilisi State Academy of Art for an MA degree in Modern Art. Being a member of Blue Shield Georgia is one of her professional interests. She is passionate about the heritage of Svaneti and is contributing to its preservation and sustainable use through her research and work.

Contact: maqi.kviciani@yahoo.com

Gabriel Lafitte

Gabriel Lafitte has worked with Tibetans since 1977, mainly on development projects, pastoral livelihoods, environmental sustainability, resource extraction and whole landscape dynamics. His blog on these issues is: www.rukor.org. He is currently writing a book on the economic development of the whole Tibetan Plateau. He regularly trains young Tibetans of a new generation in methods of analysis. He is author of three books: Happiness in a Material World, Lothian, 2004; Spoiling Tibet: China and Resource Nationalism on the Roof of the World, Zed, 2013; and Wasted Lives: A critical analysis of China's campaign to end Tibetan pastoral lifeways, Tibetan centre for Human Rights, 2015.

Contact: glafitte1@gmail.com

Diphetogo Anita Lekgowa

Diphetogo Anita Lekgowa is a young San woman from Botswana, born and raised in Khwai village in the Okavango Delta. She is the co-founder of the "Tane Ko Teemahane Women's Foundation", which empowers Indigenous women and youth through culture and traditional knowledge. Anita has hosted a community-based workshop on natural resources management and governance, completed a Public Policy Course offered by OSISA, and plans to build a cultural village for her community. Diphetogo Anita Lekgowa has represented Indigenous peoples on a national, regional and international level, such as at the SADC Forums and the UNPFII in New York, with the support of IPACC, WIMSA

(Working Group of Indigenous and Minorities in Southern Africa), Botswana Khwedom Council, OSISA and NCONGO. Anita currently serves as the Vice Chair for the NHABE Museum and the Southern Africa Gender Representative for IPACC.

Contact: ipacc.africa@gmail.com

Melody Lepine

Melody Lepine is a member of the Mikisew Cree First Nation. She is the Director of Mikisew's Government and Industry Relations office, which is responsible for Mikisew's consultations with federal and provincial governments and industry, including Mikisew's efforts to raise concerns about the cumulative effects of development on the Peace-Athabasca Delta within the Wood Buffalo National Park. A strong advocate, she has participated in public hearings involving projects that impact the park, including oil-sands mines and the recently approved dam on the Peace River. She has also been a board member of the Cumulative Effects Management Association in the oil sands region and is a member of the Alberta Environment and Park's Traditional Ecological Knowledge Advisory Panel and the Alberta Oil Sands Advisory Group.

Contact: mgustafson@jfkllaw.ca

Manuel Llano

Manuel Llano was born in 1982 and resides in Mexico City. He studied communications (BA) and social anthropology (MSc) at the Iberoamerican University. He is Coordinator of the geo-statistic information system at Conservación Humana AC, where he has collaborated in field and research bio-cultural conservation projects since 2005. He is also founder of CartoCrítica, a Mexican non-profit organisation that seeks to promote transparency and access to public information as well as critical analysis through geospatial technologies for the protection of natural territories and cultural spaces.

Contact: huiricuta@yahoo.es

Shayne McGrath

In 2004, Shayne McGrath voyaged to the Antarctic to challenge illegal whaling and continued by sea from Africa to the Amazon campaigning against industrial destruction of forests and rivers. In 2006-10, he played a major role in defending Tasmania's oldgrowth forests and stopping a massive pulp mill proposed for the island state. From 2010, he has worked on Sumatran conservation issues as a volunteer with local conservation groups, for the management agency for the Leuser Ecosystem (BPKEL), for Wildlife Asia, and for the Sumatran Orangutan Conservation Programme. In 2011, he played a key role in a landmark court case against the clearing of rainforest for palm-oil plantations. In 2012, he co-founded a conservation group in Aceh (HAKA), and in

2015 worked with Leonardo DiCaprio and Fisher Stevens on the film "Before the Flood", broadcast in 171 countries.

Contact: shayne.mcgrath@gmail.com

Kreshnik Merxhani

Kreshnik Merxhani (1982) graduated in architecture studies at the Polytechnic University of Tirana in Albania. Since 2008 he has focused on traditional architecture, restoration projects and artistic photography, particularly in Gjirokastra. From 2008-12 he was trained in restoration by Cultural Heritage without Borders. In 2012-14 he was the project manager of a restoration project of the Hammam (turkish bath) in Kruja, another historic city in Albania. From 2014-16, he was head of the Technical Department at the Regional Directory of National Culture in Gjirokastra, serving as chief architect for the design of several restoration and revitalization projects. He carried out a risk assessment of all the listed monuments in the region of Gjirokastra and since 2016, he has been the group leader and architect for restoring the city's old Bazaar.

Contact: ark.kreshnik@gmail.com

María Rosa Muñoz Barriga

María Rosa Muñoz Barriga (28) is an Ecuadorian economist. After working as a research assistant and junior researcher for four years in the Research Institute of the Municipality of Quito (Ecuador), "Instituto de la Ciudad", she developed skills which she has used to pursue a career in urban heritage and development issues. She is studying for a Masters in Urban Management at the Technische Universität Berlin and working for the Habitat Unit in a project to identify Sustainable Development Goals in an urban setting and their relationship to other international treaties for sustainable urban development.

Contact: mrmunozb@gmail.com

Iryna Nikiforova

Iryna Nikiforova (1962) is Deputy Head and a co-founder of the NGO "Initiative for St. Andrew's Passage". An interpreter, in 1984 she graduated from the Kyiv National Linguistic University, specializing in foreign languages. Since 2008 she has engaged in the sphere of protecting historical and cultural heritage, working on numerous boards, councils and commissions. On her initiative, the government created the Commission on uncontrolled constructions in the buffer zone of the Saint Sophia National Preserve. She was a member of the commission inspecting questionable constructions in the historical part of the city and took part in numerous meetings and conferences on issues of hydro-geological problems on the territory of the Saint Sophia National Preserve. She has numerous national awards for her work protecting cultural heritage.

Contact: irinaan@ukr.net

Marina Nikolaeva

Marina Nikolaeva (1978) has a Master of Arts and a PhD in cultural studies. She has served as head of the Analytical Department for the Institute for Regional Development (Pskov) and head of the of Exhibition Centre of the Theatre and Concert Directorate (Pskov). She is also a member of the Russian Union of Cultural Workers (Pskov) and member of the Bureau of Social Technologies (Pskov).

Contact: nikolaevamf@yandex.ru

Ernesto Noriega

Ernesto Noriega studied architecture and development cooperation in the United States and Europe. He collaborated with indigenous communities and grassroots organizations for over 25 years before co-founding the NGO OrigiNations. His work is guided by the belief that a deep-rooted identity and a strong sense of cultural self-esteem are the foundation for sustainable and self-determined development. He has designed programs that encourage indigenous youth to reconnect with their endangered heritage and to become actively involved in shaping their communities' future. He has worked with indigenous communities in Northern India, Siberia, New Mexico, Guatemala, Argentina, the Peruvian Andes and the Amazon and with the BaAka forest peoples of Central Africa. He is responsible for the strategic direction of OrigiNations and leads the implementation of projects on the ground.

Contact: e.noriega@posteo.de

Frank Petersen, Ellen Kuipers and Esmé Gerbens

Frank Petersen, Ellen Kuipers and Esmé Gerbens share a working commitment at the Dutch NGO "Waddenvereniging" to promote and protect the natural beauty of the Wadden Sea. The Waddenvereniging is an independent organization with no formal or financial ties to the Dutch government and has approximately 50,000 members. In 2016 the Wadden Sea was chosen as "the most beautiful natural landscape in the Netherlands" and has been a World Heritage property since 2009. Waddenvereniging aims to convince both the public and the private sector that conservation of this unique natural environment is best done without new or ongoing mining projects underneath the boundaries of this World Heritage property.

Contact: fpetersen@online.nl

Andrey Petrov

Andrey Petrov (1958) is a geographer. He graduated from the Faculty of Geography of the Moscow State Lomonosov University and then worked there as a scientist. He was an active member of the Nature Protection Squad (Druzhdina) in the period 1977–1990 and has a PhD. He has worked as

World Heritage Campaign Coordinator in Greenpeace Russia since 2005. He is an expert in questions regarding protected areas, environmental tourism and the application of the World Heritage Convention. He was elected as one of the Heritage Heroes at the 39th Session of the World Heritage Committee. Andrey has travelled extensively throughout Russia and has visited 76 other countries.

Contact: andrey.petrov@greenpeace.org

Gerry Proctor

Gerry Proctor has an Honours in Theology and a Masters in Philosophy at Liverpool Hope University with a thesis entitled "A Commitment to Neighbourhood". He worked for eight years with young people in the town of St Helens and then spent six years living and working in Latin America in poor communities in Ecuador and Bolivia. He then returned to Liverpool, his birthplace, and worked for 12 years in charge of one of the largest Roman Catholic communities in the city. In the past decade he has lived in the apartment complexes of the city centre and waterfront working with residents and founding Engage Liverpool which works to improve people's quality of life and raise the profile of urban issues to improve the sustainability of city living. He sits on the Liverpool World Heritage Site Steering Group.

Contact: proctorgerry@hotmail.com

Tatjana Puschkarsky

Tatjana Puschkarsky studied English Literature and Political Science with a focus on environmental politics in Heidelberg and Belfast. She has worked for the Global Footprint Network in California and IUCN's World Heritage Program in Switzerland on the participation of indigenous peoples and local communities in protected-area management, cultural heritage and human rights. In collaboration with GIZ and UNESCO, she co-organized a youth summit in Japan with participants from various UNESCO World Heritage sites. She has accompanied youth initiatives in Central Africa, Guatemala, Peru, and India and co-founded OrigiNations with Ernesto Noriega in 2015. At OrigiNations, she is responsible for the coordination, implementation and documentation of projects, the exchange with partner organizations and public relations.

Contact: t.puschkarsky@origi-nations.org

Herbert Rasinger

Since 2015, Herbert Rasinger has been chairperson of the cityscape protection initiative (Initiative Stadtbildschutz) based in Vienna, Austria. He is active in the protection of cultural heritage sites (last atelier of Gustav Klimt) and other city protection matters (Wien Mitte and the Vienna ice skating ring). He is a graduate of Vienna Technical University and Wilmington Friends School, Wilmington, Delaware, USA.

Contact: i-stadtbildschutz@aktion21.at

Baakantse Satau

Ms Baakantse Satau is a Bugakhwe San from the Ngamiland District of Botswana. After obtaining a Diploma in Accounting and Business from the University of Botswana, she worked with various community-based organisations in Botswana under the aegis of the Kuru Family of Organisations. She has helped give presentations to the IUCN Regional Conservation Forum in Nairobi, Kenya, on Indigenous peoples' approaches to large-scale governance of land and resources. She currently serves as the Acting Manager at the Tsodilo Hills World Heritage Site and worked with IPACC to assist in the negotiation of indigenous peoples' rights in the operational guidelines of the World Heritage Convention at the WH Committee's 39th session in Bonn. Baakantse lives with her daughter in the house where she was born.

Contact: ratangsatau@gmail.com

Gakemotho Satau

Mr Gakemotho Satau is a Bugakhwe (San) living in a village called BBeetsha in the Okavango area of Botswana. Satau speaks Khwedam as his mother tongue and is proficient in both Setswana and English. He also has basic abilities in other native languages such as Wayeyi, Mbukushu and Shekgalagadi. Mr Gakemotho Satau holds a Bachelor's degree in Library science and has received a diploma in Archives and records management from the University of Botswana. Satau has a vast array of experience in community development; his projects include a natural resources mapping for potential community projects, oral history documentation of San community's in the Okavango, database development of San foods and medicinal plants of the Okavango and fundraising and advocacy on the issues of access to resources, land rights and education at both national and multi-national platforms.

Contact: gsatau@gmail.com

Kate Saunders

Kate Saunders (1964) heads monitoring and communications for the International Campaign for Tibet, managing a field operation of Tibetan researchers, interviewing Tibetan sources and writing analyses on the situation in Tibet. Kate is a writer and journalist who has specialized in Tibet for around 15 years, advising journalists, academics, Parliamentarians and government ministries. Kate has written numerous reports for the International Campaign for Tibet and her book, 'Eighteen Layers of Hell: Stories from the Chinese Gulag' was published by Cassell in 1996. Her articles have been published in newspapers and magazines worldwide including The Guardian, The Times, Washington Post, Times of India.

Contact: kate.saunders@ictibet.co.uk

Sergey Gerasimovich Shapkhaev

Sergey Gerasimovich Shapkhaev (1948) is Director of the NGO Buryat Regional Union on Lake Baikal (NGO) in Ulan-Ude, Russia. He graduated from the Leningrad Hydrometeorological Institute specializing in oceanology, and then carried out post-graduate study in geophysics. He has experience in law-making at federal and international levels, including in the development of a federal law on the protection of Lake Baikal, and in preparing the World Heritage nomination for Lake Baikal. He participated in environmental assessments of mining projects, major hydroelectric schemes, and oil-and-gas pipeline-systems in different regions of Siberia and the Far East of Russia.

Contact: shapsg@gmail.com

Khadija Shekue Famau

Ms Famau is the Program Coordinator for the NGO Save Lamu. Save Lamu is a community-based organization focusing on issues pertaining to sustainable and responsible development and preserving the environmental, social and cultural integrity of Lamu County. The organization's focus is on two large infrastructure projects in Lamu County that will have severe impacts on Lamu if they proceed. Ms Famau, a Swahili woman, was born, raised and currently lives in Lamu Old Town. Ms Famau is currently an Environmental Science Masters student at Pwani University in Kilifi, Kenya, where she is focusing on the vulnerabilities and adaptive capacities of island communities to climate change.

Contact: khadija@savelamu.org

Dmitry Shevchenko

Dmitry Shevchenko (1981) is the deputy coordinator of the Interregional Environmental and Human Rights NGO Environmental Watch for the North Caucasus, and a member of the Association of Journalists and Ecologists of the Union of Journalists of Russia. In 2003, he graduated from the Department of Management of the Kuban State University. He has been active in the ecological movement since 2008. He is the author of the manual "How to organize and conduct an environmental campaign" (published in 2011 by Oxfam in Russia); the author of the reports: "Delta Kuban: chronicle of man-made disaster" (2013); published by Environmental Watch, and of "Sochi-2014: Ten years without the right to the law. How to build a better world" (co-authored with Suren Gazaryan). He lives in Krasnodar.

Contact: giperbor2@gmail.com

Eugene Simonov

Eugene Simonov is an environmental activist and expert residing in China. He is the International Coordinator of the Rivers without Boundaries Coalition (RwB) focusing on North Eurasia transboundary rivers. He collaborated with the WWF Amur Program to curtail three hydropower projects and designed methodology for basin-wide environmental impact assessment of hydropower and analysis of hydro-power role in flood management. He also works with the trilateral "Dauria" International Protected Area and Sino-Russian Expert Committee on Biodiversity and Protected Areas. Since 2012, RwB has campaigned on hydropower projects that are sponsored by the World Bank and China Exim Bank which threaten Selenge River in Mongolia and Lake Baikal in Russia. Since 2016 Eugene has worked with the Green Silk Road Coalition that aims to push for more accountability and environmental sustainability of China's Silk Road Economic Belt integration initiative.

Contact: esimonovster@gmail.com

Klaus Thomas

Klaus Thomas (1948) is an MBA who has retired from the Federal Ministry of the Interior and is now the spokesperson for the "Bürgerinitiative Rheinpassagen" (Rhine Transit Routes Citizens' Initiative) which works for the conservation of the landscape and culture of the Middle Rhine. This includes various activities to fight against noise harassment from rail and road traffic in order to transmit this unique landscape unscathed to future generations.

Contact: klaus-thomas@web.de

Imrana Tiwana

After graduating from the National College of Arts, Lahore, Imrana Tiwana went to Massachusetts Institute of Technology (MIT) for graduate studies on an Aga Khan Scholarship. She headed the MIT Environmental Design Forum and did course work from Harvard University. She was the first and only recipient of the Aga Khan Scholarship to be selected by the President of Malaysia, Mahatir Muhammad, to reassess urban Malaysian planning. After working in New York she returned to Pakistan to work as an architect. However, she soon plunged into efforts to save the built heritage of Lahore, recruiting many of her colleagues to the cause. She is an architect by profession but an environmentalist at heart.

Contact: itiwana@yahoo.com

Alok S. Tuladhar

An activist for the preservation and promotion of Nepali history, traditional culture, art and architecture, Alok Tuladhar wishes to devote the next twenty years of his life to saving the rapidly diminishing man-made heritage of

Nepal so that it can be passed on to future generations. He played a key role, among others, in the implementation and documentation of the Panchamukhi Hanuman Temple and Medieval Residence Conservation Project in the Kathmandu Durbar Square, a UNESCO World Heritage Monument Zone since 1979, which was badly damaged by the 2015 earthquake. Since then, he has been an outspoken member of a spontaneous community group that has taken the lead in the recovery of the quake-hit heritage monuments with local initiatives.

Contact: alokstuladhar@gmail.com

Günter Wippel

Günter Wippel holds a degree in economics and has worked on issues such as uranium mining and human rights since the 1980s. He was a co-organizer of the The World Uranium Hearing in Austria (1992) and has attended many conferences on the issue of uranium mining. In 2003, he co-founded a human-rights group, MENSCHENRECHTE 3000 e.V., connecting human-rights violations and environmental destruction. This NGO has also worked for many years on the rights of indigenous peoples. In 2008, he initiated the working group "uranium-network.org" and co-organized international conferences on the impacts of uranium mining in Bamako / Mali (2012), in Tanzania (2013) and in Johannesburg / South Africa (2015). The NGO works with communities affected or threatened by uranium mining worldwide, focusing most recently on countries in Africa.

Contact: gunterwippel@aol.com



WORLD HERITAGE WATCH

World Heritage Watch is an independent non-governmental organization founded in 2014 and committed to the preservation of the UNESCO World Heritage worldwide. We keep watch that the World Heritage is not sacrificed to political compromises and economic interests. We support UNESCO in obtaining up-to-date, complete and accurate information about the situation of the World Heritage properties. And we help local people to protect their sites and to have a reasonable benefit from them.

More and more world heritage sites are endangered by development pressure, mass tourism, armed conflict, resource depletion, climate change, building activities, but also by neglect and poor management. In UNESCO, recognition has now grown that the over 1000 World Heritage properties can not be monitored, protected and sustainably managed without the active involvement of local people.

Our goals

World Heritage Watch has the following objectives:

- To raise awareness about the importance of UNESCO World Heritage;
- To strengthen the role of civil society in the UNESCO World Heritage Convention;
- To support UNESCO in protecting and safeguarding world heritage sites.

World Heritage Watch pursues these goals by

- building a network and forum for the exchange of information and experience of its members;
- supporting NGOs and local communities who work for their World Heritage sites;
- helping to bring updated and detailed information relevant to the preservation of the World Heritage properties to the attention of governments and UNESCO;
- informing the public about developments related to the World Heritage properties.

World Heritage Watch considers itself to be an enabling and facilitating platform providing support, coordination and communication for our global network of civil society actors who are committed to "their" World Heritage property and will notify us of dangers that threaten them. Our highest concern is the reliability of our information and the technical quality of our work.

Many of the people who work for the world heritage live near remote nature reserves, in developing or unfree countries. Often they do not have a chance to make themselves heard. We will strengthen their voices in the world public, with UNESCO and their governments.

World Heritage Watch e.V.

Palais am Festungsgraben 10117 Berlin
Germany

Tel +49 (030) 2045-3975
contact@world-heritage-watch.org
www.world-heritage-watch.org

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