

# World Heritage Watch Report 2025





World Heritage Watch

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Berlin 2025

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Upper left: An aerial view of Saltaire, an English industrial town known for its distinctive rows of houses made of Yorkshire stone. *Photo: Geoff Griffiths / Getty Images*

Upper right: The archaeological site of Jebel Barkal, Sudan, heavily damaged after torrential rainfall in the summer of 2024. *Photo: National Corporation for Antiquities and Museums of Sudan*

Lower left: One of the few remaining vaquitas in the Gulf of California. *Photo: Marcelo Otero / Greenpeace*

Lower right: Sharif Jamil, Coordinator of Waterkeepers Bangladesh, speaking on a public gathering to demand the closure of the Rampal Power Plant, 27 December 2024. *Photo: Hasib Sarder*

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# Preface

In 2025, the world remembers the end of World War II with all its horrors, mindful of present-day everlasting dangers. At the same time, 80 years after the end of World War II, we also recall hope-inspiring postwar developments - achievements in international cooperation brought about by the very trauma of two World Wars in the first half of the 20th century.

Immediately after 1945, the formation of collaborative international systems began. In hindsight, these amount to unprecedented achievements in global cooperation and peace.

We have every reason to celebrate the nascence of the world's multilateral, post-World War II institutions. UNESCO, home to the World Heritage Convention, is one of them.

Today, however, in the face of evolving events, we can no longer take the endurance of UNESCO's World Heritage Convention System and its underlying values for granted. Multilateral budgets are slashed and the bondage of common heritage, achievements in human rights, and concern for our common planetary future are tossed aside by leading nations. Some even rescind their UNESCO membership.

Our World Heritage Watch organization was founded in 2014 with the objective to give voice to civic organizations engaged in the preservation of their local World Heritage.

Today, in the face of alarming recent developments, World Heritage Watch in addition focuses on systemic concerns. Against the backdrop of threats to sites, eroding value systems, and actual institutional dismantling under our generation's watch, we are increasingly concerned with the Convention's overall institutional future within the multilateral system.

We cherish the far-sightedness once guiding the creation of the United Nations System in 1945, and of UNESCO in 1946, and we call attention to the need to contain current threats.

Time has come to stem the tide of dismantling and quietly starving the international World Heritage system. Precaution is essential: It would be hard, if not impossible, to rebuild a global World Heritage System should any wrecking ball ever damage what has been built over more than 50 years.

These days, the World Heritage System - run by UNESCO, and strongly related to IUCN (The International Union for the Conservation of Nature), ICOMOS (The International Council for Monuments and Sites) and ICCROM (The International Council for Conservation and Restoration of Monuments) - requires active and at times combative, awareness creation and just-in-time collaboration.

As of May 2025, there are 1223 World Heritage Sites located across 168 countries. 952 are cultural, 231 are natural, and 40 are mixed properties. These designated World Heritage Sites must be upheld in perpetuity in line with the UNESCO World Heritage Convention of 1972.

The task at hand is to reduce and avoid losses on the ground, and to fight the erosion of the overall World Heritage Convention system. Many hands and a lot of expert players are needed to live up to this task, in proactive partnerships and campaigns rallying defense of the World Heritage Convention achievements to date.

UNESCO, home of the World Heritage Convention, has come a long way. It was created early on in 1946 under the then newly established United Nations System. Its amazingly swift postwar establishment was possible thanks to earlier (post World War I) global thinking under the remarkable International Committee on Intellectual Cooperation (ICIC) which was established in Geneva under the League of Nations in 1922. It included celebrated scholars, among them Albert Einstein and Marie Curie. Inazo Nitobe, a Japanese scholar and one of the Under-Secretaries General of the League of Nations at that time, became a founding director of the ICIC.

In 1926 the International Institute of Intellectual Cooperation (IIIC) was established in Paris with financial aid from the French government to implement plans and policies made by IIIC, with activities in a variety of fields such as universities, libraries, intellectual property, arts, information and media. While IIIC activities were suspended at the outbreak of World War II, the enduring desire for International Intellectual Cooperation gave rise to UNESCO in 1946.

Another important but almost forgotten forerunner of UNESCO had been the “Treaty on the Protection of Artistic and Scientific Institutions and Historic Monuments” or Roerich Pact, propagated by the exiled Russian painter and philosopher Nicholas Roerich. Concluded in Washington DC by 21 American countries in 1935, it called for “peace through culture” and the preeminence of cultural values over military might.

1972 became a galvanizing point. The United Nations embarked on preserving nature and mankind’s historic heritage. Among others under the impact of Rachel Carson’s book “Silent Spring” in 1962, and of first pictures from space of our small blue planet, the community of nations developed a first measure of planetary awareness, and increasingly grasped the need for global cooperation.

At stake were both, mankind’s millenary cultural heritage and its shared global environment. Inspired by a “White House Conference on Natural Beauty” in 1965, followed by an unprecedented diplomatic effort involving the U.S., France, the UK and other nations as well as both IUCN and ICOMOS, 1972 saw two momentous global events: the Stockholm Environment Conference and the launch of the World Heritage Convention only a few months later.

A decade later, another important UN impulse was the 1983 Brundtland Commission (named after the Norwegian Bo Harlem Brundtland), which framed its report in the 1987 book „Our Common Future“ – a first hard look at the agenda ahead. UN efforts were crowned by the first gathering of heads of state at the 1992 Rio de Janeiro “Earth Summit”, which among others led the way to international conventions on biodiversity, climate, and an agenda for sustainable development.

Under each of the Conventions, including the World Heritage Convention, the task is steep, finance is short, and bureaucracy can be suffocating. Nevertheless, immense progress on the ground has been made.

World Heritage Watch proposes to be among its staunch defenders.

Maritta Koch-Weser, President  
Stephan Doempke, Chair  
World Heritage Watch

# Workforce Reductions in the National Park Service Impact U.S. World Heritage Sites

Alejandro Olivera, Center for Biological Diversity  
Philnise Phillips



The U.S. National Park Service (NPS) plays a central role in protecting the United States' most iconic cultural and natural landscapes. Among its responsibilities is the stewardship of multiple UNESCO World Heritage Sites - places designated for their "Outstanding Universal Value" under the World Heritage Convention. These sites are not only national treasures but are also part of the world's shared heritage, and their care requires stable, well-resourced management. Recent government-initiated staffing cuts at the NPS, however, have raised significant concerns about the U.S. government's ability to meet its international conservation obligations. Although the United States left UNESCO in 2018 and returned only 2023,<sup>1</sup> they remain a Party to the World Heritage Convention.

## The workforce reductions and executive actions

Following the transition of the Trump administration to power, on February 14, 2025, approximately 1,000 probationary employees were terminated from the National Park Service (NPS) as part of a sweeping initiative led by the Department of Gov-

ernment Efficiency (DOGE). These included rangers, custodial staff, and law enforcement officers. Those in professional disciplines like scientists, resource specialists, and other personnel essential to the functioning of park operations were also impacted.<sup>2,3</sup> As of April 2025, estimates are that as many as 2,500 employees (15% of the workforce) had been terminated, many through "buyout" offers, with further workforce reductions planned that would impact an additional 1,500 employees. While the DOGE initiative mainly targeted probationary or temporary workers of NPS, some parks have also lost permanent or full-time employees. According to reports, the terminations were part of a broader federal workforce reduction strategy impacting multiple agencies.<sup>4</sup>

Following these terminations, Secretary of the Interior Doug Burgum implemented President Trump's executive directive through Secretary's Order 3426. Issued on March 31, 2025, this order required that all national parks remain "open and accessible," regardless of staffing levels, and tasked park superintendents with ensuring continued visitor services.<sup>5</sup> However, the order did not include supplemental resources or personnel.

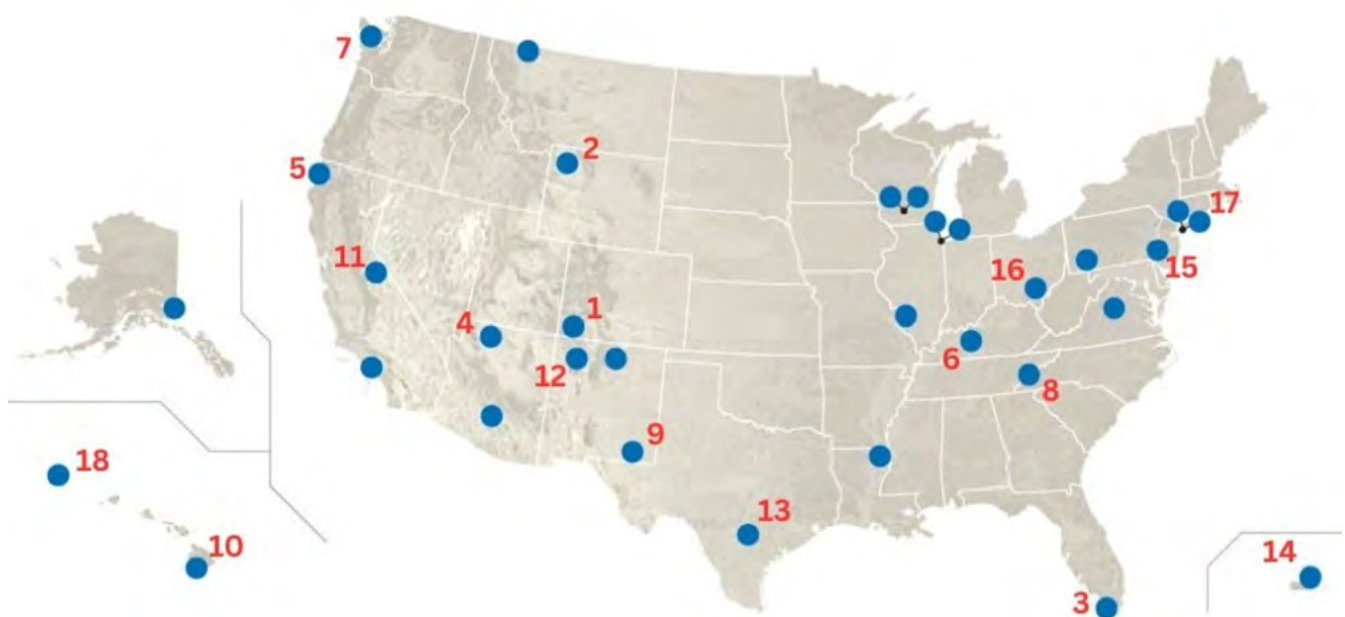


Fig. 1: A map of U.S. World Heritage sites. The numbered sites are listed on the following page

Map: Philnise Phillips

As a result, park administrators faced overwhelming pressure to operate under significantly reduced capacity, with direct impacts on visitor safety, maintenance, and ecological protection.<sup>6</sup>

These executive directives carry major implications for the operation and preservation of U.S. national parks, particularly those designated as UNESCO World Heritage Sites. The reductions in staff directly affect the workforce responsible for protecting and maintaining these internationally recognized places of Outstanding Universal Value.

### U.S. UNESCO World Heritage Sites and the Role of the NPS

The United States currently has 26 properties inscribed on the UNESCO World Heritage List, with at least 17 under direct management by the NPS. These include:

1. Mesa Verde National Park (1978)<sup>7</sup> – Managed by NPS; 2 employees terminated.<sup>8</sup>
2. Yellowstone National Park (1978)<sup>9</sup> – Managed by NPS; 7 employees terminated.
3. Everglades National Park (1979)<sup>10</sup> – Managed by NPS; 15 employees terminated.
4. Grand Canyon National Park (1979)<sup>11</sup> – Managed by NPS; 10 employees terminated.
5. Redwood National and State Parks (1980)<sup>12</sup> – Co-managed by NPS and the State of California; 6 employees terminated.
6. Mammoth Cave National Park (1981)<sup>13</sup> – Managed by NPS; 20 employees terminated<sup>14</sup>.
7. Olympic National Park (1981)<sup>15</sup> – Managed by NPS; 5 employees terminated.
8. Great Smoky Mountains National Park (1983)<sup>16</sup> – Managed by NPS; 12 employees terminated.
9. Carlsbad Caverns National Park (1995)<sup>17</sup> – Managed by NPS; 14 employees terminated.
10. Hawai'i Volcanoes National Park (1987)<sup>18</sup> – Managed by NPS; 7 employees terminated.
11. Yosemite National Park (1984)<sup>19</sup> – Managed by NPS; 9 employees terminated.
12. Chaco Culture (1987)<sup>20</sup> – Includes Chaco Culture National Historical Park (NPS) and Aztec Ruins National Monument (NPS); 1 employee terminated.
13. San Antonio Missions (2015)<sup>21</sup> – Four of the five missions are part of San Antonio Missions National Historical Park (NPS); 1 employee terminated.
14. La Fortaleza and San Juan National Historic Site in Puerto Rico (1983)<sup>22</sup> – Includes San Juan National Historic Site (NPS); Unknown.

15. Independence Hall (1979)<sup>23</sup> – Managed by NPS; 2 employees terminated.
16. Hopewell Ceremonial Earthworks (2023)<sup>24</sup> – Managed by NPS; Unknown.
17. Statue of Liberty (1984)<sup>25</sup> – Managed by NPS; 1 employee terminated.
18. Papahānaumokuākea Marine National Monument (2010)<sup>26</sup> – Co-managed by NOAA, U.S. Fish and Wildlife Service, the state of Hawai'i, and the Office of Hawaiian Affairs (OHA); number of employees terminated was not disclosed.

The remaining 9 sites are managed by a combination of state governments, private organizations, tribal entities, or other federal agencies.

These sites are periodically reviewed by the World Heritage Centre to ensure compliance with conservation guidelines. Failure to maintain standards can result in greater scrutiny or even placement on the "List of World Heritage in Danger."<sup>27</sup>



Fig. 2: One site of thirty along the Yosemite Falls trail covered in graffiti in 2022. Similar incidents are likely to happen or increase in severity due to the reduced workforce. Based on the situation in 2022, it is quite certain that the damage could be much larger in 2025. Posted to X, formerly known as Twitter, by the National Park Service. Source: The Seattle Times

### Operational consequences for World Heritage Sites

These workforce reductions have already led to cascading operational impacts, particularly at World Heritage sites, which, according to Destry Jarvis from ICOMOS-USA, is expected to mirror what occurred in national parks during the 2018 government shutdown.<sup>28, 29</sup>

- **Maintenance backlogs** and overflowing trash bins due to loss of custodial crews.<sup>30</sup> National Park staff assess the condition of park infrastructure each year to calculate the cost of needed repairs which are critical to the preservation of these sites. At the end of the 2024 fiscal year, NPS estimated \$22,986 million of repair needed across the National Park System. Some of the more popular sites, such as Yellowstone, Grand Canyon, and Yosemite, estimate a total of

\$3.7 billion in Deferred Maintenance and Repairs in the fiscal year—a figure that includes deteriorating infrastructure like campsites, trails, roads, visitor centers, water systems, etc.<sup>31</sup> This report highlights that these World Heritage sites have suffered from delayed routine upkeep and infrastructure deficiencies, which poses a severe threat to the long-term preservation of its natural and cultural integrity.

- **Diminished law enforcement**, leading to increased risk of poaching and vandalism, particularly at cultural and archaeological sites.<sup>32</sup> Similar to the 2018 government shutdown, many parks faced issues with limited staff. At Yosemite and Yellowstone, visitors often got too close to wildlife. Human food and garbage could be seen littered along the roads or campsites, putting the well-being of wildlife at risk. There has also been a concerning increase in vandalism and graffiti, rangers at Yosemite, for instance, found thirty sites along the trail covered in graffiti in 2022.<sup>33</sup>



Fig. 3: Tourists getting too close to bison at Yellowstone National Park in 2023. Many parks, like Yellowstone, have had issues of wildlife and visitor endangerment. It is highly likely to happen again or result in worse situations following the employment cuts at national parks. Without proper staffing to manage visitor behavior, such encounters can occur more often and escalate, posing serious threats to visitor safety and the safety of the parks and their resources.

Source: <https://abcnews.go.com/US/yellowstone-visitors-comfortable-approaching-wildlife-park-officials-stop/story?id=99847633>

- **Suspension of ecological monitoring**, including for endangered species and water quality.<sup>34</sup> During the workforce reduction, funding slowed or completely stopped, which greatly affected ongoing research projects. Lack of monitoring and research can lead to visitor risks, exacerbate climate issues, and cause great damage to the resources at these sites.
- **Visitor safety risks**, with fewer rangers to manage trails or respond to emergencies, causing delays and preventable accidents.<sup>35</sup> Reduced staff forces rangers to focus on other park responsibilities to fill the gap of vacant positions, keeping them from monitoring visitor and wildlife behavior and providing crucial information.
- **Delays or closures** at visitor centers, campgrounds, and historic buildings, weakening educational outreach and cultural interpretation.<sup>36</sup> Yosemite announced that they are delaying summer reservations at its most popular campgrounds<sup>37</sup>, other locations are struggling to keep visitor centers open, and park service led outreach programs are taking a hit.<sup>38</sup>

- **Risk for biodiversity** by limiting conservation and maintenance efforts. With fewer staff managing habitat restoration, general upkeep and education, protected areas are more vulnerable to degradation, which if it becomes too severe, could lead to permanent disruptions. For instance, delayed maintenance of native habitats and food sources can disrupt foraging patterns for bears, moving them closer to human-populated areas for food and increasing ecological stress. A reduced workforce could also cause a decline in forest regeneration, erosion control, and invasive species control, ultimately impacting the biodiversity that these sites are known for.



Fig. 4: Bear rummaging through an open food storage container left outside by campers at Yosemite National Park. Without enough rangers to enforce regulations and educate visitors, such incidents could become more frequent. This not only endangers the animals but also threatens natural behavior, increases the possibility of human-wildlife conflict, and could threaten the biodiversity of these heritage sites.

Photo: Jeffrey Brooker

## Everglades National Park: A Case in Point

Everglades National Park already designated a UNESCO World Heritage Site “In Danger,”<sup>39</sup> is among the sites most acutely affected. In 2020, IUCN noted in their Outlook report that the Everglades National Park face high concerns about fire management and other climate issues such as flooding. They also noted rising issues of urbanization in the area, water management, habitat shifting, pollution from agriculture, and invasive



Fig. 5: Rising water at Everglades National Park negatively impacts the site's ecology and water quality, which relies heavily on the work and attention provided by researchers and scientists at the park. Further reduction in the funding and workforce could result in long-lasting damage to the site.

Photo: Scott Leslie / Minden Pictures. Source: Science Insider

species control. In terms of protection and management, they highlighted concerns that regional management does not allow for effective protection of the World Heritage values, differing expectations for the park, and lack of funding and staff, especially in research and monitoring positions.<sup>40</sup> Its ongoing restoration efforts and compliance with UNESCO corrective measures depend heavily on technical and scientific personnel. The termination of staff involved in these programs threatens to undo years of progress and could derail compliance with UNESCO's corrective measures.<sup>41</sup>

## Legal and International Responsibilities

Under Article 4 of the World Heritage Convention, the United States must ensure the identification, protection, conservation, and transmission of its World Heritage properties. Paragraph 98 of the Operational Guidelines further requires States Parties to provide sufficient legal and institutional support for site management.<sup>42</sup>

The United States officially rejoined UNESCO in 2023 and now contributes financially and diplomatically to the organization's mission.<sup>43</sup> Despite paying membership dues, they have not yet paid seven years' worth of back dues since rejoining UNESCO. The U.S. is not currently a member of the 21-member World Heritage Committee; therefore, they do not have a decision-making role in the Committee, but only in the General Assembly. As such, while the U.S. participates in discussions and reporting, it is not certain whether they hold a decision-making role in matters affecting the implementation of the World Heritage Convention.

## Conclusion and recommendations

The sweeping reduction in NPS staffing enacted by the Trump administration not only threatens the functionality of the national park system but also undermines the integrity and long-term sustainability of UNESCO World Heritage Sites across the United States. As a newly returned UNESCO Member State, the United States must demonstrate that it is serious about fulfilling its international commitments. That begins with reversing these damaging cuts and restoring the institutional, scientific, and operational capacity of the National Park Service.

The World Heritage Committee should maintain heightened scrutiny of this situation and recognize the scale of deterioration now taking place across numerous U.S. World Heritage Sites. The Committee should invoke §169 of the Operational Guidelines and formally request a comprehensive State of Conservation report from all World Heritage sites in the United States. This report should have a special focus on the effects of the reduction in staff on the integrity of their parks, resources, and biodiversity. Given the gravity of the circumstances and the potential for further site degradation, a reactive monitoring mission should also be considered without delay. It is im-

perative that the United States act with urgency to realign its national park and heritage policies with the standards of the World Heritage Convention and reaffirm its commitment to international stewardship.

## Notes

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## Brazilian Heritage Losses: A Call to Action

**José Pedro de Oliveira Costa, World Heritage Watch Brazil**



After years of profound neglect, Brazil's UNESCO Heritage is literally collapsing. Coherent salvage and reconstruction efforts are urgently needed to stem current losses.

Most prominently, in February 2025, the ceiling collapsed on Brazil's most famous São Francisco de Assis Church, in the historic Center of Salvador Bahia. The collapse killed a visiting tourist and injured others.

São Francisco de Assis, built in the early 18th century, is enshrined in Brazilian history much like Notre Dame de Paris is in France, or the Cologne Cathedral is in Germany. With its lavish gilded interior, exquisite wood carvings, and more than 50 thousand tiles imported from Portugal, the church ranks as one of the wonders of Portuguese origin in Brazil. São Francisco de Assis is the heart of Pelourinho and the surrounding historic center. Salvador de Bahia was Brazil's first capital (1549-1763), and its historic center is a UNESCO World Heritage Site.

The collapse of the São Francisco ceiling was a truly emblematic event, alerting to the grave and imminent danger at more than one World Heritage Site in Brazil. For many buildings, long standing risks are well known but not acted upon.

Commenting on the collapse of the São Francisco de Assis ceiling, authorities said proper maintenance, conservation, and control of termites had long been an issue at the church, which is managed by the Franciscan order.

In Salvador Bahia alone, a wave of virtually irreparable collapses continues: a few weeks after the shocking collapse of the São Francisco de Assis ceiling, the building of the early 17<sup>th</sup> century "Câmara de Cidade" burnt, and a month later the roof of the São João de Deus church in nearby Cachoeira came down.

Due to longstanding low maintenance, numerous historic buildings are in a most critical stage across historic colonial districts in Brazil. Life threatening and virtually irreparable collapses loom in ancient heritage buildings, many of which belong to World Heritage sites – from Paraty in the South to São Luis do Maranhão in the north.

While the world celebrates in awe the swift rescue and citizen engagement that made the recent recovery of Notre Dame de Paris possible, no such engagement is yet in sight in Brazil. Responsibilities have yet to be established – along with an action program and structured funding.

**It is high time to salvage the principal historic patrimony of Brazil. And it is, as yet, possible, provided responsible parties come together in a shared action plan.** Especially for Brazil's UNESCO World Heritage Sites, programmatic support is overdue.

### We recommend:

- As a first step, that in the remainder of 2025, each of the local authorities at cultural UNESCO World Heritage Sites map their most threatened buildings. In this, they should receive technical guidance from specialized agencies, such as IPHAN (the National Historic and Artistic Heritage Institute), and others.
- The resulting "Heritage in Acute Danger" maps can, at the next stage, form the basis for a Heritage Conservation Emergency Plan – possibly headed by the Ministry of Culture.
- Drawing up such a plan will be a prerequisite for raising public funding, private donations, and also multilateral support.

## I. Monuments and Sites

# Stonehenge WHS: Saved from a Devastating Road Scheme — for Now



Kate Freeman, The Stonehenge Alliance

All parties agreed that the UK Government's planned 4-lane highway and 3.3km tunnel was too short to protect the 5.4km-wide Stonehenge World Heritage Site (WHS). The scheme promoters however were satisfied that mitigation and archaeological measures were sufficient. UNESCO missions, Government's Planning Inspectors and nearly a quarter of million petitioners from around the world disagreed. The project's progress has been covered in earlier *World Heritage Watch Reports* (2018, 2019, 2021, 2022, 2023 and 2024), but the legal processes and timing are complex. These are summarised below.



Fig. 1: Five days after the World Heritage Committee overturned the Draft Decision to place the property on the List of World Heritage in Danger, the newly elected UK government scrapped the Stonehenge road scheme. Picture: BBC online report on 29 July 2024

## Sequence of legal challenges and key events

- 2021: Save Stonehenge WHS<sup>1</sup> brought a successful **challenge** against the Secretary of State's (SoS) 2020 decision to approve the scheme. (Judgment, July 30)
- 2023: Following a 20-month long **redetermination** process (i.e. review) the SoS **approved** the scheme once again (Decision by SoS, July 14)
- 2024: The SSWHS **challenged** the decision again. The case for Judicial Review was **dismissed**. (Judgment, February 19)
- 2024: The dismissal was **appealed** by SSWHS. Accepted by the Court, May 21).
- 2024: **Contracts were awarded** by National Highways, the scheme promoter, and preparatory works started contrary to WHC 45 requests. (Application to move Stone Curlew nesting site, January 24; Road closures for laying of cables, April 5)
- 2024: A delegation delivered our **international petition** of nearly a quarter of a million signatures elected Secretaries of State for Culture and for Transport. (July 15)
- 2024: The Draft Decision to inscribe the property on the **List of World Heritage in Danger was overturned** by the WH Committee. (July 24)
- 2024: We delivered our **International** Petition which had collected around a quarter of a million signatures to the newly elected Labour Secretaries of State for Culture and Transport. (July 15)
- 2024: The Chancellor **cancelled the Stonehenge scheme**, but on financial grounds only. Nevertheless, the Director General of UNESCO welcomed "*the Starmer government's decision to cancel the construction of a road tunnel under the Stonehenge World Heritage Site,*" she tweeted. (July 29)
- The Court of Appeal **dismissed** the argument on whether interpretation of the World Heritage Convention was a matter for the courts. (Appeal Judgment, October 16)
- 2025: Although the scheme had been cancelled by the new Labour Government, the court of appeal judgment raised serious issues around what ministers needed to know when taking a decision. It was decided to continue the action and an **appeal** to be heard by the **Supreme Court** therefore was **lodged but later refused permission**. No reasons are ever given for refusal by the Supreme Court. (Decision by Supreme Court, January 21)

During the various legal actions and appeals, we were relieved to receive written assurances from the Department for Transport's lawyers that the archaeological preparatory works *would not proceed until the legal proceedings had been completed*.

The funds required to support the challenges and appeals were considerable, especially for a small group of volunteers. Since

<sup>1</sup> SSWHS is the private company set up by the Stonehenge Alliance to bring Judicial Reviews and subsequent legal appeals.

2020, we raised circa £ 250,000 thanks to several CrowdJustice appeals and many private subscriptions from loyal followers. To back our various appeals, we published videos featuring historians, authors, and several prominent archaeologists including Professor Mike Parker-Pearson<sup>2,3</sup>.

### The UK’s State of Conservation Report and World Heritage Centre’s draft decision

Although the UK government complied with the 45COM’s request, the UK submitted its State of Conservation Report in February 2024 but only allowed that summary to be published. It referred to an ‘information package’ on ‘proposed modifications’ to be submitted separately to the World Heritage Centre (WH Centre). Despite a Member of Parliament’s request to the Department for Culture, Media and Sport for sight of the full report, no further detail was forthcoming.

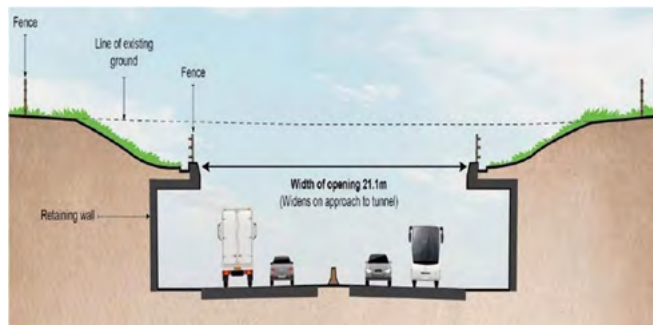


Fig. 2: Modifications proposed included cantilevers to extend 3.5m from each side to “improve [the visual] transition between the landscape and the road”  
Graphic: National Highways

The ‘modifications’ came to light on 24 June when the WH Centre published a link to these in its Draft Decision for the forthcoming 46COM in New Delhi. The proposed modifications were cosmetic: a new green bridge and cantilevers extended the walls of the deep cutting to disguise the scale of the infrastructure.

2 Professor Parker Pearson is a leading authority on British Neolithic archaeology and member of the Scientific Committee advising the road project. He led a consortium of 22 Stonehenge specialists at the public examination and re-determination process to make the archaeological case against the road scheme.

3 Video assistance by Paul Bradshaw of Viral History. The videos are available via the home page of [www.StonehengeAlliance.org.uk](http://www.StonehengeAlliance.org.uk)

The UK team presented these to UNESCO at two meetings. Whilst the WH Centre appreciated the efforts they considered the modifications in the context of the limits the UK Government had set itself without complying the WHC’s recommendations. The WH Centre therefore remained implacably against the scheme. They expressed their position thus:

*“The reason why the Committee requested that the cuttings be removed from within the inscribed property was that they would have major negative impact on the overall prehistoric landscape. This impact is not only due to the adverse visual effect of the motorway cuttings. The excavations necessary to create the 3.5 km cuttings would require the removal of extensive archaeological deposits and features dating from the early Neolithic period, and in particular material dating to the Beaker/Early Bronze Age (c. 2450-1700 BC), which is generally contemporary with the later stages of construction of the main henge monument. This intervention would therefore also compromise the physical intactness of the highly significant ancient cultural landscape.”*

Thus, the draft decision was to inscribe the property on the List of World Heritage in Danger.

### 46COM decision: Lobbying the World Heritage Committee

Throughout this period our chairman and SSWHS director, John Adams, kept the WH Centre informed of the legal position and National Highways’ activities on the ground and. He briefed each member of the WH Committee starting in April and concluded with a link to an explanatory video and a strongly worded video message by John. But – and it is a big

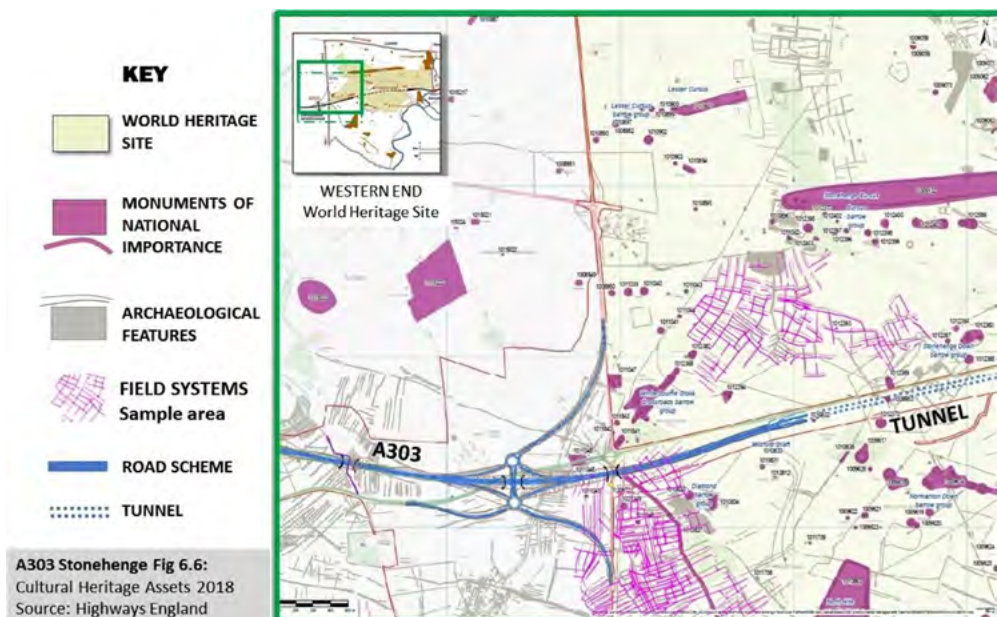


Fig. 3: Heritage detail at the western end which was subject to intense discussion. The vicinity where the cutting and motorway style junction were planned is an area dense with archaeological remains, features and monuments. Graphic: Stonehenge Alliance



Fig. 4: It became obvious that high level lobbying won over the World Heritage Committee in New Delhi.  
Photo: Stephan Doempke

but – the WHC ambassadors had already been caught up in a whirlwind of selective high-level briefings by ministers, skilled diplomats, statutory bodies, archaeologists who supported the scheme and highways engineers. They downplayed the impacts and highlighted the benefits to visitors to the Stonehenge stone circle. Promoters made much of the 50 schemes that had been proposed over the last 30 years.

It was obvious from the 46COM discussions that the WH Committee had gained the strong impression that it was time to get on with the “*most favourable option*”. The position from our point of view was one of David and Goliath.

ICOMOS and the WH Centre were at pains to explain that the infrastructure was substantial: “*It is not a correct understanding of the project to say that it will have no significant effect on the monument. It involves cutting part of the monument.*” The urgency of the situation did not appear to be understood: the contract had been awarded, and the scheme needed to be stopped in its tracks. Kenya however proposed a swathe of damaging and inaccurate amendments and requested that dialogue be continued, and a report submitted in two years’ time. In effect this gave the UK the green light to go ahead.

### Critical questions arising

For now, Stonehenge WHS is secure, but the scheme was not cancelled for reasons of world heritage but on grounds of cost. This leaves two worrying legacies: First, the WH Committee system let down Stonehenge WHS despite UNESCO’s consistent objections to the road scheme. The WH Committee was vulnerable to international politicking and cannot be relied on to take the best advice to defend one of the best known WHSs from

permanent damage. Second, UK planning law did not protect WHSs from inappropriate development.

UK planning policies relied on an international body to uphold the International Convention.

A review of the initial proposal of the A303/A358/A30 corridor scheme revealed a key issue in its scoping report of 2014: the report stated that the Blackdown Hills AONB (Area of Outstanding Natural Beauty, now called National Landscape) would be out of bounds for “large scale road building”. Stonehenge WHS was not mentioned. Specious arguments about “enhancement” of the WHS entered the frame later, but too late for the then Prime Minister’s announcement on 1<sup>st</sup> December 2014.

If World Heritage Sites in the UK are not to be exploited or damaged, their status in UK national law needs to be at least that of a National Park or National Landscape. To this end we need to work with other mutual interests and members of parliament to consider the best way to protect WHSs in the UK. This year is a good time to review its status in domestic law: it is exactly 40 years since Stonehenge, Avebury and Associated Sites WHS was inscribed.

As our work on this campaign moves on, John Adams has stood down as Chairman. We cannot overstate our appreciation of his dedication to the cause, his intelligent analysis and endless media engagements were brilliant. He rose to the huge challenge left by our loss of our moving spirit, Kate Fielden. “Cometh the time, cometh the man.”



Fig. 5: John Adams OBE, outgoing chairman of Stonehenge Alliance.

Photo: Stonehenge Alliance

# The Southern Suburb of Tauric Chersonesos has been Destroyed

Evelina Kravchenko and Roman Reyda

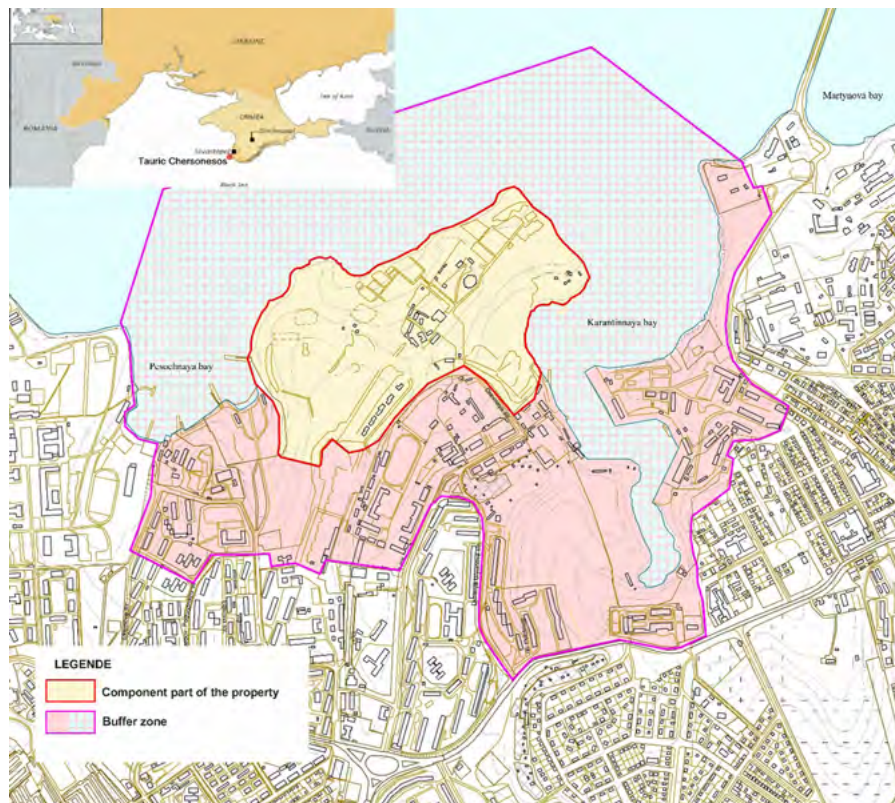


Fig. 1: General Plan of the ancient Tauric Chersonesos (yellow) and buffer zone (pink) in the city of Sevastopol in occupied Crimea, by Tymur Bobrovskiy and Larissa Sedikova (Історико-культурні заповідники, 2014).

Map: UNESCO / Martin Lenk

Last year, we summarized the results of monitoring the World heritage Site of the ancient city of Tauric Chersonesos and its Chora,<sup>1</sup> located in the territory occupied by the Russian Federation in Sevastopol, Crimea.<sup>2</sup>

The situation in Chersonesos has not changed in a year; the project under the patronage of President Putin, which is destroying the site, continues to be implemented. Both the archaeological site and the structure of the museum complex are being destroyed. As of Summer 2024, an entertainment complex was built on the site of the ancient southern suburb of Chersonesos with temple complexes and necropolises, imitating museum activities.

On March 18, 2023, Vladimir Putin came to the opening of the first stage of construction of the Korsun Children's Centre (art school). The art school is a four-story Byzantine palace-type

building of almost 3,000 square metres that can accommodate up to 500 children. The building has large classrooms, theatre studios, assembly and cinema halls, and 547 classrooms. There are also living rooms, a medical centre, and a dining room. It will host children from Artek to make them learn about the Russian vision of the history of Sevastopol and attend art classes.

In Summer 2024, Russians completed the construction of the so-called Museum of Crimea in the Tauric Chersonesos Historical and Archaeological Park in Sevastopol, which covers an area of 12,000 m<sup>2</sup>. The complex includes Museums of Crimea, Christianity, Antiquity, Byzantium (more than 44,000 m<sup>2</sup> of museum space), an amphitheatre for 1,000 visitors, two youth centres, and engineering and sewage facilities. In March 2024, the occupiers claimed that visitors would learn about the "chronicles of Crimea and Novorossiyya"<sup>3</sup> in the museum.

In April 2024, near the walls of Chersonesos, construction workers were digging a trench through newly discovered burials of the 2nd century AD, unique for their preservation and artefacts (Fig. 2–5).



Fig. 2: Construction in Drevnia street in the site of Tauric Chersonesos, 2024.



Fig. 3 – 5: Destroyed burials in the place of construction in Drevnia street, 2024.

This threatened to destroy the ancient artefacts before they were fully studied. Heavy machinery partially destroyed the archaeological heritage site. A report on this vandalism was sent to the occupying Sevastopol City Department for Protection of Cultural Heritage Objects. Nevertheless, the so-called construction continued, and the historical site was being destroyed even more (Fig. 6).



Fig. 6: Drevnia street after construction, 2024

The expedition of the State Hermitage Museum on the territory of the city, namely, the XX quarter, led by N. Yu. Novoselova (2018, 2019, 2021), was unjustifiably large-scale in relation to the monument. In 2016, about 150 sq. m. were excavated to a depth of more than 4 m through four construction periods (late 4th century BC, second half of the 2nd century BC, Roman, and medieval periods); in 2017, more than 4 m were excavated on an area of 26 m<sup>2</sup> and an area of 71 m<sup>2</sup> to a depth of 0.8 m; in 2019, the area of work was 125 m<sup>2</sup> to a depth of 0.6 m. Given that the masonries of Chersonesos, particularly in the medieval period, immediately require a synchronous conservation programme after discovery – which was not carried out by the expedition and was not submitted to any supervisory organisation for approval – the damage caused by the work of the State Hermitage Museum’s ‘expedition’ to the ancient monument requires detailed monitoring. The absence of a funded programme for the conservation of exposed architectural remains

and conservation specialists has put this part of Chersonesos (quarter XX) at risk of destruction.

The destructive works of Russian “researchers” on the so-called “Southern Suburbs of Chersonesos”, especially in the part of the ancient city in front of the main line of defensive structures, became unprecedented in scale. According to the participants and executors of this “research”, during 2021-2022 “the general area of archaeological research was 80,215 m<sup>2</sup>, of which 79,795 m<sup>2</sup> was ‘fully excavated’”, on which, according to the representatives of the occupation “science” - more than 1,000 objects of different eras were discovered.<sup>4</sup>

For comparison, in 2013, Tauric Chersonesos was one of the most studied ancient cities: over 180 years of archaeological excavations, according to scientists’ calculations, about 40 percent of the area (about 16 hectares) was studied here. The area investigated during 2021–2022 at the site of the so-called archaeological park was more than 8 hectares. In two years, the occupiers dug up half of the area of two hundred years of research. In the beginning, the work was carried out with heavy earthmoving equipment, which destroyed a large part of the cultural layer and some objects. After that, the diggers used the excavation method, which is used to research ancient settlements without stone architectural remains. This aimed to completely level the monument without the intention of further exposure, which is not adequate during the research of ancient sites (squares 5 x 5, etc.). Accordingly, after the discovery of the

indicated huge area of part of the ancient Chersonesos, there was no talk of conservation and restoration work.

According to the official data, as of 2020, the main collection of the museum in Chersonese had 222,985 storage items, the auxiliary collection 23,139 items. As of the beginning of 2024, the number of storage items in the main collection increased by 11,098 - and the auxiliary collection by 97. Thus, the question remains open where the objects from the so-called excavations of S. L. Solovyov in the southern suburbs of Chersonese were transferred for storage. According to Russian press reports, there are millions of finds, tens of thousands of which are to be transferred to the museum archive.



Fig. 7: The poster of the exhibition in Veliky Novgorod of the Byzantine Gold from the collection of the National Preserve of the Tauric Chersonesos.

Source: Museum of Fine Arts, Veliky Novgorod

Alarming statistics concern exhibition items. As usual, the Chersonesos Museum exhibited about 6,000 items of the main collection in exhibition halls and at other exhibitions. In 2022, their number increased to 6,687 items of the main collection and 46 items of the auxiliary collection. And in 2023, the museum exhibited only 1,675 items of the main collection. The reason for such a reduction in exhibited items is currently unclear. However, probable answers may be the reduction in the exhibition of the ancient and medieval halls of the museum in connection with the transfer of buildings to the monastery of the Russian Orthodox Church. There is also reason to talk about the transfer of part of the exhibition items to the territory of the Russian Federation, in particular to the Novgorod Kremlin Museum,

where the exhibition "Gold of Byzantium" with the exhibition collection of Chersonese was held (Fig. 7).

In addition, the collection of the National Preserve of Kam'yana Mogyla in Zaporizhia oblast, consisting of 5,235 items of the main collection and 771 of the auxiliary collection, was transferred to the museum archive in Chersonesos. 84 items of the main collection were exhibited in the museum of Tauric Chersonesos, that is, they were actually moved to the territory of occupied Crimea.

Thus, in 2024, the museum complex was moved from the preserve and archaeological site territory to the ancient suburb of Chersonesos, which had been destroyed by construction work. Now, the management of the complex of the New Chersonesos has been transferred to another manager from Putin's closest circle - the head of Sberbank of Russia, Hermann Gräf. During 2024, the St. Vladimir Monastery began operating on the National Preserve territory of Tauric Chersonesos. The so-called restoration of the monastery's activities, particularly the transfer of the territory and buildings of the preserve in Chersonesos to the newly established monastery of the Russian Orthodox Church, was announced personally by Putin in early 2024.

Churches located on the preserve's territory, handed over to the communities of the Ukrainian Orthodox Church of the Moscow Patriarchate and the Russian Orthodox Church, created conditions for churchmen and their agents of influence to constantly control the situation in the secular organization, including dictating the terms of use of the site. And if Ukrainian laws limited the influence of the church before the occupation, then with the arrival of the Russian invaders on the peninsula, their church took unlimited power.

Further measures of the so-called beautification already affected the active Volodymyr Cathedral. It was the implementation of a complex of works on the arrangement of communications and the territory around St. Volodymyr's Cathedral, leading to the loss of part of the exposition area, which violated integral archaeological complexes by digging trenches. This will eventually lead to the destruction of preserved drawings on the walls of a small cistern, covered with a special soil mixture, located near the St. Volodymyr Cathedral. This beautification continues until now, and in the future, it is predicted that it will be uncontrolled throughout the entire territory of the Chersonesos settlement.

In January 2024, the latter announced the so-called renewal of the monastery on the premises of the National Preserve of Tauric Chersonesos. In his speeches, Putin mentioned that exactly a century ago, the monastery was evicted from its premises and its activities stopped. These messages of the dictator and his closest entourage do not even contain manipulation - but outright lies. The cessation of the activity of the monastery did not take place in 1924, but in February 1923. Likely, the

construction site should have been handed over by this date, but they didn't cut it. The deadlines were shortened, so the scientists committed a crime by allowing the removal of cultural layers with construction equipment and imitation of scientific research rather than the research itself.

In early 2025, Russian media shared information that the Tauric Theological Seminary of the Russian Orthodox Church was moving to Chersonese from Simferopol. Thus, the territory of Tauric Chersonesos has completely changed its intended use. Instead of a museum, it houses Russian Orthodox Church organizations – an Orthodox monastery and a theological seminary. Access to the objects of the World Heritage Site (8 cultural heritage sites and the city of Tauric Chersonesos with 55 sites) that fall within the area of the monastery is currently closed (Fig. 8).



Fig. 8: Above: Topographic plan of the area of Tauric Chersonesos with place of border construction. Below: Plan of the protected area of Tauric Chersonesos. The arrows point to the future border of the St. Vladimir Monastery of the Russian Orthodox Church.

Source: Act of expertise in the land plot with cadastral number 91:02:002003:9 by Yuriy Zaitsev (2024)

Also of concern is the interview of the deputy director of science for the museum, Larissa Sedikova, about the upcoming large-scale excavations in the southwestern part of the city of Chersonesos. The only part of Putin's project that has not been implemented is the archaeological school. There were talks about its placement in this part of the site in 2014–2015. Later, this project became a component of Putin's large-scale project of New Chersonesos. Therefore, the next large-scale excavations may be the implementation of this unfinished part of the New Chersonesos project.

Such measures create a positive image of the occupying authorities in the minds of residents of Crimea and tourists, illustrating their legitimacy through cultural programs. The cultural activities that Ukraine carried out in Crimea before the occupation, on the contrary, are presented as negative and aimed

at destruction. This is happening most actively in Sevastopol, where a modern world-class museum - the National Preserve of Tauric Chersonesos - was created during the years of independence, and the site it manages was included in the UNESCO World Heritage List.

Currently, the Russian Federation is spreading false messages that Ukraine neglected Chersonesos. They are spreading the message that Russia is saving it from final destruction. It is likely that the target audience for this message is not residents - but rather the broad audience in the countries of Asia, Africa, and Latin America, who were not closely familiar with Crimea in the 1990s and 2000s. This poses a threat to Ukraine through consolidation of the occupying ideology. This is especially dangerous for young people and children, who receive distorted visions of history and political situations.

The international community must actively respond to these Russian attempts to rewrite history and must protect the cultural identity of Crimea. It is important to support the rights of indigenous peoples, local communities, Ukrainians of Crimea, and the cultural values located in Crimea to counter Russian propaganda campaigns that cover up all cultural, educational, and scientific activities of the Russian Federation without exception.

## Notes

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- [https://www.researchgate.net/publication/381090923\\_34\\_I\\_Monuments\\_and\\_Sites\\_Tauric\\_Chersonesos\\_is\\_being\\_Destroyed\\_by\\_the\\_Occupying\\_Russian\\_Authorities](https://www.researchgate.net/publication/381090923_34_I_Monuments_and_Sites_Tauric_Chersonesos_is_being_Destroyed_by_the_Occupying_Russian_Authorities)
- Novorossiia ("New Russia") is the term used by the Russian Federation for the occupied parts of mainland Ukraine.
- Soloveva, N.F., Solovev, S.L. & V.L. Myts. 2022. Kratkiye rezultaty arkhеолоhicheskyykh raskopok v Yuzhnom pryhorode Khersonesa Tavrycheskoho v 2022 h. Soloveva N. F. & S. L. Solovev (red.). 2022. 161-169 [In Russian: Соловьёва, Н.Ф., Соловьёв, С.Л. & В.Л.Мыц. 2022. Краткие результаты археологических раскопок в Южном пригороде Херсонеса Таврического в 2022 г. Соловьёва Н. Ф. & С. Л. Соловьёв (ред.). 2022. 161-169].

# A Potential World Heritage Site on Crimea is being Destroyed by the Occupation Authorities

Evelina Kravchenko

The Bakhchysarai Khan's Palace is one of the elements of the "Historic Environment of the Capital of the Crimean Khans in Bakhchysarai"<sup>1</sup> which was on Ukraine's Tentative List for World Heritage nomination. The Khan's Palace in Bakhchysarai itself was nominated in 2003. However, this nomination was later changed, and in December 2011, it was submitted as an element in the above-mentioned nomination. In January 2012, a nomination dossier and a management plan for the site were submitted.

This change in nomination was due to the location of the palace. The historical landscape in which the palace is located is an integral part of the site since it formed the unique urban environment of the city of Bakhchysarai, which developed around the palace. Part of this environment is also the site of other peoples that already existed at the time of the construction of the palace complex - Taurians, Scythians, Sarmatians, Goths, and Alans, who are extinct; Karaites, who are now disappearing, as well as other early monuments of the Crimean Tatars. All

these monuments and the natural landscape form the historical environment of the Crimean Khans; their Palace in Bakhchysarai is the only example of their architecture in the world.

The Bakhchysarai Khan's Palace is located in South-Western Crimea in the mountain valley of the Churuk-Su River on its left bank (Fig. 1).



Fig. 2: The Retinue or Count's Building (with chimneys), Palace Bridge to the main entrance, and buildings in the town of craftsmen (far left). Photo: Evelina Kravchenko, 2005

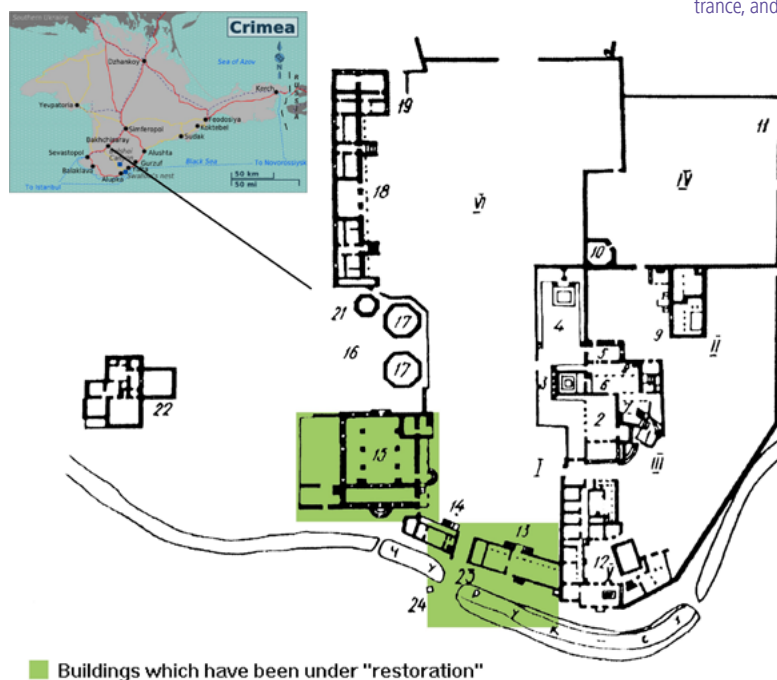


Fig. 1: General plan of the Crimean Tatar Khan's Palace in Bakhchysarai (1983) with buildings damaged by unprofessional "restoration". 13, 14 - Retinue or Count's Building, 15 - Great Khan Mosque, 23 - embankment with three bridges, 24 - the Milestone of Katherine the Second, VI - the main courtyard.  
Map: from the archives of Evelina Kravchenko

The palace complex was built and acquired its authentic appearance for over 200 years, from the 16th to the 18th century. In 1736, the palace was destroyed by fire, after which the palace was restored for quite a long time, from the second half of the 18th to the beginning of the 20th century. In general, the form and design were preserved, but the authenticity of the materials was partially lost. The palace is an ensemble of buildings of various styles arranged around a large courtyard.

The Bakhchysarai Palace meets two of the three criteria for nomination of the site to the World Heritage List as the only example of palace architecture of the indigenous people of Ukraine - the Crimean Tatars, a sacred shrine and a symbol of unity and cohesion.

At the time of the occupation of Crimea in 2014, the palace, although it required ongoing resto-

ration, was not in a state of emergency. In 2016, the “Scientific and Methodological Council of the State Committee for the Protection of Cultural Heritage” of the occupation authorities approved the restoration work and the list of cultural heritage sites on which they would be carried out. The project, “Implementation of works to preserve the cultural heritage site “Khan’s Palace” (16th-19th centuries),” has been implemented since 2018. In reality, the work began in 2020 and is still ongoing. As of 2021, 2 billion rubles had been spent on 16 sites of the Bakhchysarai State Historical and Cultural Preserve, which includes the Bakhchysarai Palace.

The first to be affected was the Great Khan Mosque, where the historical “Tatar” tiles with a unique masonry technique were replaced with modern “Spanish” tiles and fastened with screws. The decoration of the wooden roof elements was also destroyed; the floor rafters were replaced, and instead of the wooden structures of the earthquake-resistant belt, reinforced concrete ones were laid, which rested on the old, plastered walls. The old palace bridge to the main entrance was dismantled, and a new one was built. The stone masonry of the em-

bankment was also replaced with new concrete (Fig. 3). As a result of these works, the old walls of the mosque cracked<sup>2</sup> (Fig. 4–7).

In 2022, there was a story about the destruction of an Armenian inscription on a stone. As the investigation of Ukrainian activists showed, during the so-called restoration, the place where the foundations of an Armenian church destroyed by an earthquake were located was excavated. The so-called restorers used the stone blocks found in the soil to build an extension to one of the palace facilities. The tombstone inscription was found by accident, which caused a scandal in the administration of the reserve. As a result, to remove obstacles for further “restoration”, the inscription was knocked off the stone with a hammer<sup>3</sup>.

This story likely was the reason for the change in the restoration plans of the occupation authorities, since in 2022 large-scale archaeological excavations continued on the palace’s territory, which covered almost the entire area outside the buildings. The amount of funding for the work and the completion date have



Fig. 3: The Retinue or Count’s Building, and the Palace Bridge to the main entrance in process of so-called restoration, and buildings in the town of craftsmen.

Photo: from the internet; from Evelina Kravchenko’s archive, 2024



Fig. 4: Russia’s so-called ‘restoration’ of the Khan’s Palace and the potentially irreparable damage it has caused.

Photo: Edem Dudakov, 2022



Fig. 5: Destroyed authentic ornaments of Biuk Khan Jami (Great Khan Mosque).

Photo: Edem Dudakov, 2022



Fig. 6: The destruction of the original masonry of Biuk Khan Jami (Great Khan Mosque) as a result of construction works.

Photo: Edem Dudakov, 2022



Fig. 7: Removed authentic roof beams of the Great Khan Mosque. Photo: Edem Dudakov, 2022

also changed. The estimated amount of 1.6 billion rubles increased to 3.5 billion rubles. The deadline was postponed from 2020 to 2024 and then to 2025; that is, the restoration work should be completed by the end of this year.

As of the summer of last year, the area of archaeological research on the territory of the Bakhchysarai Palace was more than 9,000 m<sup>2</sup>. The occupation media cite the number of archaeological finds for 2019 as more than ten thousand. The dean of the history department of the former Tavria National University, which the occupiers renamed the Crimean Federal University after V.I. Vernadsky, Alexander Herzen, heads archaeological excavations in this restoration project. In recent years, excavations in the palace courtyard have uncovered the foundations of the destroyed Persian Palace, baths, water supply and drainage, etc.

In 2022, during the so-called restoration, one of the palace buildings was also significantly damaged – the Retinue or Count's Building. It was built in the 16<sup>th</sup> century; in 1736, the building was destroyed in a fire and then rebuilt. The half-timbered building on a stone perimeter consists of a gate tower and two wings with galleries. The facades were plastered and whitewashed, painted with cartouches with geometric and floral ornaments. The roof is tiled with high stone chimneys (Fig. 2).

In 1974-1980, the building was restored, and during the restoration, paintings were discovered on the gate tower and facades and were restored. The premises in the powerful stone basement of the palace were adapted for the archaeological archive. As a result of the unprofessional actions of builders in February 2022, the facade of the Retinue Building cracked. The outer wall of the building began to move away. As seen in the photos (Fig. 3), the building now stands without a roof under a temporary cover. Some chimneys and one minaret have disappeared. There are no internal ceilings. It seems that the building has been completely destroyed.

According to the occupation media, citing archaeological research, one of the palace's walls rested not on a stone base but on the ground, which surprised the restorers. The restorers apparently did not conduct any preliminary research, although it is reported that more than 200 million rubles were spent on design and preliminary work. It is worth adding that



Fig. 8: According to Krym. Reali, modern paving slabs were laid on Palace Square in the courtyard in front of the Great Khan's Mosque.

Photo source: <https://ctrcenter.org/en/russia-continues-to-destroy-the-khans-palace-under-the-guise-of-restoration>, March 12, 2024

before the occupation, there were no problems with the insulation or stability of the walls in the basement of the building. The archaeological collections located there were dry and quite comfortable.

In 2024, a representative of the occupation authorities of Crimea, Sergey Aksyonov, reported that OOO Krymzhylkomfort had been selected as the new organization to carry out restoration work on the Retinue Building. There are no positive reviews of the restoration work that was previously carried out nor any general information about this organization's activities.



Fig. 9: The milestone of Catherine II and a building in the town of craftsmen in front of the entrance to the Khan's Palace, before restoration. Photo: Evelina Kravchenko, 2005



Fig. 10: The milestone of Catherine II with the newly-installed double-headed eagle, and a building in the town of craftsmen after restoration.

Photo: from the internet; from Evelina Kravchenko's archive, 2024

Only the restored milestone of Catherine II is clearly visible in the photos of the occupation authorities (Fig. 9, 10). It was whitewashed, and a bronze double-headed eagle was installed on its top – the emblem of the Russian Empire and the current Russian Federation<sup>4</sup>. Moreover, the photo clearly shows that houses of the town of craftsmen (Bakhchysarai, the old city district) near the entrance to the Bakhchysarai Palace have undergone significant changes – elements of traditional decor have also been removed from them, roofs have been replaced, and some of them have been painted in kitsch colors that are not typical of traditional buildings.

In general, the situation around the Bakhchysarai Palace shows that some of its buildings have been irretrievably lost due to the unprofessional actions of restorers; almost all the palace buildings have undergone destructive changes. The Palace of the Crimean Khans is losing its authenticity and becoming a new building.

## Notes

- 1 Харлан О.В., Науменко В.Є. 2014. Номінаційне дос'є об'єктів спадщини «Історичне середовище столиці кримських ханів в місті Бахчисарай». Бобровський Т. (ред.). Історико-культурні заповідники. Номінаційні дос'є об'єктів культурної спадщини, що запропоновані Україною для занесення до Списку Всесвітньої спадщини ЮНЕСКО. Київ: НДІ Пам'яткоохоронних досліджень МКУ, с. 113-224.
- 2 [https://ciss.org.ua/en/sk\\_page.html?object\\_code=69423987d1a204e0bf9198f3e4a1fe51](https://ciss.org.ua/en/sk_page.html?object_code=69423987d1a204e0bf9198f3e4a1fe51).
- 3 [https://argo.page/blog/16?fbclid=IwY2xjawlr19leHRuA2FlbQlXMQABH5Vm-LlFVDNPsNzbl4H3lrsRMKcJgBTzfbotVTb1tUojs2lgcQqAq-KSAJA\\_aem\\_z\\_kfQDLHdWHXhbYy1UzKHw](https://argo.page/blog/16?fbclid=IwY2xjawlr19leHRuA2FlbQlXMQABH5Vm-LlFVDNPsNzbl4H3lrsRMKcJgBTzfbotVTb1tUojs2lgcQqAq-KSAJA_aem_z_kfQDLHdWHXhbYy1UzKHw)
- 4 The milestone was erected between 1784 - 1787 as a reminder of the trip of Russian Empress Catherine II to Crimea which pursued primarily a geopolitical goal: to demonstrate the "indisputable rights" to include Crimea and other territories of Southern Ukraine into the Russian empire. In the 19th century the milestone was crowned with a double-headed metal eagle which was removed from the portal of the so-called Iron Doors of the Bakhchysarai Palace. After 1917, the coat-of-arms was dismantled by the communist rulers as a symbol of Tsarist feudalism. By re-installing it, the present Russian regime demonstrates that it sees itself in the continuity of the imperialist Tsarist Empire and its geopolitical goals. Source: [https://uk.wikipedia.org/wiki/Катеринівська\\_миля](https://uk.wikipedia.org/wiki/Катеринівська_миля)

# Drastic Building Interventions in the Archaeological Sites of the Acropolis and its Slopes

Tasos Tanoulas, ICOMOS Hellenic



In April and October of 2024, ICOMOS Hellenic issued updated statements on the drastic structural interventions on and around the Acropolis, with a summary of their history since 2020 when the covering of the natural rock of the Acropolis with reinforced concrete and the announcement of a project for covering the entire Acropolis with terraces and constructions made of new materials took place<sup>1</sup> (Fig. 1, 2; see all figures at the end of the paper).

In 2021, the “reconstruction” of the Roman flight of steps was announced by the Hellenic Ministry of Culture (Fig. 3). International outcry resulted in the visit to Athens of an Advisory Mission of UNESCO and ICOMOS representatives in 2022.<sup>2</sup>

The Mission, in its report published in 2023, compromises with the completed works by necessity before a *fait accompli*, proposing only corrections but, for the works planned for covering the rock and the western access, it recommends to the Hellenic side to comply, from now on, with the UNESCO / ICCROM / ICOMOS / ITCN (2002) and other management guidelines of the World Heritage Convention.<sup>3</sup>

ICOMOS Hellenic in press releases and reports communicated to all ICOMOS National Committees and to the World Heritage Center of UNESCO, demonstrated the provocative treatment of the Mission’s report by the Hellenic Ministry of Culture which, arbitrarily presented the Mission’s report as laudatory,<sup>4</sup> at the same time belittling the recommendations for conforming with the guidelines of the World Heritage Convention, and any relevant criticism.<sup>5,6</sup> Even worse is that, building activity is continued in a way that cynically violates the internationally accepted guidelines<sup>7</sup> which the Mission’s report refers to. Bulky reinforced concrete structures disfigure the Acropolis and the area surrounding its foot, which are themselves important archaeological sites.

The pretext is that they serve utilitarian needs, like rainwater drainage network, pathways, ticket souvenir shop etc. (Fig. 4–8). But this excuse cannot in the least justify the fact that the Ministry of Culture broke the rules by carrying out the preparatory work with mechanical equipment, instead of applying the method of systematic excavation, as required by law (Fig. 9). Furthermore, with fast procedures of studies and ap-

provals, important monuments are “fixed”, such as the Agrippa Pedestal (Fig. 10).

Others are to be “restored” in an improper way, starting with nine marble plinths with two extremely valuable inscriptions which, despite the rule that portable inscriptions of value must be displayed indoors, will be “restored” outdoors, in a random location, using over 60% new material (Fig. 11).<sup>8</sup>

The ongoing problem of crowding tourists, instead of being addressed by research and thorough study for the completion of the long due Acropolis and Tourism Management Plans (as suggested by the Joint Mission Report), is used as an excuse for more structural implementations in the western access and inside the Propylaia (Fig. 12, 13).<sup>9,10</sup> In the same line, the President of the Committee for the Conservation of the Acropolis Monuments, whose role is most important for all the implementations on and around the Acropolis, expressed publicly his disrespect for the Advisory Mission and its Report, concluding that, no matter what they suggest, he and his team would still do what they hold as correct.<sup>11</sup>

In addition, there is a complete lack of transparency that prohibits access to the processes of the Ministry of Culture’s agencies, something absolutely incomprehensible for interventions regarding public property of universal importance. Despite this, there is information that the discussions in the Committee for the Conservation of the Acropolis Monuments did not result in changes to the baseline of the studies, summarized below. Therefore, we reproduce at this post, the description of these interventions as summarized in our April 2024 report.<sup>12</sup>

The “re-arrangement of the western access is to cover practically all of the area between the Propylaia, the Nike bastion and the Agrippa pedestal, and the south half of the lower area inside the Beulé Gate (Fig. 3).<sup>13</sup> Moreover, it will not reinstate the Roman forms, but especially in the central passage-way a modern step-form will be applied. The steps will be of marble, but in other cases of steel-grating or cement. The supports will be mostly metal posts resting on the rock and on antiquities. The ancient remains underneath will become practically inaccessible. A stairs-platform-lift will move along sloping rails on the north side of the central passageway, while similar mech-

anism will run along sloping paths or stairways connecting to the south slope. Another mechanism will connect the area at the foot of the Agrippa pedestal with the slope west of the Beulé Gate. Moreover, the Propylaia is destined to serve as a station for disabled-people-vehicles and, at the same time, as a passageway for tourists entering and exiting the Site and, also, as a monument visited by tourists.

The proposed additional structures for protecting the original steps below the colonnade and before the door-wall, additional pavements for the protection of the Propylaia steps and floors (steel slabs, *breathing* carpets) guarantee only permanent damages and disfiguration of the architecture of the monument. Rather than an archaeological site, the Acropolis will look like an exhibition centre of contemporary engineering and of technologies for the accommodation of disabled people." All these implementations are not in conformity with the International Conventions and the normative texts on restoration and conservation of cultural heritage.

In the last press release ICOMOS Hellenic issued in October 2024, which was communicated to the World Heritage Center of UNESCO in October 2024, the risk was stressed of imminent construction activity for covering the entire Acropolis with terraces and constructions made of reinforced concrete and other modern materials, as well as the "reconstruction" of the Roman flight of steps on the west of the Propylaia also with modern materials. I quote: "The Ministry of Culture has ... announced that the cycle of studies and decision-making will be completed in the autumn of 2024, i.e. now. At the moment, despite the lack of transparency, we know that the studies have not yet been forwarded to the Central Archaeological Council, and no Acropolis Management and Tourism Management Plans have been completed and the overcrowding problem is always there. At the same time, in and around the Acropolis, many massive structures have been added."

The most conspicuous among these is a very extensive souvenir shop to the south of and very close to the Areopagus. This is almost completed, it is about 22 meters long and about 9 meters wide, with a flat roof of concrete, supported by many thin metal columns but, in the ground, a huge foundation of reinforced concrete is buried. All of them are incompatible with the principles of the International World Heritage Convention, as recommended in the UNESCO/ICOMOS Advisory Mission Report, the 1964 Venice Charter and the 2003 ICOMOS Charter.

After four years of continuous concerns from the international scientific and public community, as well as from international NGOs, questions are raised by the fact that the issue of the Acropolis is not included on the agenda of the Committee. We would like to know why the Centre is avoiding this issue and on the basis of which competence and authority. One is forced to strongly believe that a serious issue is being raised about the credibility of the Convention and the transparency of the Cen-

tre's functioning which could also be considered as an abuse of power.

The last Press release of ICOMOS Hellenic dated October 6, 2024, was communicated to all the National Committees of ICOMOS. It was also communicated to the World Heritage Center of UNESCO, with a letter addressed to the WHC Director Lazare Eloundou-Assomo. In addition, it was communicated to Ernesto Ottone Ramirez, UNESCO Assistant Director-General for Culture, and Maria Liouliou, project coordinator at the WHC. The letter was signed by Tasos Tanoulas, Architect, MA, PhD, President of ICOMOS Hellenic, Hellenic Ministry of Culture, Acropolis Monuments Preservation Service (1976–2016), Head of the Restoration of the Propylaia (1984–2010). This time we did not receive any response as it was normally done in my previous correspondence with the WHC UNESCO. According to the guidelines, the content of this letter and the press release of the Greek ICOMOS should have been communicated to the Greek Authorities for an update on the issues mentioned in the documents. Has the WHC received answers from the Hellenic Ministry of Culture? If so, does the WHC find these answers satisfactory? In positive case, we would like to know the justification of this opinion.

**Once more, we ask the following actions to be taken:**

- **The "Acropolis, Athens" World Heritage Property must urgently be put on the agenda of the World Heritage Committee.**
- **The World Heritage Committee must request from the Hellenic State Party**
  - a) **To stop all practical activity on the site immediately until the WH Committee has taken a decision about the implemented and planned works.**
  - b) **To submit a Management Plan and a Tourism Plan for the Acropolis, Athens, developed with full participation of civil society and transparent procedures, before any other interventions on the site can be considered.**

## Notes

- 1 <https://world-heritage-watc;h.org/content/wp-content/uploads/2021/06/WHW-Report-2021.pdf>, pp. 21-27 (Accessed 8.10.2024)  
<https://world-heritage-watch.org/content/wp-content/uploads/2022/11/2022-Report-WHW-final.pdf>, pp. 227-231 (Accessed 8.10.2024)
- 2 <https://whc.unesco.org/en/documents/199557> (Accessed 8.10.2024)
- 3 <https://whc.unesco.org/en/documents/199557> (Accessed 8.10.2024)
- 4 <https://www.culture.gov.gr/el/Information/SitePages/view.aspx?nid=4560> (Accessed 8.10.2024)
- 5 <https://www.kathimerini.gr/society/562377325/unesco-poly-kala-prostatemeni-i-akropoli/> (Accessed 8.10.2024)  
<https://www.in.gr/2023/04/19/life/culture-live/unesco-akropoli-protypo-syntirisi-klironomias-se-pagkosmio-epipedo/> (Accessed 8.10.2024)  
<https://www.lifo.gr/now/entertainment/unesco-i-akropoli-protypo-syntirisi-klironomias-se-pagkosmio-epipedo> (Accessed 8.10.2024)
- 6 <https://thepressproject.gr/epistimonas-kai-anthropoi-tou-politismou-stilitevoun-to-neo-tsimentoma-tis-akropolis/> (Accessed 8.10.2024)

- 7 <https://world-heritage-watch.org/content/wp-content/uploads/2023/06/WHW-Report-2023.pdf>, pp. 48-49 (Accessed 8.10.2024)
- 8 [https://www.ucy.ac.cy/aru/wp-content/uploads/sites/251/2024/01/ARU\\_Lectures\\_S.S.\\_2024.pdf](https://www.ucy.ac.cy/aru/wp-content/uploads/sites/251/2024/01/ARU_Lectures_S.S._2024.pdf) (Accessed 8.10.2024)
- 9 <https://www.culture.gov.gr/el/Information/SitePages/view.aspx?nID=4615> (Accessed 8.10.2024)
- 10 <https://www.theguardian.com/world/2023/jul/09/acropolis-greek-tourists-cruise-ships-athens-controls> (Accessed 8.10.2024)
- 11 Transcribed and published at <https://triantafylloug.blogspot.com/search/label/APXITEKTONIKH%20ΔΙΑΛΕΞΕΙΣ>. (accessed 8.10.2024)  
Korres's phrasing: "Even if UNESCO had different views, we are not a protectorate, and so we would do what we hold as correct." ... "our interlocutors from UNESCO were not better than us! They did not have

- the same specialization, not our PhDs, nor our books, neither our range of international science! They are simply UNESCO executives and, in spite of this, they come to judge us! We were humiliated when they came. I knew that I was better [than them], ...
- 12 <https://digitalculture.gov.gr/2021/02/apokathistate-i-ditiki-prosvasi-tis-akropolis/> (accessed 8.10.2024)  
<https://www.theacropolismuseum.gr/synedria/7i-diethnis-synantisi-gia-tin-apokatastasi-mnimeion-akropoleos> (accessed 8.10.2024). Korres, M., Μελέτη Αποκαταστάσεως της Αναβάσεως (Study of the Restoration of the Ascent), Athens 2021.
- 13 <https://www.theacropolismuseum.gr/synedria/7i-diethnis-synantisi-gia-tin-apokatastasi-mnimeion-akropoleos> (accessed 8.10.2024). Korres, M., Μελέτη Αποκαταστάσεως της Αναβάσεως (Study of the Restoration of the Ascent), Athens 2021.

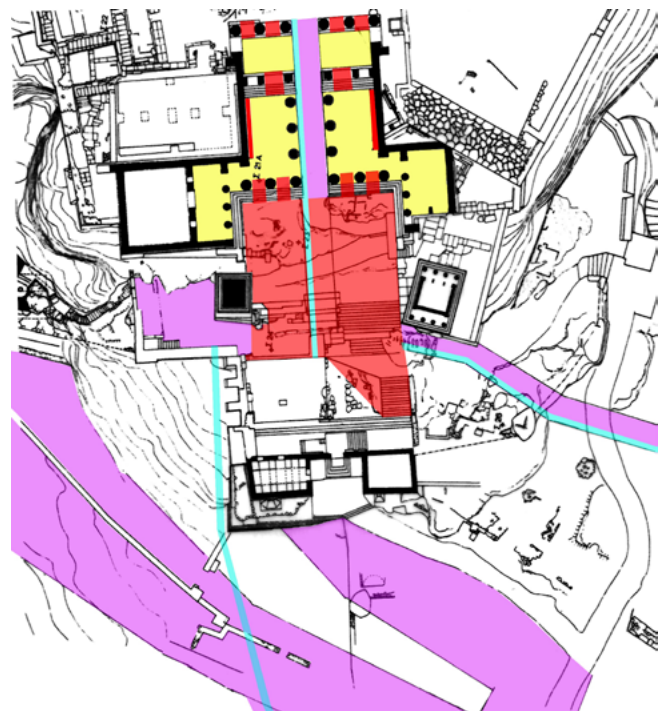
## Illustrations

All illustrations by Tasos Tanoulas



« Fig. 1: Paving the rock to the east of the Propylaea. Above: The metal mesh spread on the white plastic sheet resting directly on the living rock. Below: To the right at the bottom of the picture, the thickness of the reinforced concrete resting on the living rock. (October 2020)

Fig. 2 (below left): Photomosaic plans of the Acropolis (2020). Above, before the reinforced concrete pathways were implemented in 2020. Below, the same plan; in white, the proposed covering of the Acropolis rock between the major monuments for the leveling of the site as it was, according to Korres' view, in the 5th c. B.C.



≈ Fig. 3: Plan of the western access to the Acropolis. Red, indicates new material added in the western access between the Propylaea and the Beulé Gate, including structural implementations in the Propylaea (sheathing original marble steps and stylobates with stainless steel, reconstruction of the benches along the wall of the Ionic Hall). Purple: new material, most probably reinforced concrete, covering the terrace to the north of the Agrippa pedestal, and new pathways to the north, west and south of the Acropolis. Yellow: areas of the Propylaea, at the same time serving as station for disabled people equipment, passageway for going into and out of the Acropolis, visited architectural masterpiece. Blue: stairs-platform-lifts moving along rails on the one side of pathways or steps. (2024)



Fig. 4: Part of the dense network of utilitarian infrastructure. A big plastic pipe buried to the south of the Areopagus, part of the drainage network. View of the ditch looking west. The big pipe is being encased in cement that will bear the fill to reach the surrounding ground level. (March 2023)



Fig. 5: Massive drainage channels, built in reinforced concrete, spreading widely in the archaeological site below the Acropolis. (October 2022)



Fig. 6a: The foundations of the new souvenir shop, with vertical rods for the reinforcement of the walls. At the background the rock of the Areopagus. View from the south. (2024)

Fig. 6b: The new souvenir shop, after completion. View from the south. (2025)



Fig. 7a: A closer view of the foundations of the new souvenir shop from the south-east. Above on the right, the rock of the Areopagus. (2024)

Fig. 7b: The new souvenir shop, after completion. View from the east. (2025)

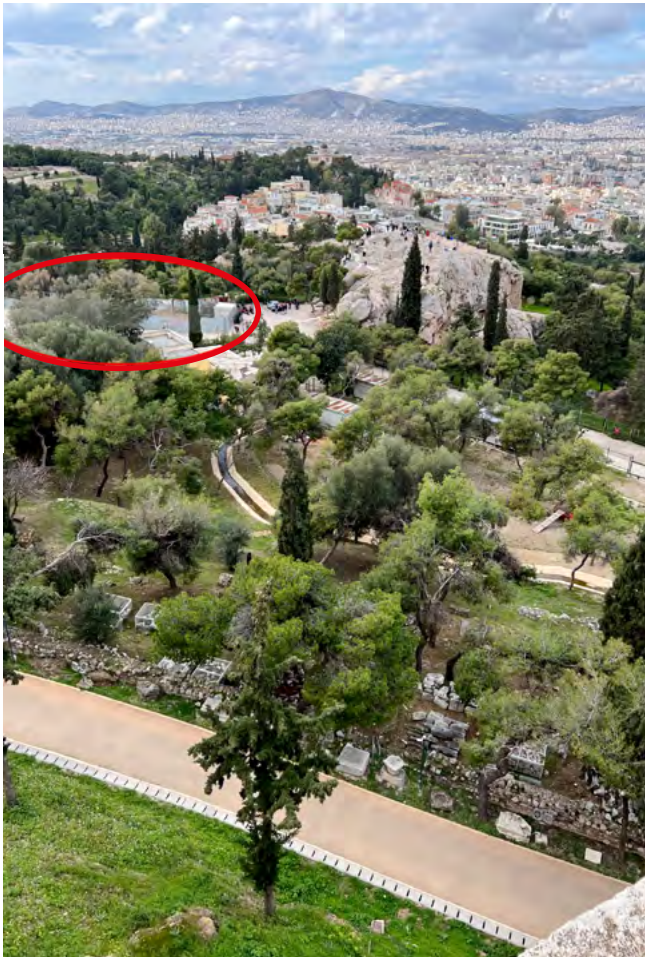


Fig. 8: View from the northwest end of the Acropolis' northern wall, looking northwest. In the image, below: the Peripatos, lined with a covered drainage channel on the south, all constructed with reinforced concrete; in the middle, a winding drainage channel. The drainage network was completed in 2023. Above, in a red ellipse, the foundations of the new souvenir shop and, to the right, the rock of the Areopagus. Further up, the Pnyx and the Observatory. (2024)

Fig. 9a. 9b: Two successive stills from a video showing a mechanical excavator at work, at the area destined for the new souvenir shop. (2023)



Fig. 10a: "Consolidation" of the Agrippa Pedestal. Prestressed rods, framing the periphery of the course on top of the foundation. Two prestressed rods inserted in cylindrical holes that are straight through and enter and exit on the external surfaces of the course. (2023)

Fig. 10b: Detail of the "consolidation" illustrated in the previous picture, with the detail of the south end of the prestressed rod, visible at the middle of the south side of the course. (2023)

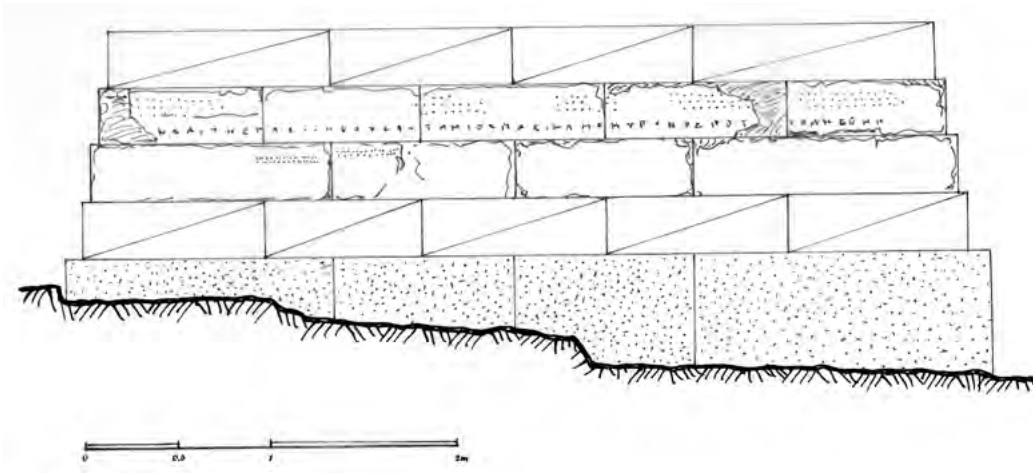


Fig. 11: View of the exhibition of a group of precious inscribed blocks in the open air, instead of being exhibited in a museum, as is the normal procedure for inscriptions. From bottom to top: reinforced concrete base, new marble blocks course, two courses with the original inscribed blocks, crowning course with new marble blocks. Substructure just started.



Fig. 12: Leaving (!) the Acropolis plateau through the Propylaea. (2023)



Fig. 13: Queuing before the ticket booth. (2023)

# Conservation Management Challenges at the Gelati Monastery, Georgia

Mzia Janjalia, Art historian

The Gelati Rehabilitation Interim Committee (GRIC) established in April 2023 under the Patriarchate of Georgia, is aiming at “the recommendations from the 2022 World Heritage Centre/ ICOMOS/ICCROM Advisory Mission and the 2023 World Heritage Committee Decision 45COM7B.54, with a focus on emergency stabilization and the development of a comprehensive conservation program to preserve the Outstanding Universal Value of the Property (OUV). Key actions have focused on preserving the monastery’s historic structures, wall paintings, mosaics, and overall site integrity. One major achievement is the arrangement of the temporary protective roofing for the Church of the Virgin, that is “at the final stage of its arrangement” as stated in the SOC by the State Party for 2024.<sup>1</sup> Despite the vast documentation presented in the SOC Report for 2024, highlighting the impressive international collaborations held by the GRIC, as well as multitude of actions implemented, the management strategies and efficiency of the key actions taken by the GRIC raise serious concerns. Briefly, the urgent issues are related to:

## Overall Temporary Protective Coverage of the Church of the Virgin<sup>2</sup>

The structure of the Church of the Virgin, with partly installed coverage scaffolding, still remains vulnerable to water ingress in contrary to the GRIC’s numerous assertions disseminated through their webpage and local media from 2023 onward (Figs. 1, 2, 3).



Fig. 1: Gelati Monastery Church of the Virgin, Temporary protective coverage scaffolding, April 5, 2025. Photo: Tornike Baratashvili



Fig. 2: Church of the Virgin, Scaffolding and the church roofs covered with snow, February 28, 2025. Photo: Tornike Baratashvili



Fig. 3: Church of the Virgin, Scaffolding concrete and stone slab supports on ground and church structure, October 10, 2024. Photo: Manon Liluashvili

The final project of the scaffolding has never been introduced and data provided by the GRIC regarding the schedule of works, and the structure’s technical details have been inconsistent. Requests by heritage professionals and civil society members for the final project including simulation modeling of wind and rain storms and seismic activities, as well as external reviews with risk-assessment, have gone unanswered.<sup>3</sup> The latter is of special note, as the site of Gelati is windy and rainy and is in a seismic active zone. Of concern are steel beams of the temporary roof scaffolding: an inaccurate arrangement of the beams which lay on window jambs of the cross-arms has caused stone destruction and damage to their 16<sup>th</sup> painted decoration at places

(Figs. 4, 5–6); the beams of the dome-covering segment of the structure are in touch with the drum<sup>4</sup> (Fig. 7). In Gelati, the drum paintings seem to be in poor condition, and in general, drums of domes are considered as the weakest parts of medieval Georgian domed church buildings.

The short note presented in the project indicating that appropriate climate control will be provided inside the scaffolding is too vague, and the requests for detailed project have been ig-



Fig. 4: Church of the Virgin, Effect of the scaffolding steel beam installation on window jamb stone, October 10, 2024. Photo: Eter Edisherashvili



Fig. 5–6: Church of the Virgin, Scaffolding steel beams on painted window jambs, October 10, 2024. Photos: Eter Edisherashvili, Manon Liliashvili

nored. The access areas and working platforms included into the initial proposal later, after the inspection report by the Bureau Veritas, raise concerns regarding relevance to the long-term activities necessary for the roofs and facades: remove tiles and loose material left under roofs during previous rehabilitation works and causing damage to the paintings and building, installation of new roofs, conservation of facing stone and cornices of the building (Fig. 8). The absence of an action plan for removing the loose material is of special concern, as without proper planning and monitoring, with a decisive role of the component to manage the environmental condition, the activity can be of crucial risk to wall paintings and mosaics.<sup>5</sup>

### Wall Painting Conservation Issues, Environmental Condition Component

The amount of activities and work done for mapping and monitoring of the wall paintings in the period of 2023–2024 should be mentioned, as well as several investigations and remedial treatments; the wall painting component has clearly expressed focus on capacity-building.<sup>6</sup> The comprehensive ap-



Figs. 7: Church of the Virgin, Temporary protective coverage scaffolding platform outside the dome touching the dome drum, March 14, 2025. Photo: Tornike Baratashvili



Fig. 8: Church of the Virgin, Project for access areas and working platforms scaffoldings, October 23, 2024. Graphic: SOC Report 2024



proach, a declared basis of the component, is strongly appreciated though several issues raise concerns: lack of clear vision and priority-oriented actions focused on ongoing loss of plaster fragments and paint flakes; lack of comparative analysis of the collected data, as well as of the targeted investigations for diagnostics and risk assessment, thus timely implementation of remedial measures; poorly presented links between research and remedial measures, and lack of detailed information on the conservation materials used; focusing more on failures of previous conservation works than on water ingress. The GRIC was

addressed with details of concerns by heritage professionals several times, and by the Chubinashvili National Research Centre for Georgian Art History and Heritage Preservation with reports from 02/2024 and 11/2024, though the issues have been left without any professional feedback<sup>7</sup> (Figs. 9–10, 11–12).

The vaguest part of the GRIC activities is an environmental condition component: despite the fact of systematic measurements and data-collecting, nothing is known regarding the team working on the component, as well as the responsibilities and measures held for improvement of the status quo. The general statement found in one of the reports - "Collected environmental data indicate highly variable and unstable conditions, with probably few options for mitigation"<sup>8</sup> - is vague and raises even more questions and concerns, since the environmental condition is of key importance for decision-making in all components



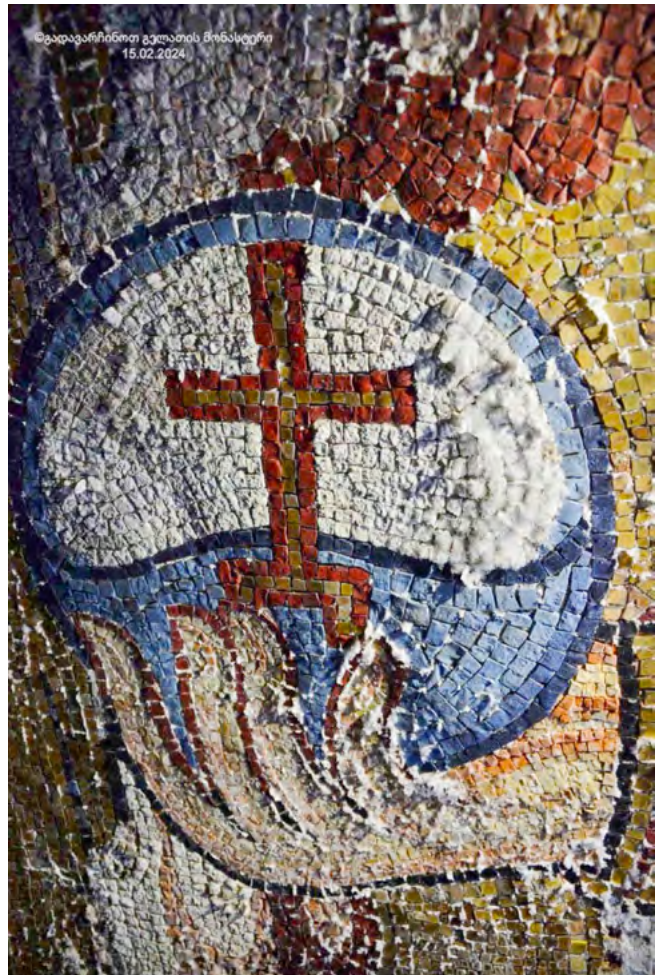
Figs. 9–10: Church of the Virgin, Paintings in the western niche, February 15, 2024 and October 10, 2024.

Photos: Eter Edisherashvili



Figs. 11–12: Church of the Virgin, Paintings in the north-western pendentive, February 15, 2024 and October 10, 2024.

Photos: Eter Edisherashvili



Figs 13–14: Church of the Virgin, Apse mosaics before salt reduction, and paint layer and plaster fragments loss examples, February 15, 2024.

Photos: Eter Edisherashvili



Fig. 15–16: Church of the Virgin, Examples of paint layer flaking, October 10, 2024.

Photos: Eter Edisherashvili

of the conservation project: wall paintings and mosaics having moisture and salts as agents of deterioration, architecture with the need to remove loose material, and environmental control inside the scaffolding (Figs. 13–14, 15–16).

Nothing is known in respect of the developments related to the findings by U. Tonietti and Al. Massari.<sup>9</sup>

### Other Issues of Concern, and Conclusion

The SOC Report states, that “The stages of implementation and further plans are periodically presented to the stakeholders and professional audience through meetings, and the public is gradually informed through social media and other mass communication channels”. In fact, the communication and public awareness strategy chosen by the GRIC is focused on promotion of success and positive messages, and fully ignore problem-oriented discussions with heritage professionals and civil society members. Despite numerous requests nothing is known about the holistic Conservation Programme even for the Church of the Virgin, and St George Church still remains out of focus (Fig. 17–18).<sup>10</sup>



Fig. 17–18: Gelati Monastery, Church of St George building, and paint layer and plaster fragments loss example, October 10, 2024.

Photo: Mariam Ebanoidze

Nothing is known about the positions of the GRIC’s Advisory Boards’ members on the issues of concern. The lack of sustainability in conservation actions held by different units representing the State Party from 2020 is obvious.<sup>11</sup> The publication of a significant part of the documentation on the GRIC’s website is appreciated, though none of the 3 reports with critical analysis and recommendations provided by the Chubinashvili Centre can be found, though the latter is indicated as a partner institution on the website and SOC Report.<sup>12</sup>

In this regard, the GRIC’s identification of stakeholders is notable: “With respect to the 8th paragraph of the Decision, it should be noted that... the GRIC is fully coordinated with all relevant stakeholders and responsible authorities, including the National Agency for Cultural Heritage Preservation of Georgia”.<sup>13</sup> The European Heritage Strategy for the 21<sup>st</sup> Century includes professionals, NGO’s, the voluntary sector and civil soci-

ety among heritage stakeholders,<sup>14</sup> and The Faro Convention,<sup>15</sup> includes all concerned citizens in the list. It is worth noting that The Faro Convention has been signed by Georgia, and is widely referred to on forums.<sup>16</sup> It would be important that strategies and conventions have an impact on real cases, e.g. on the Gelati case, where from 2020, after the visible failure of the roof's rehabilitation activities, close attention of groups of civil society, heritage experts and investigative journalists is ongoing.<sup>17</sup>

The idea of the establishment of the Gelati Committee was strongly supported by heritage professionals in 2022, though the GRIC founded under the most influential institution of the country and consolidating all tasks and responsibilities under a single structure replicating that of the National Agency of Heritage Preservation of Georgia (NAHPG), in fact is adding to the problems of the management system in the field. The NAHPG is carrying merely a registrar role, and the World Heritage Protection Council of Georgia has never been a role-player in the field. The GRIC, using the authority of the Patriarchate, endeavors to discredit the heritage stakeholders expressing critical thinking. Permanent reference by the GRIC to several national and international partnerships and to the communication with the World Heritage Centre (WHC) creates even more risks, as the lack of open governance results in the loss of trust in the approaches declared and the bodies formally involved. Thus the WHC's in-depth interest in management challenges, and encouragement of good governance principles would be of great benefit.

## Addendum

On February 18<sup>th</sup> the GRIC has published two important documents:

1. *the 23–27 September 2024 RMM Report and*
2. *the ICOMOS Technical Review on the Implementation of the sub-project: "Installation of the Support Metal Structure for the Temporary Roofing of the Dome of the Cathedral of the Nativity of the Virgin".*<sup>18</sup> The latter, the *ICOMOS Technical Review*, is of concern not only for the reason that it welcomed the passing of beam in the 16<sup>th</sup> c. bricked-up and painted window, with an inaccurate analysis: "supporting platform is connected to the dome through power beams extending from the internal scaffolding and crosswise passing through the windows of the dome (without relying on or touching the dome's structure)". Mainly, its final acknowledgment "for the quality of the detailed construction project" seems to be strange in regard with the actual situation. We believe that the risks related with the scaffolding structure should be re-assessed; in this regard the comment of the RMM Report should be considered as well: „No information was provided regarding the state of the crack on the dome extrados meridian" (Figs. 2, 3, 4, 5–6, 7, 19).

We firmly request the seismic modeling of the scaffolding structure in order to create clear understanding of risks for the paintings and for the body of the dome in case of seismic activities. The elaboration of detailed projects on the structure's water runoff and ventilation systems is also of great importance.

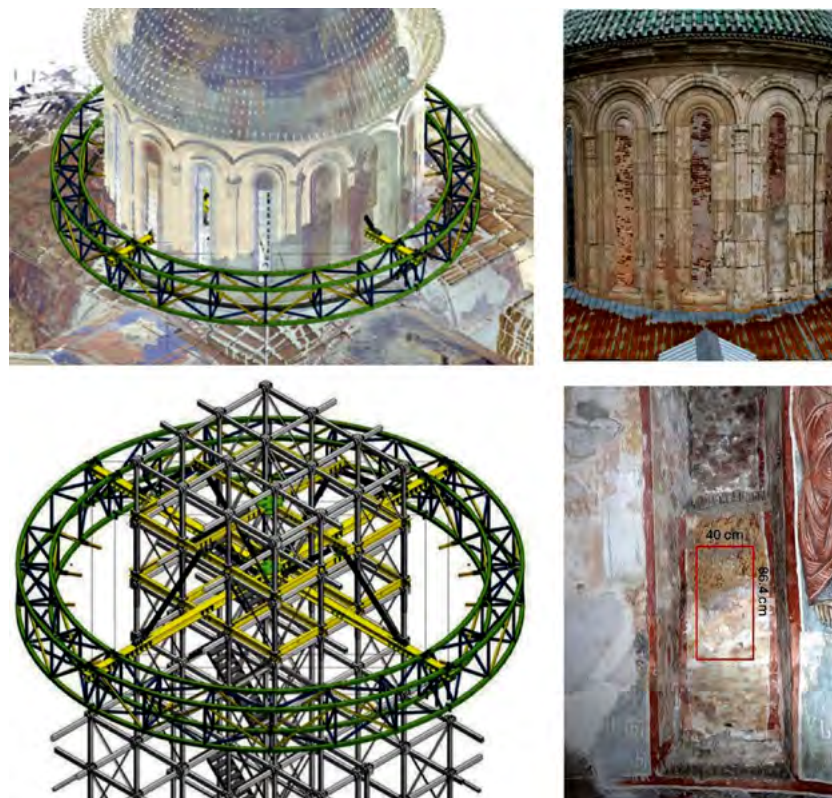


Fig. 19: Church of the Virgin, Sub-project for removal of wall painting fragment in the dome drum window, January 2025.

Photo: ICOMOS Technical Review

The main conclusions of the RMM Report regarding the painting conservation, environmental component and conservation management issues principally coincide with the concerns and considerations of the Georgian heritage professionals. Yet, it should be noted that the phase of removing loose material clearly seems to be of urgent risk for the paintings and mosaics, and the lack of information on the planning and operating issues of this phase, as well as on the participation of environmental and structural engineers in its implementation, raise concerns (an absence of environmental engineer in the project is of general concern).

Of course, the core of all problems at Gelati is "the need for a professional decision-making leadership on crucial conservation problems regarding priorities, timing and modalities of interventions at each stage of intervention, combined effectively in a holistic manner", as stated by the RMM. However, this extremely important consideration cannot be found in the main conclusions of the

Report. In this regard, it should be highlighted also that the real improvement of the existing management and methodological issues will be impossible without the review of the 'all-included' management system, and without the establishment of open and good governance, allowing the presence of an independent monitoring and scientific participation at national level. At

last, it should be stated once more that at present, the National Agency for Cultural Heritage Preservation of Georgia being fully politicized and out of professional discourse, is under the most severe crisis in its history; and the World Heritage Protection Council of Georgia in its present form could not have any but formal significance for the developments.

## Notes

- 1 The SOC Report by the State Party 2024 is signed by the Deputy Chair of GRIC. It presents 11 folders of Annexes with numerous documents and references to the documents published on GRIC web-page. See <https://whc.unesco.org/en/list/710/documents/>; <https://gelatirehabilitation.ge/en/documents>
- 2 WHC/21/44 COM 7B.47; WHC/23/45.COM/7B.Add.2
- 3 SOC Report, Annex 1.
- 4 "The spatial frame of power scaffolding is a temporary purpose building the structures of which are calculated for vertical static loads and are not prepared to receive horizontal loads. In case of the presence of horizontal forces (seismic, wind) the horizontal movement of the power scaffolding should be limited; in our case, retaining structures should be used, which will be leaned against the walls of the temple neck by the so-called "dampers" (material: rubber, caoutchouc, or other similar material, which will not damage the temple walls). The seismic force itself – due to the low value of the seismic masses of the scaffolding is insignificant and any kind of damage will not occur to the temple structure. The same can be said about the effects of wind." (Power scaffolding explanatory note, SOC Report, Annex, 1.1, <https://whc.unesco.org/en/list/710/documents/>)
- 5 See the interim report on mosaics with clear cautions on risks: "To the point that it was possible to investigate the interior of the structure with an endoscopic probe 5.5 mm thick and 2 meters long and identify, inside the mosaic, areas of strong air circulation, water passage and the presence of animals and biological attacks. Another 35% of detached areas is located in the upper section of the vault which means in the area of maximum physical stress... Above all, the recommendation is not to take any risks regarding the stresses to which the mosaic may be subjected. To be clear, the structure of the apse and the mosaic should not receive any static or vibrational stresses until an integrated mosaic-structure safeguarding system independent of the scaffold is put in place", SOC Report, Annex 3.3, <https://whc.unesco.org/en/list/710/documents/>
- 6 SOC Report, Annexes 2,10, <https://whc.unesco.org/en/list/710/documents/>; <https://gelatirehabilitation.ge/en/documents#>
- 7 Despite Chubinashvili Centre report, failing condition of the painting in the western niche did not get relevant focus by the GRIC, and in 2024 July-August, after the plaster collapse, the complete detachment and removal for safe storage of the painting fragment was decided; similar approach was shown towards the north-west pendentive painting, where the remedial measures were held after the plaster collapse. The approach of the team to the areas where the Italian-Georgian team worked in 2021–22 remains of special concern. In general, we strongly believe that the short statements on the condition assessment of paintings should not be presented as postulates and should not be followed without open professional discussions and wide consensus: "Nothing can be done to mitigate the problems of paint layer exfoliation at this stage (any intervention at this stage would be likely to cause more harm)", See "Action Plan for wall painting critical areas, 1-23 December 2023"; "In critical cases, the combined conditions are so extreme that severe limitations are placed on treatment possibilities and outcomes. It should be highlighted that, because of the inherited conditions and deterioration circumstances, some of the areas might not be saved. This is highly regrettable, but needs to be acknowledged as a reality of the situation... However, it must be emphasised again that given the extreme state of some of the areas of painting, it may be impossible to save. The wall painting conservation group tries its utmost, but inherited constraints must be acknowledged", See "Wall painting condition monitoring July-August 2024". <https://gelatirehabilitation.ge/en/documents#>; <https://whc.unesco.org/en/list/710/documents/>
- 8 SOC Report, Annex 2,6 Remedial treatments phase 2, <https://whc.unesco.org/en/list/710/documents/>
- 9 <https://gelatirehabilitation.ge/en/documents>; <https://gelatirehabilitation.ge/en/documents>
- 10 This can be explained by the fact that even issues concerning Church of the Virgin are not solved yet, though appropriate interest towards St George church, with similar roof problems and ongoing deterioration of paintings, could be at least used for better understanding of the conservation problems of the Church of the Virgin.
- 11 From 2020, the State party has been presented by the: National Agency of Heritage Preservation, Ministry of Culture and GRIC.
- 12 The Chubinashvili Centre has provided Reports on: the temporary coverage scaffolding proposal - 09-2023; and on conservation issues - 02-2024 and 11-2024.
- 13 SOC Report 2024, <https://whc.unesco.org/en/list/710/documents/>
- 14 <https://www.open-heritage.eu/the-european-cultural-heritage-strategy-for-the-21st-century/>
- 15 <https://rm.coe.int/1680083746>
- 16 <https://rm.coe.int/presentation-application-of-faro-principles-in-georgia-an-overview-cre/1680a454de>
- 17 NGO working in Kutaisi "Europe our House"; heritage professionals using the FB page "Save The Gelati Monastery" as a platform; and "iFact" investigative journalists are following the process. See <https://www.facebook.com/profile.php?id=100064392173206>; <https://www.facebook.com/groups/438106840500226>; <https://ifact.ge/>
- 18 <https://gelatirehabilitation.ge/en/documents#>

# The Current Reality in Palmyra After Liberation and the Fall of the Assad Regime<sup>1</sup>

Hasan Ali, Isber Sabrine, Mohammed Fares



Palmyra was inscribed on the World Heritage List in 1980 due to its well-preserved Roman ruins, before its destruction in 2015. Palmyra holds significant symbolic value for the Syrian people, as it is part of their living memory and a source of pride.<sup>2</sup>

On December 8, 2024, Syria achieved freedom with the fall of the Assad regime, which had both positive and negative impacts on the future of archaeological sites, particularly Palmyra. On the negative side, the resulting security vacuum increased the risk of looting and vandalism, necessitating intensified efforts by the current administration to protect the archaeological site. Conversely, the change in leadership marked the end of a corrupt era, potentially facilitating the protection, reconstruction, and restoration of Palmyra's heritage and its reestablishment as a tourist destination in Syria. During a field visit by a member of the Palmyrene Voices initiative, Mohammed Fares, on January 5, 2025, initial observations were made to assess the current state of the site.

## Palmyra Archaeological Museum

According to the field survey, the museum garden contains numerous heavy statues and funerary beds, most of which are shattered or broken, while some remain in good condition. The structural integrity of the museum has been compromised by aerial bombardment, resulting in holes in the roof that have been temporarily sealed with metal sheets. The current exhibits consist of broken pieces, with some artifacts having been transferred to the Damascus Museum prior to ISIS's takeover and not yet returned. The museum is currently not operational, but guards from the Directorate of Antiquities and some local volunteers are protecting it without support from the new administration, despite the pressing need for such assistance. Additionally, there is no administrative staff overseeing the museum at present. (Fig. 2)

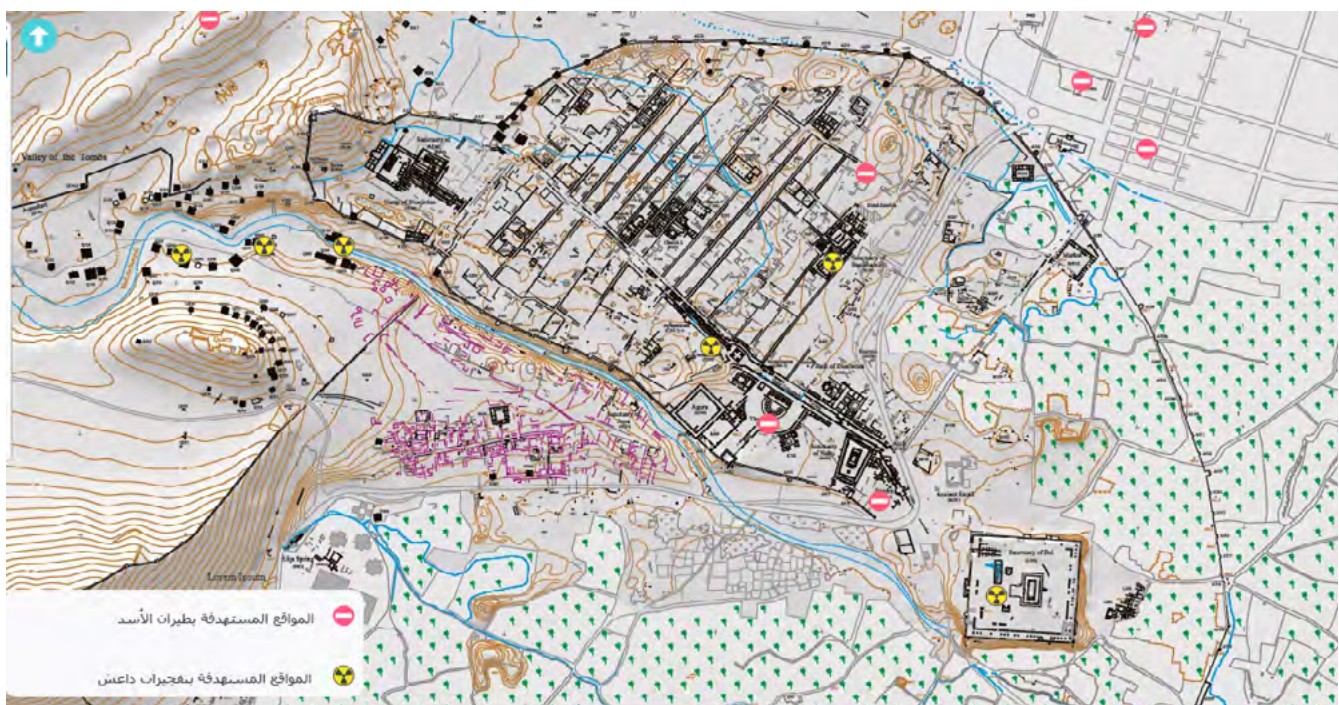


Fig. 1: Landmarks targeted by ISIS (yellow) and the Assad regime's warplanes (red)

Map: iDAI. world, 19 / 7 / 2015. Edited by Hasan Ali

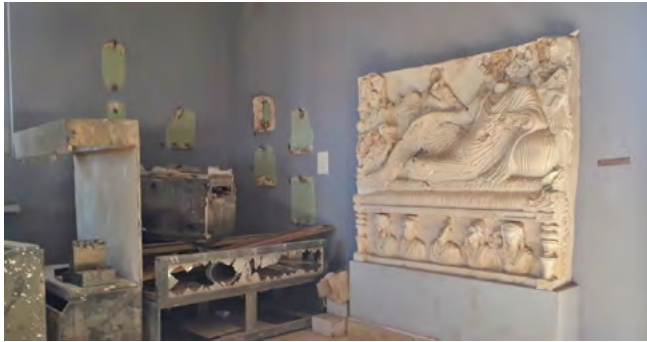


Fig. 2a–c: The current state of the Palmyra Museum and the artifacts inside.  
Photos: Mohamed Fares 2025

## Palmyra Castle (The Ayyubid Castle)

The castle's walls were damaged, and parts of its upper towers, particularly on the northern, eastern, and southern sides, collapsed due to airstrikes during ISIS's control of the city in 2015. Access to the interior of the castle is difficult because of collapses at the entrance. Evidence of military positioning was found, including thick sand berms and some block buildings equipped with artillery that were abandoned by Assad's forces during their retreat (Fig. 3).

## The Archaeological Site and the Ancient City

### 1) Temple of Baalshamin

The temple was destroyed by ISIS on August 23, 2015, turning it into rubble and ash. No significant documentation or restoration efforts have been conducted at the site.<sup>3</sup> A theoretical study titled "The Temple of Baalshamin: A Workshop on Palmyra's Vision After Liberation," supervised by Dr. Abeer Arqawi, was conducted to document the temple's history, describe its architectural elements and artifacts, and identify the missions that worked on the building since its discovery (Fig. 4).<sup>4</sup>



Fig. 3a and b: Palmyra Citadel before and after the bombing.  
Photos: Hasan Ali (2006), Mohamed Fares (2025)



Fig. 4a and b: The temple of Baalshamin before and after the bombing.  
Photos: Hasan Ali 2007, Mohammed Fares 2025

### 2) Temple of Bel

The sanctuary of the Temple of Bel was destroyed by ISIS on August 30, 2015, reducing it and the surrounding colonnade columns to rubble. Only the entrance supports to the cella remain, while the temple's outer walls are relatively intact, albeit with some damage to their columns, stones, and decorative elements.<sup>5</sup> In 2016, the Russian Academy of Sciences attempted

to create a digital 3D model of the temple as a preliminary step toward its future reconstruction (Fig. 5).<sup>6</sup>



Fig. 5a and b: The sanctuary of the temple of Bel before and after the bombing.  
Photos: Hasan Ali 2011, Mohammed Fares 2025

### 3) Arch of Triumph and the Grand Colonnade

A narrative circulated among local residents on October 4, claiming that ISIS militants had blown up the Arch of Triumph and three columns along the Grand Colonnade connecting the



Fig. 6a and b: The triumphal arch before and after the bombing.  
Photos: Hasan Ali 2011, Mohamed Fares 2025

Arch to the Tetrapylon.<sup>7</sup> However, a field inspection of the fallen stone pieces from the Arch does not indicate an explosion. It is more likely that the stones fell due to an airstrike nearby.

Additionally, sorting and numbering of the fallen pieces from the Arch of Triumph was observed, likely conducted by Russian entities in preparation for restoration efforts. Meanwhile, illegal excavation activities were noted along the Grand Colonnade, which were not present before 2015 (Fig. 6, 7).



Fig. 7a and b: The Grand Colonnade Before and After Secret Digging,  
Photos: Hasan Ali 2008, Mohamed Fares 2025

### 4) The Tetrapylon

Field inspections of the four structures, known as the Tetrapylon, revealed that they were subjected to explosions, reducing their columns to a pile of rubble and scattered stone fragments. There are no indications of any documentation or numbering of the stones (Fig. 8).

### 5) The Theater

On July 3, 2015, ISIS carried out a mass execution inside Palmyra's archaeological theatre, claiming that the victims were members of Assad's forces. Field inspections of the Theater revealed a collapse in its façade (the upper section of the orchestra). The large fallen stone blocks do not indicate the use



Fig. 8a and b: The four galls before and after the bombing.  
 Photos: Hasan Ali 2011, Mohamed Fares 2025

of TNT, which ISIS commonly used to destroy Palmyra’s landmarks. Instead, it is likely that the damage resulted from a missile strike. Joint Syrian-Russian efforts were made to restore the



Fig. 9a and b: The Palmyra theater before and after the bombing of the façade of the theater.  
 Photos: Hassan Ali 2011, Zaher Al-Saleem 2024

façade of Palmyra’s Theater. A digital 3D model of the Theater was created, and sorting and numbering of the fallen stones were conducted in preparation for restoration (Fig. 9).<sup>8</sup>



Fig. 10a–c: The Diocletian camp before and after the secret sabotage.  
 Photos: Hasan Ali 2011, Mohamed Fares 2025, Mohamed Fares 2025

### 6) Western Fortifications and the Camp of Diocletian

At the top of the hill known as “Jabal al-Husayniyat,” a recently abandoned military position was found. However, the more significant issue is the presence of extensive clandestine excavations at the site of the Camp of Diocletian. A relatively large area appears to have been manually excavated, exposing architectural remains, including stone foundations and fragments with various decorations from funerary beds and some funerary busts. What raises questions is that the excavation site is located near the military fortifications of Assad’s forces at the top of the hill, suggesting that these acts of digging and destruction were carried out under the supervision of regime forces (Fig. 10).

### 7) Western Tombs

According to media reports and the local researcher Hassan Ali, who observed from the roof of his house, ISIS militants detonated numerous tombs in August 2015, particularly the tower tombs. Approximately ten tower tombs were destroyed, including the Tomb of Elabel and the Tomb of Atenatan, the latter being the oldest tower tomb dating back to 9 BCE.<sup>9-10</sup> Additionally, several house and underground tombs were also blown up. Field inspections revealed that these tombs have mostly been reduced to piles of rubble, except for a few that remain

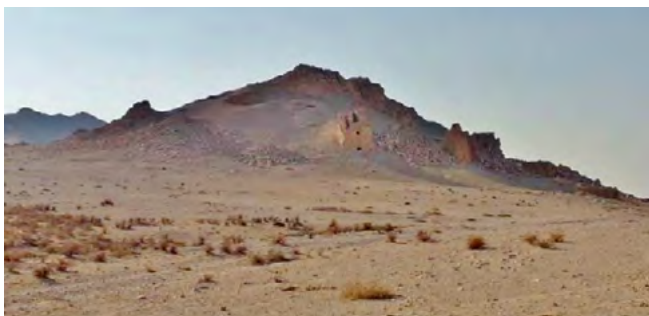


Fig. 11: Southwestern burials before and after the bombing.  
Photos: Hasan Ali 2007, Mohamed Fares 2025, Mohamed Fares 2025

in relatively good condition and were not subjected to explosions (Fig. 11).

### 8) Northern Tombs

In 2017, a Russian base was established near the camel racing track in the area of the northern tombs. This involved levelling and clearing large areas to construct a military base and a helicopter landing pad, as well as fortifications for military points around the base. Additionally, the area was cleared to create earthen berms on both sides of the supply road connecting the base within the archaeological zone, linking all military units together. Currently, these sites have been vacated, and there is no military or civilian presence in the area. However, clandestine excavation activities have been observed inside the northern walls (Fig. 12, 13).



Fig. 12a and b: The northern burials before and after the establishment of the Russian base.  
Photos: Hasan Ali 2011, Mohamed Fares 2025

## Recommendations and Proposals

- The documented buildings and the rest of the archaeological city, spanning approximately 12 square kilometers including the oasis, require intensive efforts. A specialized team should be deployed to accurately document the current state, assess the extent of damage, evaluate the incurred losses, and re-document and register the remaining preserved architectural elements. The Palmyrene Voices team, in collaboration with the Syrian Directorate-General of Antiquities and Museums, is capable of completing this task if adequate support is provided.
- The residential city requires a damage assessment and comprehensive rehabilitation of infrastructure and housing to



Fig. 13: A secret excavation near the northern walls from the inside.  
Photo: Muhammad Fares 2025

enable residents — who form the third pillar of heritage alongside cultural and natural heritage — to return to their homes.

- The current situation demands urgent action from official authorities, humanitarian organizations, and civil society groups to meet the needs of these residents. This includes providing security forces to protect the city and organize resident affairs, teams to remove landmines and remnants of weapons, as well as access to water, food, healthcare, education, job opportunities, and financial aid (potentially in the form of supportive loans) to repair homes and encourage others to return to Palmyra.
- Syria's political change and the victory of revolutionary forces following Assad's fall on December 8, 2024, should prompt the new Syrian administration to reevaluate previous priorities and plans, particularly those involving joint projects with Russia. These projects appear to obscure Russian airstrikes' role in destroying Palmyra's cultural heritage. It is essential to seek more equitable local and international partnerships for rehabilitating and restoring the city.
- Ensure protection of Palmyra's archaeological sites to prevent looting and vandalism.
- Authorities involved in restoring cultural heritage must also contribute to rebuilding the residential city to assist the local community in resettling in Palmyra.

- Develop laws and strategic plans that safeguard this heritage while criminalizing any harm or exploitation of it.
- Raise awareness among Palmyrenes about the value of their cultural heritage. Implement public policies aimed at highlighting the role that both tangible and intangible cultural heritage play in society. Integrate its preservation into planning programs for decision-makers while enhancing opportunities for its sustainability.
- Involve the local community in decision-making processes that will determine Palmyra's future. Sponsoring entities must consider their perspectives on how to restore their heritage while encouraging displaced residents to return so they can actively protect their legacy.

## Notes

- 1 This paper is a part of a more comprehensive report on Palmyra which can be found at <https://palmyrenevoices.org/the-reality-of-palmyra-before-and-after-the-fall-of-the-assad-regime/>
- 2 Ali, Hasan, 2023. Palmyra in the 20th century and the present: A historical and a community archaeology study, supported by Steward of Cultural Heritage (SoCH) GERDA HENKEL Foundation, Patrimoine Programme and Deutsches Archäologisches Institut, Ege Yayınları, İstanbul.
- 3 <https://ar.unesco.org/syrian-observatory/news/يرثأال-رمدت-عقوم>
- 4 [https://www.researchgate.net/profile/Omar-Di/publication/313576520\\_baa%27I\\_shamin\\_temple/links/589edcd145851598bab488e0/baal-shamin-temple.pdf](https://www.researchgate.net/profile/Omar-Di/publication/313576520_baa%27I_shamin_temple/links/589edcd145851598bab488e0/baal-shamin-temple.pdf)
- 5 <https://ar.unesco.org/syrian-observatory/news/قباسال-عچرمال>
- 6 <http://syrianheritagerevival.org/ar/%D9%85%D8%B9%D8%A8%D8%AF-%D8%A8%D9%84/>
- 7 <https://web.archive.org/web/20151008125156/http://www.aljazeera.com/news/2015/10/isil-blows-arch-triumph-syria-palmyra-151005033238445.html>
- 8 <https://www.almayadeen.net/arts-culture/%D8%A8%D8%AF%D8%A1-%D8%A7%D9%84%D9%85%D8%B1%D8%AD%D9%84%D8%A9-%D8%A7%D9%84%D8%AB%D8%A7%D9%86%D9%8A%D8%A9-%D9%85%D9%86-%D8%A3%D8%B9%D9%85%D8%A7%D9%84-%D8%AA%D8%B1%D9%85%D9%8A%D9%85-%D9%88%D8%A7%D8%AC%D9%87%D8%A9-%D9%85%D8%B3%D8%B1%D8%AD-%D8%AA%D8%AF%D9%85%D8%B1-%D8%A7%D9%84%D8%A3%D8%AB%D8%B1%D9%8A>
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# The Role of Local Communities in the Management of Petra, Jordan

Samah Jazi Faisal Al Khasoneh and Maria Elena Ronza,  
Sela for Training and Protection of Heritage



Petra, a UNESCO World Heritage Site since 1985, is renowned for its stunning rock-cut architecture and archaeological significance. Yet, beyond its monumental facades lies a story deeply intertwined with the lives of local communities, such as the Layathneh, Amarin, Bdul, and Saidiyyin tribes.

The Petra region encompasses six communities, four of which – Wadi Musa, Taybeh, Beidha, and Um Sayhun – are situated in close proximity of the archaeological park. Each village carries its unique history and tribal identity, contributing to the socio-cultural fabric of the Petra Region.

The relationship between those communities and the archaeological site historically was not always an easy one. Both the Bdul and the Amarin, for example, experienced forced displacement that disrupted traditional knowledge systems and severed their cultural ties to the land. Furthermore, the neglect of their voices in site management and decision-making processes has marginalized their contributions, both economically and socially. The rapid sociocultural changes and the growing touristification of Petra, as recognized by UNESCO, have exacerbated these issues, transforming the site into a commodified tourist destination at the expense of its living heritage.

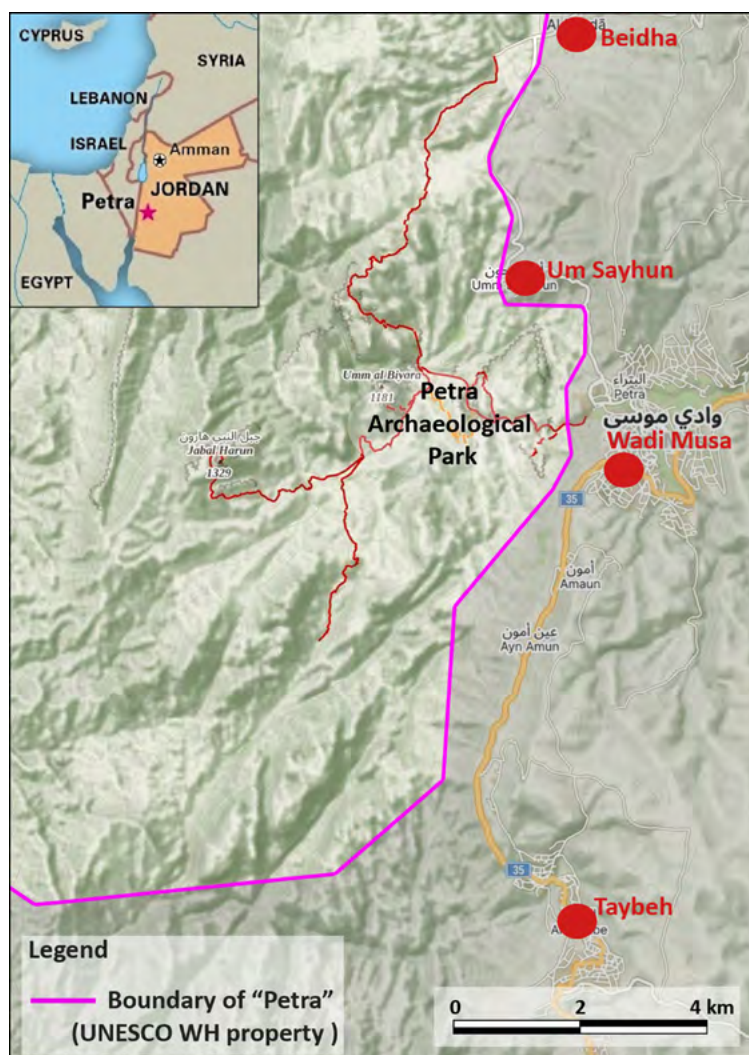


Fig. 1: The four communities surrounding the Petra Archaeological Park. Map: Martin Lenk

This report examines the critical role of local communities in Petra, the challenges they face due to their marginalization, and the efforts made to address these issues. It advocates for a more inclusive and participatory approach to site management, emphasizing the need to preserve cultural identities, integrate traditional knowledge, and ensure equitable benefits from Petra's tourism industry. Through these measures, Petra can be safeguarded not only as a historical treasure but also as a vibrant living heritage site for future generations.

## Local Communities and Petra: A Historical Perspective

The communities living in the surroundings of the site of Petra primarily reside in four villages (Comer and Farajat, 2012):

- Wadi Musa: Serving as the main gateway to the archaeological park, Wadi Musa is the tribal home of the Layathneh community. It is the largest village in the region and hosts the primary tourism infrastructure and services, making it the hub of economic activity in the area.
- Taybeh: Located southeast of the Petra Archaeological Park, Taybeh is the region's second-largest village. It has been home to the Al-Shrur, a sub-tribe of the Layathneh, since the early 20<sup>th</sup> century.

- Beidha: Situated 7 kilometers from the Petra Archaeological Park, Beidha is the tribal home of the Amarin community. Historically, the Amarin lived in caves and black tents in the Siq al-Barid area. Between 1985 and 1986, the government resettled them in a newly constructed residential area.
- Um Sayhun: Adjacent to the northeastern boundary of the Petra Archaeological Park, Um Sayhun was built by the government between 1985 and 1987 to resettle the Bdul tribe, who used to live in caves within the main archaeological site.

These communities play a vital role in the cultural and historical landscape of the Petra region and represent the identity of Petra that should be preserved.

### The Bedou in Petra

The Bedouin “Bedu” communities of Petra, including the Amarin, Bdul, and Saidiyyin tribes, have historically lived in Beidha, Um Sayhun, and Dhlagha. These tribes, who originally resided in tents and caves, developed a lifestyle that allowed them to survive in harmony with the landscape for centuries. The landscape and the archaeological site were not just a home but an integral part of their identity, culture, and traditions. In recognition of their unique way of life, the cultural space of the Bedouin in Petra was inscribed on the Representative List of the Intangible Cultural Heritage of Humanity in 2008 (Bille, 2012; UNESCO, n.d.).

Petra itself is celebrated for its remarkable rock-cut architecture and historical significance. This recognition brought international attention to the site, emphasizing its value as an archaeological and cultural treasure.

However, this recognition has been undermined by actions that disregard the Bedouin’s deep cultural and historical ties to Petra. In the mid-1980s, the government forcibly relocated these communities from the caves to purpose-built villages, such as



Fig. 2: View of Um Seyhun village with Petra’s mountains in the background.

Photo: Mohammad Al Bdoul

Um Sayhun (Shoup, 1985; Bille, 2012), without considering the buffer zone of the World Heritage Site, under the pretext of site preservation. This forced displacement severed their direct connection to their ancestral lands, disrupted their traditional way of life, and ignored the need to integrate their cultural heritage into the broader framework of site management.

Neither the government nor UNESCO has adequately addressed Petra as a living heritage site that incorporates the existence and culture of its indigenous communities. Efforts to preserve the archaeological park have often excluded the Bedouin, sidelining their role as stewards of the site and failing to safeguard their intangible cultural heritage (Mickel and Knodell, 2015). This approach overlooks the need to balance conservation and management with the recognition and integration of local traditions and identities.

Despite the inscription of their cultural space on UNESCO’s list, there has been little meaningful action to protect or promote the Bedouin’s heritage. Policies have focused on site conservation in isolation rather than embracing a holistic approach that recognizes the coexistence of the physical and cultural dimensions of Petra. As a result, the Bedouin’s identity, knowledge systems, and cultural practices face erosion, threatening the very elements that make Petra a unique and vibrant world heritage site.

Addressing these oversights requires recognizing the Bedouin as active participants in the site’s heritage and developing inclusive strategies that integrate their presence and culture into its management. Without such measures, the full story of Petra as a living heritage site remains incomplete.

### The current state of inclusion

The management of Petra under the Petra Development and Tourism Region Authority (PDTRA) has long been characterized by the limited representation of local communities in decision-making processes. While efforts have been made to involve these communities through consultations, such initiatives often appear tokenistic and fail to provide locals with genuine influence over the management of their heritage. This exclusion has exacerbated economic marginalization, with many locals relying on Petra for their livelihoods as guides, sellers, or service providers. Despite their dependence on the site, the economic benefits of tourism are predominantly captured by external stakeholders, leaving the local population with limited opportunities and low-paying jobs.

The situation has been further compounded by rapid sociocultural changes and the “touristification” of Petra, both recognized by UNESCO as significant threats to the site and its local communities. These processes have transformed Petra into a commodified tourist destination, sidelining the cultural and social dimensions that make it a living heritage. The relocation

of local Bedouin communities from Petra has intensified these challenges, creating a profound cultural disconnection. This displacement disrupted traditional knowledge systems, severed historical ties to the land, and undermined the Bedouin's role as stewards of the site. The alienation of these communities has also led to reduced engagement in conservation efforts, leaving Petra increasingly vulnerable to threats such as over-tourism and environmental degradation.

Moreover, the neglect of community voices has fueled growing frustration and tensions between locals and authorities, undermining collaborative efforts for site management. Tensions reached a breaking point at the end of 2023 and during 2024 when a series of confrontations erupted between local Bedouin communities, particularly the Bdul tribe, and the authorities. In an attempt to enforce strict regulations within Petra, the police forcibly removed informal tourism activities. This heavy-handed approach provoked riots, with the Bedouin demanding job opportunities, fair inclusion in Petra's management, and a chance to benefit from the site.

This unrest has further highlighted the critical loss of traditional knowledge about Petra. Younger generations, alienated from their heritage, are increasingly discouraged from engaging with it, threatening the continuity of valuable indigenous practices. These developments underscore the urgent need for a more inclusive approach to Petra's management, one that ad-

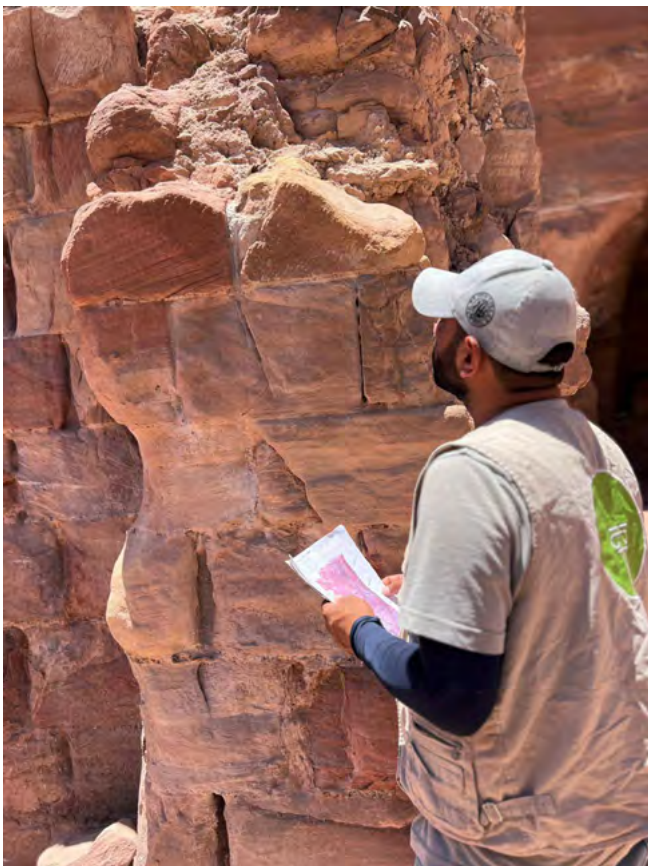


Fig. 3: Local trainees conducting a condition assessment of the site.

Photo: Mohammad Al Bdoul

resses the underlying sociocultural and economic issues. Without meaningful efforts to integrate local voices, preserve cultural identities, and ensure equitable benefits from tourism, the challenges facing Petra will continue to escalate, jeopardizing both the site's physical preservation and its essence as a living heritage.

### What has been done

The 2019 Petra Integrated Management Plan highlights the local communities as essential stakeholders in ensuring the survival and sustainability of Petra's ecosystem. It advocates for a participatory approach, beginning with their involvement in the plan's preparation and continuing with the development of new site management strategies and plans. Petra Development and Tourism Region Authority (PDTRA), in collaboration with Sela for Training and Protection of Heritage, has taken significant steps to support this vision. A comprehensive capacity-building program was established to train local communities in the documentation, conservation, and rehabilitation of the site.



Fig. 4: Public lecture as part of the local community awareness-raising campaign.

Photo: Mohammad Al Bdoul

Additionally, a wide-reaching awareness campaign was launched to foster a deeper understanding of heritage conservation among the local population.

Despite these efforts, further actions are crucial to fully integrate the local community into Petra's management and conservation processes. This includes initiatives to safeguard their cultural heritage and strengthen their identity within the context of the site, ensuring their role as active contributors to Petra's preservation and sustainability.

### Recommendations

To ensure sustainable management and preservation of Petra, it is essential to establish comprehensive mechanisms that actively involve local communities in all aspects of decision-making and site conservation and management.

Community representation in the Petra Development and Tourism Region Authority (PDTRA) decision-making board is vital to amplify their voices and ensure their perspectives are respected. Equally important is the investment in capacity-building and training programs to equip locals with advanced skills in heritage management, conservation, and sustainable tourism. Further training is recommended to enhance these capabilities, alongside the appointment of local site stewards to oversee preservation efforts and strengthen the community's role in protecting the site.

Policies must also be developed to prioritize local businesses and entrepreneurs, ensuring equitable distribution of tourism revenues to support the economic well-being of the community. Documenting the locals' traditional knowledge about Petra and integrating it into modern conservation, touristic, and management practices can preserve invaluable indigenous insights while fostering a sense of ownership among locals.

Additionally, fostering ongoing dialogue between communities, authorities, and UNESCO representatives through awareness and trust-building programs is critical for effective collaboration. Protection and meaningful involvement of local communities must be paired with efforts to enhance and preserve their

cultural identity and unique imprint on the site, ensuring that Petra remains a living heritage for future generations.

Moreover, incorporating the monitoring and reporting mechanisms required by UNESCO into the management framework is essential. Regular submissions of UNESCO periodic reports and updates about the "Cultural Space of the Bedu in Petra and Wadi Rum" should be uploaded to the UNESCO World Heritage website. This will ensure the efficient preservation of Bedouin culture in Petra, highlight the progress of preservation initiatives, and align with international heritage standards.

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# Update on the Destruction of the St Catherine Area, South Sinai, Egypt

John Grainger, Ben Hoffler and Joe Hobbs

This report serves to update the 2024 report and expand the World Heritage Committee’s understanding of the negative consequences to the Outstanding Universal Values (OUVs) of the St Catherine Area WHS resulting from the ongoing “Great Revelation Initiative – the Land of Peace” initiative (formerly the Great Transfiguration Project) underway in the heart of this WH Site. The WH Site encompasses desert mountain landscapes, monuments and locations that are of great significance to the three monotheistic (Abrahamic) religions.

This mega-tourism development comprises 14 construction projects involving hundreds of buildings over thousands of square metres with 400 chalets, 530 chalets and villas, 5 hotels, an eco-lodge of 200 rooms and a new residential area of 700 units all within the WH Site. The scale and impact of this devel-

opment is evident from satellite imagery and the recent terrestrial photographs in the Annexe to this report.

The main reporting matters since the 2024 report relate to the following:

## Ongoing history of non-compliance by the State Party

a) At the Extended 45<sup>th</sup> Session of the World Heritage Committee, held in September 2023, draft Decision 45 COM 7B.138 requested that “Further developments included in the ‘Great Revelation Initiative – the Land Peace’ be halted until a Heritage Impact Assessment (HIA) is undertaken, in line with the new Guidance and Toolkit for Impact Assessments in a World

Heritage Context, and the Heritage Impact Assessment report and details of the Saint Catherine City Development have been reviewed by the Advisory Bodies.

It is apparent that this request to halt further development has been ignored, as development has purposefully proceeded with construction at a pace that has outstripped UNESCO’s capacity to monitor the site and request change. It is understood now that in April 2025 this massive tourism project will be officially opened, an event which will represent a failure to protect and conserve the OUVs of this WH Site.

b) In 2023 in the same draft decision, the WHC requested the State Party to urgently invite a joint World Heritage Centre/ICOMOS Reactive Monitoring mission to the property to assess the state of conservation of the property, the already executed components of the project, and the efficacy of the protection and management system of the property. It is unclear whether this mission was ever undertaken with no response to enquiries at the UNESCO Cairo Office. It may be significant that the 2021 UNESCO Advisory Mission to Egypt did not visit the St Catherine WH property when construction had only just started,

Source: UNESCO, World Heritage Site, St Catherine map. Scale 1:100,000

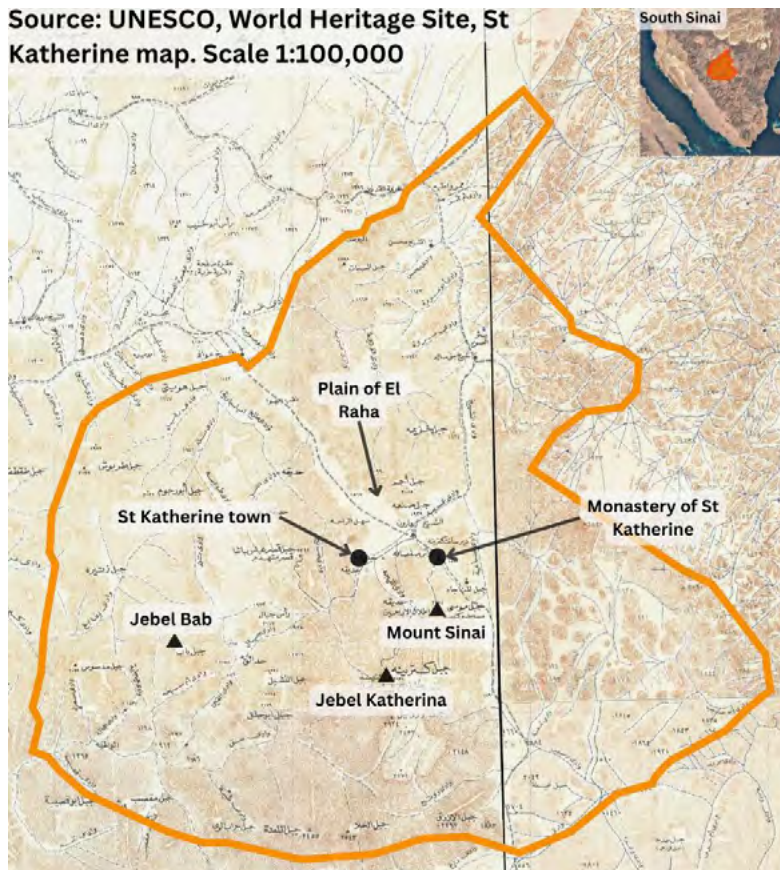


Fig. 1: Map of the St Catherine World Heritage, indicating the location of St Catherine Monastery and the tourism mega-development at El Raha.  
Map: UNESCO / Ben Hoffler

c) Finally, the WHC requested the State Party submit to the World Heritage Centre, by 1 December 2024, an updated report on the state of conservation of the property and the implementation of the above. Again, the response of the State Party to this request is not known.

### Past History of non-compliance by the State Party

a) In former times, the State Party has failed to conform with WHC requests. At the time of the St Catherine Area's inscription in 2002, and on occasions since, the WH Committee has invited the State Party to prepare a visitor-management plan for the Monastery and to implement the 1998 Sustainable Development Plan (SDP) for the town of St Catherine (2002 Decision 26 COM 23.6, 2004 Decision 28 COM 15B.51). Neither of these requests had been fulfilled by the State Party. The "St Catherine City Development Initiative" has apparently replaced the SDP, with the massive tourism project a major part of this initiative, but the status of the SDP, which the Committee requested be implemented (Decision 28 COM 15B.51), has never been reported on.

The WHC remarked on the limited overview that this City Development Initiative provided, and that the continued lack of a Site Management Plan, with a Visitor Management Plan component, were all cause for concern in view of the large development projects already implemented.

b) It is apparent that the integrity of the natural landscapes in this large Cultural Site is central to the maintenance of its Outstanding Universal Values. Indeed in 2003 the WH Committee encouraged the State Party to resubmit the nomination as an Associative Cultural Landscape (Decision 27 COM 8C.16) but this was never forthcoming. Such a redesignation may have protected the OUVs of the Site's biblical landscapes from the current despoliation.

### Incomplete, inconsistent and misleading reporting

a) The State Party has continued to misrepresent the nature and scale of the construction in annual conservation reports to UNESCO, for instance stating, "that the visual integrity of the property, specifically views from the Saint Catherine Monastery, are assured", while also noting that "tourism developments were planned in a way to provide views toward the Monastery"! Accompanying contemporary photographs reveal the visual impacts on this venerated landscape.

b) The full details of the City Development Initiative, comprising complete detailed plans and related studies, have not been submitted, but the State Party report states that no further developments are planned that would justify reporting to the World Heritage Centre. The outflow of information about the megaproject from St. Katherine has been restricted by

the State Party, but local sources at St Catherine have indicated that there are other developments planned, including an aerial tramway to the a mountain summit overlooking the Monastery. This is redolent of the abandoned proposal in 1990 which the late Lance Morrow, writing in Time Magazine, described as Trashing Mt Sinai,

### Impacts on indigenous Bedouin Community

a) This WH Site is the traditional homeland of the Jabaliya Bedouin, and it is their cultural traditions that have helped shape and conserve the Site's majestic landscapes. The traditional landscape of their homeland now has been irretrievably altered. The 2021 UNESCO Advisory mission to Egypt did not visit the property, but it would have been clear then that there was no meaningful consultation with the local communities or the Monastery ahead of the project implementation.

b) The construction has led to Bedouin structures being demolished and most significantly the destruction of a traditional Jebaliya burial site. This historical site contained around 370 burials dating back several centuries and is now a parking area (see Photos in Annexe). Ancestral remains were exhumed and reburied in a communal pit about 10 kms away. It is this author understanding that, in Islamic law the principle of respecting the dead is understood as militating against exhumation. Accordingly, classical Muslim jurists agree that exhuming graves is prohibited except when absolutely necessary.

### Conclusions and Recommendations

It is apparent that if the State Party had implemented the requests and recommendations of the WH Committee at the time of inscription the grave situation at St Catherine would likely have been avoided. The physical, aesthetic and cultural impacts of the GTP on the OUVs of the Site have been immense and almost certainly caused the irreversible loss of attributes conveying the outstanding universal value of the property.

### Conservation Statement and Proposed Visit

The joint World Heritage Centre/ICOMOS Reactive Monitoring mission must be undertaken ASAP with unfettered access to the property and conducted by independent international experts.

The State Party should then submit to the World Heritage Centre an updated report on the state of conservation of the property.

### Listing as a World Heritage in Danger

There is likely sufficient cause already to include the St Catherine Area WH Site on the list of World Heritage Sites in Danger. Listing the St Catherine Area as a heritage in danger would inform the international WH community and raise concerns for the threats to this Sites WH's values.

Censuring the State Party by delisting the Site from the WH List of properties, due to the irreversible loss of attributes, could be an option but that would remove any influence UNESCO could

exert on the State Party of for the rehabilitation of this highly significant Site.

### Annex: Historical and Recent Images from St Catherine Area WH Site



Fig. 2: It was in the grand, echoing solitude of these natural landscapes generations of monks found the stillness & silence needed to pursue their spiritual mission. This image shows the view from the Monastery of St. Katherine to the Plain of El Raha, one of the most richly-fabled parts of St. Katherine's landscape, upon which it is believed the followers of Moses waited for him during his time on Mount Sinai. It is upon this plain the Egyptian government's tourism megaproject centres today.  
Photo: American Colony in Jerusalem



Fig. 3: The Monastery of St. Katherine, with the shadowy footslopes of Mount Sinai on the left & the Plain of El Raha behind. The sharply winding camel path between the monastery & Mount Sinai's summit is visible in the foreground. Seen faintly in the central parts of the Plain of El Raha is the trail upon which pilgrims long made their final approach the monastery.  
Photo: American Colony in Jerusalem

**David Roberts Lithograph, 1830s: Monastery of St. Katherine & Plain of El Raha**



**Similar view of Plain of El Raha with new construction, October 2023**

Fig. 4: This comparative graphic shows the Plain of El Raha as recorded in a lithograph by David Roberts in the 1830s & the view of the plain from a similar position today, with its wide open spaces filled by the megaproject's new constructions. This celebrated historic vista or so-called 'cone of vision' was noted in a 2010 masterplan commissioned by the Monastery of St. Katherine to protect Wadi El Deir, in which the importance of safeguarding this view was underlined. Egypt's government has deliberately misrepresented the scale of the change on the Plain of El Raha & its impact on this historic view to UNESCO, perversely maintaining 'specifically... the views from the monastery are assured'.  
Graphic: Ben Hoffer

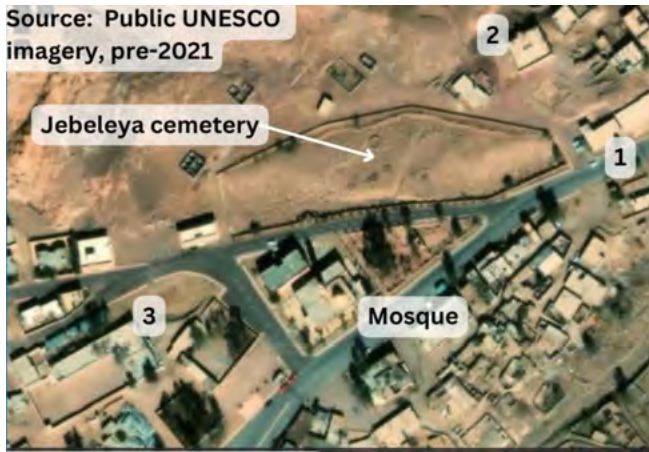


Fig. 5: Parts of St. Katherine's landscape with a special meaning & sensitivity for the Jebeleya tribe have been removed entirely by new construction works. The satellite imagery here shows the replacement of a tribal cemetery in which generations of the Jebeleya had been buried. Older imagery is above & newer imagery below. This cemetery had been located near the main mosque in the town centre of St. Katherine & was an important historical burial site for the tribe. Graphic: Ben Hoffler



Fig. 6: At least 380 burials were made in the tribal cemetery of the Jebeleya over several centuries with the most recent one taking place around three decades ago. This image shows a team of labourers exhuming remains. Photo: Ben Hoffler



Fig. 7: Exhumed remains were placed in a burial pit near another cemetery around 10km outside St. Katherine. Photo: Ben Hoffler



Fig. 8: Standing about 1.5km from the monastery the building in the foreground is a newly-developing 150 room resort titled the 'Mountain Hotel' on the Plain of El Raha. Stretching out over a larger area behind is another new resort that will have an even bigger capacity. Steigenberger - a global chain of luxury hotels - recently acquired the right to operate properties in the heartlands of the UNESCO World Heritage Site. Egyptian media report negotiations are currently underway for other corporations to follow. Photo: Ben Hoffler



Fig. 9: SITES International set down the development vision for St. Katherine. Its planners have misunderstood these wild mountain vistas, seeing them not as the settings of legends holy in different faiths but as empty tracts of real estate to be filled. The overlay of these storied natural landscapes with modern hotels will alter their spiritual associations, undermining the sense of awe, wonder & inspiration on-lookers have long drawn in gazing out over their sacred spaces. Taken near the Monastery of St. Katherine, this image shows the newly-emerging view of the Plain of El Raha whose spaces are being progressively filled. Photo: Ben Hoffler



Fig. 10: This image shows one of the resorts under construction on the Plain of El Raha, which Egyptian media report will have 192 rooms & 56 suites. Integrated into it will be a restoration of the first hotel built here in the 1980s. Photo: Ben Hoffler



Fig. 11: The Plain of El Raha has undergone a level of change unprecedented in any era of St. Katherine's history. Alongside the scale & nature of the developments, serious questions must be asked of the Egyptian government's tourism strategy for St. Katherine. A generation of high-end hotels built in the 1980s & 90s have failed here. Occupancy rates have been quoted as less than 2%. They have not grown St. Katherine into the hub of long-term resort tourism that was intended & jobs in high-end hotels have gone largely to people outside the Bedouin community, whose members typically seek work in different professions. St. Katherine has long been Egypt's most important centre of trail tourism, with trail tourism consistently proving its value to the Bedouin. Egypt's government has entirely overlooked these historic tourism trends in creating a megaproject whose primary benefit will be for people outside the community of St. Katherine. Photo: Ben Hoffler



Fig. 12: This is an area known as Abu Zeituna, in the UNESCO World Heritage Site. A newly-built residential compound with 700 housing units is numbered 1 above, dwarfing the cluster of single-storey Bedouin houses in the foreground. An even larger tourism compound in which plans state there will be four hotels, 440 mountain chalets, 450 private villas & 490 health chalets is scheduled for construction on the plains labelled 2. The Bedouin community of St. Katherine is being built into a new urban realm to which they have never belonged, as a people of nomadic heritage. The new construction does not align with their identity & is likely to have an irreversible impact on their culture. Our goal is to stop all scheduled construction in the UNESCO site. Photo: Ben Hoffler

# Urban Transformation of Al Diriyah: Between Venice Syndrome and the Bilbao Effect

Saad Hanif

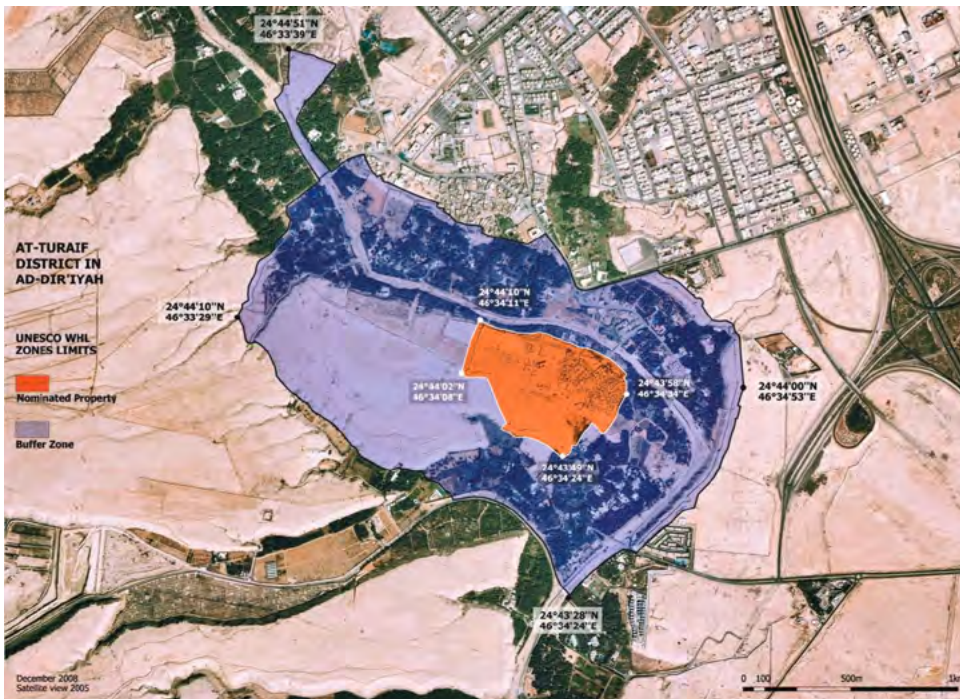


Fig. 1: At-Turaif district and its buffer zone in Al Diriyah.

Map source: UNESCO

The town of Al Diriyah, located in Riyadh, the capital of the Kingdom of Saudi Arabia, is undergoing a massive urban transformation that seeks to elevate its heritage from a neglected past to a Living Heritage Museum<sup>1</sup>, blending cultural preservation with a vision for global tourism and economic growth. At-Turaif district, which lies in the center of Al Diriyah, is a UNESCO World Heritage Site. This mud-brick settlement functioned as both the first Saudi State capital and the residence of the Al Saud family (Fig. 1). The ongoing urban transformation aimed at establishing Al Diriyah as a Living Heritage Museum has raised concerns regarding the potential impact on the Outstanding Universal Value (OUV) of the At-Turaif district. Specifically, tourism developments encroaching upon the buffer zone threaten to blur the boundaries between the World Heritage Site and newly developed areas.

In 2010, the At-Turaif District of Al Diriyah gained recognition as a World Heritage Site due to its fulfillment of Criteria (iv), (v), and (vi). Criterion (iv) was met as it showcases exemplary Najdi architectural style, utilizing traditional building techniques suitable for the environment. Criterion (v) was satisfied by its representa-

tion as a remarkable desert settlement. Criterion (vi) acknowledges its historical significance as the initial unifying force in the Arabian Peninsula (WHC. UNESCO, 2010; Al-Tokhais, A. 2021). Since then, the At-Turaif, as part of Al Diriyah, has undergone a massive urban transformation in different phases, over the years, aimed at identifying, highlighting, and showcasing its cultural heritage, thus developing the World Heritage Site and its peripheries into a cultural destination for tourism development (Hanif, S. 2024).

The majority of the Al Diriyah town was deserted and futile land until the Saudi government commissioned the Diriyah Gate

Development Authority (DGDA) to carry out a transformation project to combat its deteriorating and ruined state (Fig. 2). The theme is inspired by new Saudi urbanism and the previously dominating Najd architecture of the region. Reconstruction is set to replicate Najd traditional architecture with exaggerated various districts emphasizing history, culture, entertainment, lifestyle, and educational institutes (Nedeljkovic, N. 2022). In addition to functioning as a component of a broader environmental and urban development, the Diriyah Gate Development Authority seeks to establish a meticulously designed institutional structure, intending to fulfill UNESCO's requirements for developing the peripheries of a World Heritage Site (Heritage Conservation Consulting).

The current giga-project aims to establish a mixed-use urban community on the peripheries of the buffer zone, showcasing the traditional Najdi architectural style of Al Diriyah. Upon completion, the development will feature cultural, entertainment, retail, hospitality, educational, office, and residential areas, boasting hotels, museums, and fine-dining establishments. As one of the pioneering Living Heritage Museum projects, Al



Fig. 2: Al Turaif district of Al Diriyah before its designation as a World Heritage Site. Photo source: Documentalium

Diriyah catalyzes Vision 2030, aligning with the commitment to enhance the role of tourism in the country’s economy. The project is expected to have a substantial impact on cultural tourism, as Al Diriyah alone aims to attract 27 million visitors annually, contributing to this target, while also generating 55,000 job opportunities through its development efforts (Diriyah Gate Development Authority).

### Urban Transformation Process

In the initial phase (1986–2010), efforts primarily centered on preserving the At-Turaif district in Al Diriyah. These efforts were taken to mitigate decay and establish a development master plan, laying the groundwork for a potential UNESCO World Heritage Site listing. Subsequently (2010–2017), there was a heightened focus on achieving UNESCO recognition, maintaining its status, and implementing the proposed development plan. In the previous phase (2017–2022), after the UNESCO World Heritage designation of the At-Turaif district, the urban transformation of Al Diriyah gained

momentum to provide visitors with more contemporary facilities. These initiatives gave rise to reconstruction along with the restoration of the remnants of the heritage structures in the At-Turaif district (Fig. 3). By the end of 2022, the town of Al Diriyah was inaugurated as a Living Heritage Museum in its first phase, encompassing the At-Turaif district (WHS) alongside the newly constructed Al Bujairi quarter (Fig. 4).

### Transformation of At-Turaif in Al Diriyah

The creation of the Diriyah Gate Development Authority (DGDA) represents a pivotal step in the advancement of Al Diriyah’s transformation. This initiative is complemented by the announcement of an ambitious USD 18.5 billion financial plan designated for the first phase of development. The primary ob-



Fig. 3: The urban transformation of Al Diriyah, integrating modern amenities.

Map source: Al Bujairi: Heart of the Cal



Fig. 4: A panoramic view of the At-Turaif district, as seen from the At-Turaif visitor center, offers a juxtaposition of heritage preservation and contemporary urban development. Photo: Mohammad Saad Hanif

jective of this endeavor is to rejuvenate the World Heritage Site (WHS) and its peripheries, thereby enhancing its status as the “Jewel of the Kingdom.” Both the tourism development and the promotion of Diriyah as the “Jewel of the Kingdom of Saudi Arabia” contribute to the World Heritage Site’s transition from a previously neglected heritage site to a Living Heritage Museum. Emphasizing its uniqueness, Al Diriyah is marketed as unparalleled, with the slogan “Only One Diriyah” (Inzerillo, J. 2021; Bay, M.A.; Alnaim, M.M.; Albaqawy, G.A.; Noaime, E., 2022). At-Turaif, as part of Al Diriyah, is undergoing a comprehensive rebranding and infrastructural transformation (Fig. 5), to establish itself as a leading cultural tourism destination that attracts international visitors while preserving its heritage for future generations (Hanif,S. & Riza,M., 2024).

According to ICOMOS (2010), the reconstruction is regarded as a representation of the past, though not within architectural terms, and it is concluded that the conditions for authenticity have not been fulfilled. Furthermore, ICOMOS identified the proposed Living Heritage Museum as posing risks to the preservation of the property’s authenticity and integrity. Consequently, the architectural integrity of the nominated property is deemed insufficient, as it no longer authentically reflects its historical or cultural significance. The situation of these structures has changed drastically under the recent initiatives and calls for further assessments. The extensive development taking place at Al Diriyah under DDGA has sparked concerns regarding the OUV of the World Heritage Site and the extent to which the WHS can transform.

### Al Diriyah’s Transformation: Hanging Between Venice Syndrome and Bilbao Effect

The Bilbao Effect<sup>2</sup> and the Venice Syndrome<sup>3</sup> represent two contrasting paradigms in the management of cultural heritage. Heritage sites undergoing transformation often strive to replicate the strategic planning and transformative success associated with the Bilbao Effect while seeking to avoid the detrimental outcomes embodied by the Venice Syndrome. The case of At-Turaif in Al Diriyah’s development provides a unique position on this spectrum. On one hand, the urban transformation of the previously neglected and ruined site has unlocked its poten-

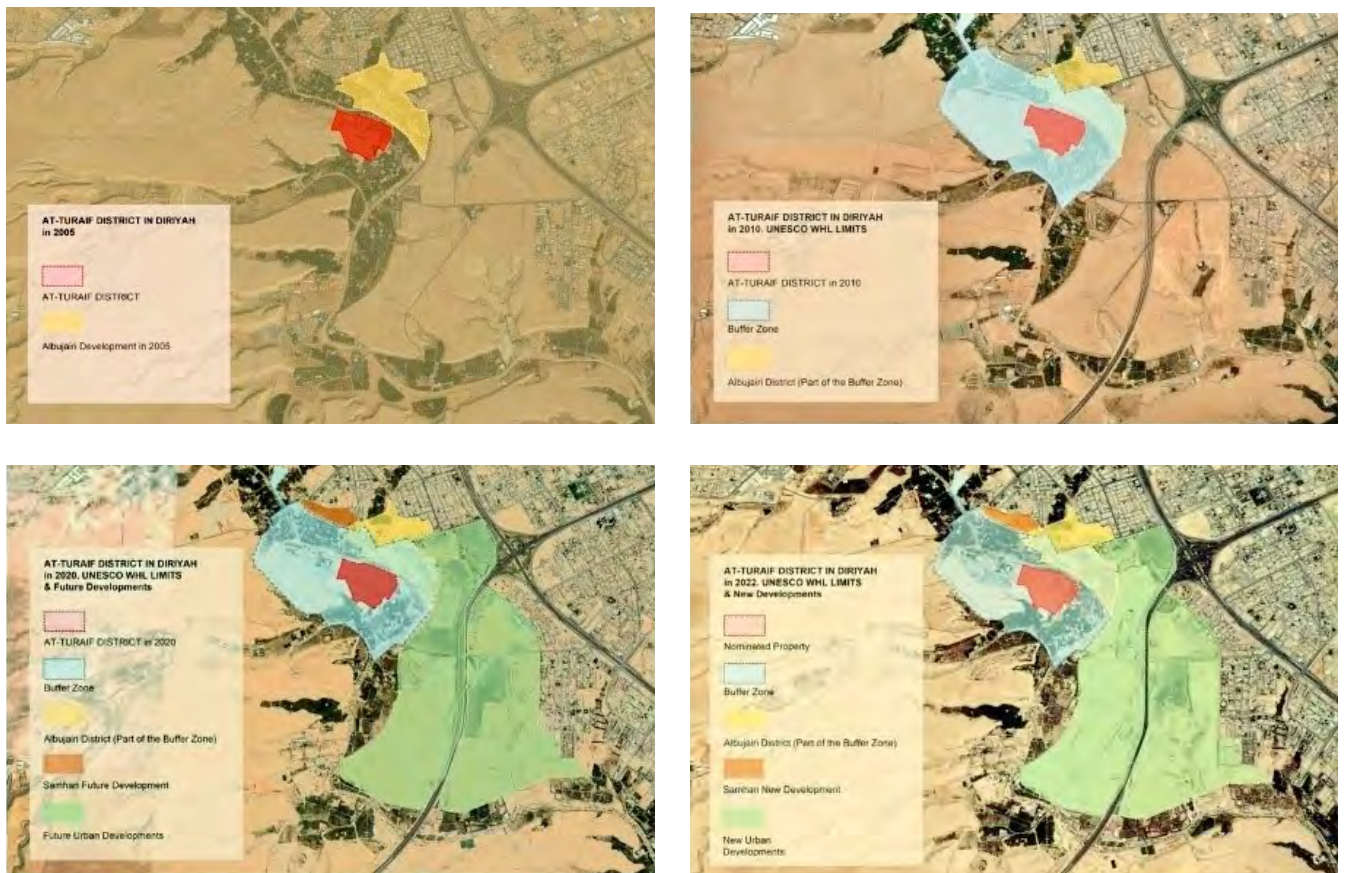


Fig. 5: Al Diriyah’s development and its intersection with the Buffer zone of At-Turaif (WHS) over the years. Maps source: Bay, M. A., Alnaim, M. M., Albaqawy, G. A., & Noaime, E. (2022)

tial as a valuable cultural heritage landmark. The development efforts have attracted global attention and stimulated tourism growth. On the other hand, ICOMOS (2010) highlighted that it is unfortunate that the museum and tourism development program is portrayed as if it serves as a genuine management plan for the property, primarily focused on conservation (Fig. 6).



Fig. 6: Aerial View of Al Diriyah's Expansion Plan with the At-Turaif World Heritage Site approximately outlined in red. Photo: Al Diriyah Gate Development Authority

As a result, the At-Turaif district in Al Diriyah risks undergoing a hollowing-out process, where the heritage district transitions to a curated, museum-like environment. This outcome challenges the balance between preserving the site's authenticity and meeting the demands of tourism development. In this vein, ICOMOS (2010) raised concerns regarding the proposed initiatives aimed at transforming the property into a Living Heritage Museum, as this could significantly impact the OUV of the heritage site. To address these concerns, ICOMOS recommended providing a detailed plan mapping all project locations relative to the property boundaries and buffer zones. Additionally, ICOMOS suggested a comprehensive prospective study vital to assess the effects of these developments, including the Living Heritage Museum and the associated religious foundation project, on the property's value, visitor flow, and visitor reception. However, these measures are yet to be implemented appropriately due to the unprecedented pace of development. Perhaps if DDGA is working towards it, a comprehensive report clearly stating the *Factors Affecting the Property* mentioned by ICOMOS 15 years ago has not been revealed yet.

### Future Transformation of Al Diriyah

The urban transformation of Al Diriyah has advanced to a stage characterized by cultural commodification, verging on over-commercialization. This process entails reimagining the boundaries of the World Heritage Site to conform to predefined heritage standards while navigating the delicate balance between conservation and tourism development. The commodification of Al Diriyah continues to progress as The Diriyah Company just revealed the concept design for The Arena in Di-

riyah, a 20,000-seat venue, part of a \$63.2 billion masterplan by the Saudi Public Investment Fund (PIF) to further develop Diriyah's urban transformation. Designed by HKS, the arena's concept draws on the area's natural geology and historic Najdi forts, combining historical reflection with modern digital and tech-forward elements (Fig. 7).



Fig. 7: The Diriyah Company Just Revealed the Concept Design for The Arena In Diriyah, A 20,000-Seat Venue, This March 2024. Source Parametric Architecture.

Furthermore, the developers spearheading the urban transformation recently revealed plans to construct King Salman Boulevard, a 1.9km avenue modeled after the Champs-Élysées in Paris, along with the kingdom's first Royal Diriyah Opera House (Halligan, N. 2024). By 2025, the At-Turaif District, its buffer zone, and the peripheries of Al Diriyah are set to undergo further extensive revitalization as part of the DGDA's ambitious redevelopment plans. Emphasizing the Living Heritage Museum approach, the DGDA aims to implement a range of entertainment activities in the heritage site's vicinity (Bay, M.A.; Alnaim, M.M.; Albaqawy, G.A.; Noaime, E. 2022). Over the coming years (Fig. 8), the development of Al Diriyah will see significant advancements, including the addition of 38 luxury hotels, featuring renowned brands such as Apple, Six Senses and Aman—alongside 17,500 residential units, an art district, and a tech and media hub (Whiley, J. 2023).



Fig. 8: At-Turaif is at the heart of Al Diriyah's transformation into a Living Heritage Museum. Photo: Vision2030.Gov.Sa

Al Diriyah's ambitious transformation into a Living Heritage Museum captures the tension between the "Venice Syndrome" and the "Bilbao Effect". This necessitates special attention from UNESCO and the Diriyah Development Authority if this

transformation is set to establish a new benchmark for UNESCO World Heritage Sites that have previously been neglected and remained mere remnants of the past. To ensure the preservation of the Outstanding Universal Value (OUV) of At-Turaif amidst the transition of Al Diriyah, the following measures are recommended:

- 1. Continuous Monitoring and Oversight:** Implement a systematic monitoring framework to oversee ongoing tourism developments, ensuring that the OUV of the property remains paramount and is not compromised by economic or tourism-driven initiatives. ICOMOS emphasized in the 2010 report the need to strengthen conservation monitoring efforts through more structured campaigns involving photographs, observations, and 3D scanner surveys.
- 2. Regular Assessment Mechanisms:** Establish a protocol for the periodic evaluation of modern projects, as stressed by ICOMOS previously. This will require assessments conducted every 4–6 months. These evaluations should focus on preservation efficacy, environmental impact, and economic outcomes, allowing for adaptive strategies that align with ICOMOS guidelines.
- 3. Local Community Involvement:** Actively involve local communities in the development of the World Heritage Site to ensure that the process respects their needs. Incorporate initiatives that can make the At-Turaif district in Al Diriyah, actually a livable heritage site and avoid transforming it into a mere tourism destination with occasional or seasonal visitors.
- 4. Comprehensive Documentation of Transformation:** Chronicle the evolution of the property from its previously ruined state to its current status as a Living Heritage Museum. This documentation will serve as a valuable resource for future conservation efforts and provide insights into other heritage sites undergoing similar transformations, thereby introducing the Al Diriyah effect.
- 5. Ensuring Sustainable Development Through Operational Guidelines Paragraph 172:** It is recommended that the Diriyah Gate Development Authority (DGDA) and the Saudi government consider formally submitting their development plans regularly to UNESCO under Paragraph 172 of the Operational Guidelines for the Implementation of the World Heritage Convention.

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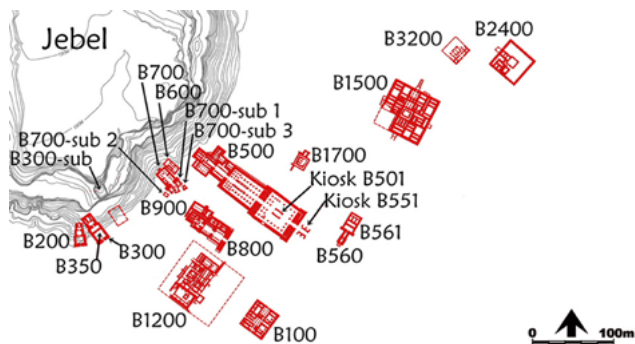
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## Notes

- 1 The concept of a living heritage museum is applied in a broader context, wherein the peripheries of the World Heritage Site are envisioned as being transformed into a dynamic cultural hub.
- 2 This term describes the transformative impact of iconic architecture on a city's economy and global image. The Guggenheim Museum Bilbao, designed by Frank Gehry, is a prime example. Its inauguration in 1997 revitalized the post-industrial city of Bilbao, Spain, attracting millions of tourists and stimulating economic growth. The Bilbao Effect has inspired other cities to invest in landmark cultural institutions as catalysts for urban development.
- 3 In contrast, this term refers to the negative consequences of excessive tourism on historic cities or World Heritage Sites. Venice, Italy, epitomizes this syndrome, where the influx of tourists has led to over-commercialization, rising living costs, and the displacement of residents. The city's cultural authenticity and daily life have been compromised, raising concerns about heritage preservation and the extent of cultural tourism.

# Assessment of the Situation at the Site of the Holy Mountain of Jebel El-Barkal, Sudan<sup>1</sup>

Awad Masaoud, Sudan Cultural Heritage Relief



Jebel El-Barkal, along with the other archaeological sites in the Napatan Region, is a prominent UNESCO World Heritage site located in the Northern State of Sudan, specifically in the Meroe region. The site holds great historical and cultural significance, representing the heart of the Kingdom of Napata, which flourished between the 8th century BCE and 4th century BCE. Jebel El-Barkal is particularly known for its majestic pyramids, temples, and monuments, which provide invaluable insights into ancient African civilizations.

Despite not being directly affected by the ongoing conflict in Sudan, Jebel El-Barkal faces significant threats from two major factors: climate change and human intervention. Climate change has altered rainfall patterns and led to more frequent droughts and floods, which contribute to the erosion of the site's structures and disrupt its delicate ecosystem. Additionally, human activities such as uncontrolled urbanization, tourism, and agricultural practices have further exacerbated the site's vulnerability. These factors not only jeopardize the preservation of Jebel El-Barkal's physical integrity but also threaten its cultural heritage. Therefore, urgent measures are required to address these challenges and ensure the protection of this invaluable archaeological treasure for future generations.

## Damage observed due to nature, climate change and human intervention

Serious and negative impacts on the site are due to climate change, specially the clearly noted increment in the rates of rain and the wind speed. Compared to last year, the rates are much



Fig. 1: Plan of the Jebel El-Barkal site (below) and its location in Sudan (above).

Source: [https://www.learningsites.com/GebelBarkal-2/GB-hist2\\_CSS3-update.php](https://www.learningsites.com/GebelBarkal-2/GB-hist2_CSS3-update.php) (below) / Jolanta Patruno (above)

higher and the duration of the rain is clearly longer. The last rain continued for five hours and was accompanied by strong wind. The major problem at Jebel El-Barkal WHS is that beside the heavy rain a large amount of water drains from the top of the mountain through the rocks and down through the temples, specially B500 Amon Temple, the biggest monument in the site (Figs. 2–5). The same problem exists with temples B600 and B700, too.

All monuments at Jebel El-Barkal were constructed from Nubian Sandstone, which we can classify in terms of fragility to three types; the whitish, the yellowish and the reddish. The first two are very fragile, and they don't have any resistance to the natural impact and the climate factors like rain and wind. So the monuments at Barkal started to be impacted negatively by climate change many years ago, but it became more serious since a couple of years ago, specially the last three years, since the increment of the rain rates.

The columns of the monument, specially B500 (The Great Temple of Amon) (Figs. 6–10), which is considered the largest draining passage for the water coming from the top of the mountain, and also some of the wall, started to melt due to the heavy rain (Fig.s 11–12).

<sup>1</sup> This report is based on information from the National Corporation of Antiquities and Museums of Sudan (NCAM).

Fig. 2-5: The water drains through B500.  
Source of all photos: National Corporation of Antiquities and Museums (NCAM)



below: Figs 6-9: Erosion of buildings and columns at B500 due to rain water.  
Photos: NCAM





Fig. 10: Erosion of buildings and columns at B500 due to rain water. Photos: NCAM

One of the main problems is also the back-dirt fill from previous excavations (from Reisner's time and some from recent excavations) together with the heavy rain, and the lack of draining possibility resulted in many spots of water gathering (pools) specially in B500 (Figs. 12–13) and B1500 – the Palace of Naktamani (Figs. 14–15).



Fig.s 11–12: Melted walls at B500.

Photos: NCAM



Fig.s 13–14: Pools formed at B500.

Photos: NCAM

B300 Mute Temple was also subject to heavy rain for the second time. Last year the traditional layer of roof which is a mix of animal remains and mud (zibala) was totally washed away by the rain. We renewed it last year, but by the first rain this



Fig. 15: Pools formed at B1500.

Photos: NCAM



Fig.s 16–18: Damage to B300 Mute Temple due to heavy rainfall. Photos: NCAM

year it was washed away again. With the expected increment of the rain next year, this traditional way will not resist the rain, we strongly recommend that there should be another way of this protecting layer with more efficient materials (Fig.s 16–18). The same should be applied in the El-Kurru tombs, because we have the same problem there.

### Action taken by local authorities and response by UNESCO

At the time of writing this paper, UNESCO, despite being informed by the local authorities in Sudan, has not responded to these threats, nor has it assessed the damage that has occurred, nor has it taken any action to save the site.

1. The Sudanese authorities have moved to reduce these damages through the National Corporation of Antiquities & Museums (NCAM), a governmental body.
2. NCAM local office in the field, jointly with the local community representative and heritage activists from the community around the site, undertook a cleaning and maintained a sanitation environment for the site after the damage.
3. NCAM reports that they assessed the damages and addressed its partners to provide support to carry out urgent restoration operations at the site, but due to the war in Sudan and the economic effects of this war, the state cannot finance these restoration operations, and as of writing this report, the NCAM said that it did not obtain funding from any local or international body to carry out the necessary and urgent restoration operations.

### Recommendations

Establish a protocol for managing floods and other natural or man-made disasters in collaboration with UNESCO. This protocol should be implemented in coordination with relevant local authorities, with UNESCO committing to funding its execution.

Involve local communities actively in the protection and preservation of the site, ensuring their participation in safeguarding the cultural heritage and natural environment of Jebel El-Barkal.

Training local communities on protection measures: Provide training programs for local communities on effective protection and conservation techniques, equipping them with the knowledge to prevent damage and ensure sustainable management of the site.

Establish and implement a robust monitoring and protection mechanism for the site, managed by the Tourism and National Heritage Protection Police Force, in collaboration with the Ministry of Culture and Information, local authorities, and the Sudanese National Corporation for Antiquities and Museums.

Design and implement preventive maintenance schedules for the site by the Sudanese National Corporation for Antiquities and Museums, in partnership with the Ministry of Culture and local authorities, to ensure the long-term preservation of Jebel El-Barkal.

# Eroding Heritage Value: The Case of the Darjeeling Himalayan Railway

Pratiti Joshi

'Mountain Railways of India' is a UNESCO world heritage property comprising of three serial components. Darjeeling Himalayan Railway (DHR) is the first among the three railways inscribed under this property with subsequent addition of the Nilgiri Mountain Railway in 2005 and the Kalka Shimla Railway in 2008.

The DHR was accorded the status of an outstanding example of a hill passenger railway in the world in 1999 as a testament to the bold and ingenious engineering solutions that lead to the establishment of an effective rail link across a mountainous terrain of great beauty. Built between 1879 and 1881, it runs through the foothills and mountains of West Bengal, rising from an elevation of 100 meters to 2258 meters. Popularly known as the 'Toy Train', it is a narrow-gauge railway that connects New Jalpaiguri to Darjeeling, covering a distance of 88 km.

Still fully operational as a living example of the engineering enterprise of the late 19th and early 20th centuries, the DHR rep-

resents an outstanding example of innovative transportation systems built through a difficult terrain, which had tremendous influence on the social and economic development of the region. The property is inscribed under criterion (ii) and (iv).

The DHR has been facing challenges post its inscription, and UNESCO has raised issues regarding the erosion of the heritage value of mountain railways in India. Lack of maintenance, monitoring issues, encroachment, tourism pressures coupled with the lack of boundary and buffer zone have led to a deterioration of the Outstanding Universal Value (OUV) of the property. Due to unsuccessful implementation of the recommendations formulated by ICOMOS since the time of the property's inscription and the lack of information furnished by the State Party from 2017 to 2019, as a wake-up call, a joint World Heritage Centre/ICOMOS Reactive Monitoring Mission was sent to inspect the state of conservation of the DHR in December 2019, upon the request of the World Heritage Committee at its 43rd session in Baku, Azerbaijan.

## Threats to the property

### Encroachment

In June last year, a leading national daily reported death of an 18-year-old youth who was run over by a toy train at Kurseong in West Bengal's Darjeeling district. This has called for serious caution. It has raised alarming questions about the encroachment along the DHR and the safety of the people who run their businesses near the tracks hampering railway operations. Lack of an official boundary and established buffer zone has hindered proper protection of the property's attributes.

Serious encroachment issue due to illegal construction is evident and has been reported repeatedly. Staggering cheek-by-jowl construction along and in immediate proximity to the DHR track is a threat to the property's OUV. At the time of inscription, in 1999, most of the 88-kilometre route of the DHR passed through either forest or tea garden landscapes, however much of the DHR currently runs between illegally constructed houses and shops. Currently the panoramic view of the mountains and the scenic beauty that could once be enjoyed from the toy train has been compromised. The landscape is marred with construction offering rare views in intervals during the joy ride.



Fig. 1: Encroachment by illegal buildings at the outskirts of Kurseong city.

Photo: Pratiti Joshi



Fig. 2: View from the railroad obstructed by development.

Photo: Pratiti Joshi

#### Overtourism

Tourism being a double-edged sword presents opportunities for revitalization and development but is also accompanied with its own pressures on the local communities. Challenges of overtourism are evident in case of DHR. The toy train today is hardly used by locals for their routine/daily commute. It is mostly in-use for tourism purposes and has lost its charm and utility in the everyday lifestyle of the people.

The significance of this property resides in its continuity as fully operational living lines. According to the justification under criterion (iv) these “are used in a spirit and for purposes that are the same as those at their inception”. Therefore, the Outstanding Universal Value (OUV) of the property is greatly embedded in its socio-economic functions and use which is compromised due to unsustainable tourism.

#### Lack of Maintenance

The Northeast Frontier Railway (NFR), which manages the DHR, has blamed the people residing along the tracks for the accumulation of waste obstructing the way of the trains. Waste management is one of the pressing concerns that need to be addressed.

Many of the station buildings which are identified as major attributes of the OUV have seriously deteriorated since its inscription. Illegal construction along the tracks has also put pressure and adversely impacted the original land use pattern. Uncontrolled rampant development in the immediate surroundings calls for proper delineation of a buffer zone of the inscribed property, and the enforcement of appropriate regulations.



Fig. 3: Tourists at Batasia Loop.

Photo: Pratiti Joshi



Fig. 4: Maintenance and upkeep leave much to be wished for, here at the Ghum Railway station.

Photo: Pratiti Joshi



Fig. 5: Garbage dumped on the tracks at Kurseong.

Photo: Pratiti Joshi

### Absence of a Comprehensive Conservation Management Plan

Completion, adoption and implementation of the draft Comprehensive Conservation Management Plan (CCMP) for DHR is crucial since issues are stemming from the absence of a management system with a focus on priorities for protection and maintenance. The CCMP should provide the final boundary definition and maps including a clearly demarcated buffer zone based on consultation with the concerned stakeholders.

In the absence of the CCMP, the attributes that convey the property's OUV such as station buildings, architectural elements and elements of industrial heritage are at risk of deteriorating if professional heritage expertise is not involved in the conservation, management and adaptation of these structures.

As per the Decision 45COM 7B.161 the State Party has been requested to submit the finalized CCMP for the Darjeeling Himalayan Railway (DHR) for review by the World Heritage Centre and the Advisory Bodies prior to its formal adoption; and by the end of 2024 submit to the World Heritage Centre an updated report on the state of conservation of the property for examination by the World Heritage Committee at its 47th session in 2025.

### Local Communities Views

Residents are facing issues due to heavy traffic congestion along the train tracks. During the time when the tracks were constructed there was hardly any vehicular traffic on the roads. Today with the development influx, changing demographics and increasing tourism in the region, the current road capacity is insufficient to manage safe operations of the train and vehicular traffic simultaneously. Several incidents of the DHR hitting or colliding with vehicles are reported. Upon interviewing



Fig. 6: Parking on and right next to a DHR track at Kurseong city center.

Photo: Pratiti Joshi

residents in Darjeeling, many shared the same sentiment and conveyed that in such scenario locals do not have legal protection while there are no repercussions on the Railways. Vehicle parking is yet another concern. During the night time, the train tracks are used for parking. Private houses built along the train track suffer from severe pollution and unhealthy living conditions. While the train is passing by it is almost impossible for them to open their windows due to heavy pollution residue from the smoke stacks of the trains.



Fig. 7: Signage at the Old Darjeeling Railway Station.

Photo: Pratiti Joshi

## Recommendations

- In order to resolve the encroachment issue it is critical to have property boundary and buffer zone clearly demarcated for enforcement of adequate rules and regulations. Therefore, official adoption of the boundary of the DHR component in conformity with Paragraphs 99-102 of the *Operational Guidelines* for the Implementation of the World Heritage Convention and after consultation with other stakeholders is necessary.
- Stakeholder involvement (especially the civil society) is imperative in the decision making process to control and/or remove encroachment (wherever deemed necessary). This would result in coherent and mutually agreeable approaches which are both practical and workable. These measures and provisions should be reflected in the CCMP.
- Waste accumulation on the tracks hampers the train operations and visually impairs the integrity of the property. Appropriate rules for waste management and regulations to avoid such practices around the World Heritage property, to not only maintain waste-free conditions for the local population and visitors, but also the safe and secure operation of the railway should be established.
- Uncontrolled haphazard development due to growing tourism needs, in close proximity to the property needs to be regulated. An integrated development plan for the towns/cities along the train route should be developed marking heritage attributes, regulated areas and specifying areas for new development.
- Re-routing of the traffic through well-designed transportation planning with appropriate parking provisions is required since the immediate surroundings of the property are choking with traffic leading to safety concerns.
- Rehabilitation of the private houses along the train tracks with prior consultation with locals and community representatives should be seriously considered.
- Awareness raising and capacity building at every level is important. The train and station operations staff or the non-heritage staff should also be aware of the site's recognition as a World Heritage Property and its OUV.
- Legal protection and recognition of all heritage attributes and elements that convey the property's OUV either through the implementation of existing legislative measures for heritage sites or through the development of legislation specific to the DHR, is essential.

# Obstructive Pavilions at Jokhang: A Falsification of Tibet's Holiest Temple

International Campaign for Tibet



The UNESCO protected “Historic Ensemble of the Potala Palace” (inscribed in 1994), including the Jokhang temple (added in 2000) and the Norbulingka area (added in 2001), is scheduled for discussion at the 47<sup>th</sup> Session of the World Heritage Committee in July 2025. The historic political and religious site has been plagued by waves of blatant destruction of heritage buildings and reconstruction in the Chinese-aesthetic, uncontrolled urban development, and the destruction of intangible culture. The most recent and pressing concern has been the construction of two obtrusive pavilions in front of Tibet’s most sacred temple, the Jokhang temple (also called Rasa Trulnang

Tsuklakhang). With the core foundations built in the 7<sup>th</sup> century, Tibetans have long associated the Jokhang temple with the genesis of Tibetan cultural and religious civilization.<sup>1</sup>

The two overtly ostentatious pavilions were allegedly intended as a practical measure to protect three historic stelae (stone columns with commemorative inscriptions) from weathering.<sup>2</sup> However, it is evident that the size and ornate-style of the pavilions were not designed to maintain architectural consistency with the 1,300-year-old Jokhang temple façade of 5<sup>th</sup> century Indian temple design (see Fig. 2). The pavilions instead have the



Fig. 1: Comparative before and after images of pavilion construction at the Tang China and Tibet Treaty Stele.

Photo credit: Top: 佛教在线 (Fojiao zaixian; Buddhism online), 2018.<sup>3</sup> Bottom: Tsering Woesser, August 2020.<sup>4</sup>



Fig. 2: Comparative images of the front façade of the Jokhang Temple in 2004 and 2025.

Photos: Top: creative commons, 28 July 2004, <http://www.onwardtibet.org/index.html>. Bottom: Jennifer Lee, 'Jokhang Temple, Lhasa – the Holiest Temple & Spiritual Center in Tibet', 17 February 2025, <https://www.asiaodysseytravel.com/tibet/jokhang-temple.html>.

effect of i) imposing a more prominent Chinese presence and stamp to the entrance and façade of Tibet's most sacred temple, ii) impeding access to and visibility of the historical stela, and iii) impeding Tibetan Buddhist rituals and traditions (prostrations and circumambulation) that contribute to the site's unique intangible heritage.

### The World Heritage Committee Response

The World Heritage Centre officially raised their concerns about the new constructions with China on 25 May 2020. They have since been engaged in a back-and-forth exchange about:

1. China's violation of Operational Guidelines<sup>5</sup> that require countries to submit plans and a heritage impact assessment prior to new construction,
2. the need to complete and submit a heritage impact assessment in accordance with 2011 ICOMOS Guidance on HIAs for Cultural World Heritage Properties, and
3. the need to consider alternative options to the historically confusing pavilions, which have a negative impact on the Jokhang temple's Outstanding Universal Value.<sup>6</sup>

In its December 2024 State of Conservation Report, China reported that a "professional organization" was engaged to conduct a HIA, which concluded "the pavilions were essential for safeguarding the ancient steles, but that they *"introduce adverse effects on the landscape view corridors and the historic environment surrounding the Jokhang Temple Monastery"*. It recommended *"the pavilions should be lightened in terms of appearance to mitigate its visual impacts"*<sup>7</sup>, and recommended a professional organization be engaged to design a rectification proposal. The Chinese Mission added the "facilities have been designed in the style of a traditional Tibetan architecture, with its overall structure reversible".<sup>8</sup>

A full non-public HIA report was reportedly included in the report annex. As it is non-public, we do not know what "lightening in appearance" means in tangible adaptations.

### Assessing the rationale for pavilion design

The assertion that the pavilions are Tibetan in design is problematic and impractical. As one cultural heritage expert astutely noted, "it is misleading to say something is 'Tibetan style' as that reduces Tibetan architecture, which, like other art forms, evolved over time and always had large regional differences"<sup>9</sup>. While the pavilions may have Tibetan elements, the most important consideration should be whether or not the pavilions are stylistically congruent with the entry area and overall façade of Tibet's most sacred temple, which derive from the Vihara Indian temple design dating back to the 5<sup>th</sup> century.<sup>10</sup> At a glance, when we compare before and after images of the pavilions (see Fig. 6), it is clear that the pavilions are unnecessarily large, os-

tentatious in design and colour, and inconsistent with the style of the Jokhang entrance.

After consulting with several experts familiar with contemporary and historical Tibetan architecture and the Jokhang temple, some key questions are worth re-visiting:

#### Are the pavilions necessary?

If the stone stela have survived for over 1,200 years, why do they suddenly need protection? If there is some damage, it should be recommended to undertake minimal interventions so as not to obstruct view of the stones or the entry of the Jokhang temple. The stone inscriptions are historical objects part of the heritage of the Jokhang temple and should not be concealed. Their concealing appears particularly notable, as the inscriptions reflect the historical relationship between Tibet and Tang China as two distinct entities negotiating boundaries, and thus document Tibet's status as a sovereign polity.

#### Are the structures really reversible?

A reversible structure is a temporary structure that imposes minimal disturbance to the nature of the place. The assertion that the structures are reversible is highly questionable as the pavilions have concrete structures with concrete footings, which when built or removed cause irreversible damages to the plaza.

#### What should 'lightening the appearance' look like?

Lightening the appearance is critical to not only ensuring minimal obstruction and impact on the overall universal value of the Jokhang temple, but also to ensure that the stone stela are visible and accessible. Depending on the nature of the erosion on the stela, it should be recommended to consider options to remove the pavilion roof and the wall enclosure or use minimal transparent walls to protect the stela from the natural elements so that the protective shelter blends with the overall façade of the Jokhang temple entrance. This is consistent with expert advice provided by the World Heritage Centre and Advisory bodies.

### A world heritage site in danger

At the upcoming 47<sup>th</sup> session (July 2025 at UNESCO Headquarters, Paris), the International Campaign for Tibet calls on the World Heritage Committee to inscribe the site as a "World Heritage in Danger". Since its inscription as a world heritage site in 1992, the "Historic Ensemble of the Potala Palace" has been a site for demolition, urban and tourism development, and securitization – all which have irreparably damaged and disturbed the sacred atmosphere and intangible cultural heritage for Tibetan pilgrims.

#### Demolitions

In 2002, two years after the Jokhang temple was inscribed as a UNESCO heritage protected site, the remains of the Ngakhang complex (a southern annex of the Jokhang temple) were demol-

ished and replaced by concrete-frame housing blocks. The Ngakhang complex dates back to the 5<sup>th</sup> Dalai Lama's reign and survived serious damages during the cultural revolution.<sup>11</sup> Shortly after the UNESCO inscription of the Potala Palace in 1995, authorities demolished 40 historic buildings in the Shöi district below the Potala,<sup>12</sup> while clusters of historical buildings in the Barkor neighbourhood were demolished between 2001 and 2002.<sup>13</sup>

### Barkhor street area redesigned as an exotic Disneyland

The Barkhor street, which forms the circumambulation path around the Jokhang temple and an important market street, has been redesigned and exoticized to appeal to tourists.<sup>14</sup> For example, streetlights resembling prayer wheels have been installed (see Fig. 3), and the street sellers removed into nearby malls. Many residential buildings have been remodeled to include Tibetan architectural features, but without coherence or respect for traditional Tibetan architecture and design practices.



Fig. 3: Lamp posts in the style of prayer wheels next to new pavilions, 2023  
Photo: Anonymous, 2023.



Fig. 4: Imposing Chinese government propaganda banner announcing "伟大的中国共产党万岁!" (English: Long live the great Communist Party of China!) and additional security tent check posts to enter the circumambulation route.  
Photo: Anonymous, 2023

### Threats to intangible culture

Intangible cultural heritage encapsulates the living traditions of devout Buddhist Tibetans who perform rituals inside and outside the temple. Such intangible cultural heritage should be preserved so that pilgrims are able to prostrate, circumambulate, and pray freely in a sacred space without obstruction or disturbance from tourists, excessive security infrastructure, or propaganda materials. Some of the major threats to the unique



Fig. 5: New pavilion and additional security tent sheltering specialized security personnel with shields and helmets.  
Photo: Anonymous, 2023.



Fig. 6: A comparison of the entry way to the Jokhang temple in 2018 and 2023.  
Photo: Top: Anonymous, 2023. Bottom: China news, 26 July 2018.<sup>15</sup>



Fig 7: Security tents flank the left and right side of Barkor square with on-duty security personnel.

Photos: Anonymous, 2023.

intangible culture of the Jokhang temple include mass tourism, security checks to enter the circumambulation route, security posts in and around the square, “patriotic” propaganda banners across the sacred temple, and new pavilion constructions which crowd and impede the entryway and area for prostrations and circumambulation.

While it is notable that China’s 2024 State of Conservation Report finally addressed the long-standing requests concerning the boundaries of the heritage site and a conservation plan, it once again only alluded to the existence of a conservation plan and provided non-public ‘texts’ from the plan.<sup>16</sup> Numerous, serious and longstanding concerns remain. The most recent construction of Chinese-style pavilions in front of the Jokhang temple entry is clear evidence of China’s institutionalized disregard of meaningful heritage protection. Unless China demonstrates a genuine commitment to heritage conservation – such as by providing and complying with heritage conservation plans and UNESCO Operational Guidelines – we call on the World Heritage Committee at the upcoming 47<sup>th</sup> session to inscribe the site as a “World Heritage in Danger”. We believe this is necessary in light of China’s long pattern of undertaking construction and urbanisation projects that deliberately and repeatedly damage the authenticity and Outstanding Universal Value of the heritage property.

## Recommendations

Given a long history of heritage destruction, the failure to provide a complete conservation plan of the inscribed area, and evidence of new constructions in the heritage site and disre-

gard of UNESCO operational guidelines, the Committee should invoke more serious measures, such as consider inscribing the site as a World Heritage in Danger. As per paragraph 179 of the Operational Guidelines,<sup>17</sup> the lack of a conservation policy, and threatening effects of planned projects, as well as the already significant loss of historical authenticity are at least three criteria that the property satisfies for inscription on the List of World Heritage in Danger.

To allay the genuine concerns of Tibetans and those interested in the preservation of the historical and cultural authenticity of the heritage site, we welcome efforts to promote greater transparency, with particular regard to details of the reported conservation plan, and the next steps to rectify the design and construction of the two pavilions constructed in 2020.

Given historical issues related to unapproved development plans, the exclusion of traditional Tibetan designs and materials, as well as the exclusion of Tibetan residents, artisans, pilgrims and religious community from the management of the property, we recommend the Committee request all future ‘state of the conservation reports’ include a detailed description of the strategies pursued to include Tibetans, their knowledge and needs into the development and conservation of the property. Reporting should include details of the number of Tibetan residents, artisans, or pilgrims consulted, and the ways in which their recommendations have been adopted. This regular reporting requirement will demonstrate a genuine commitment to preserving and revitalizing rather than museumizing private and public Tibetan spaces that make up the property.

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## II. Historic Cities and Urban Ensembles

# L'île de Saint-Louis at the Tipping Point Due to LNG Extraction and Climate Vulnerability

Kate Mastriano in collaboration with Action Solidaire Internationale



Situated on the northwest coast of Senegal, L'île de Saint-Louis has been a UNESCO World Heritage site since 2000. Décision 24 COM X.C.1 of the World Heritage Committee inscribed L'île de Saint-Louis under the Outstanding Universal Value (OUV) cultural criteria (ii) and (iv) for its conservation of 19th century structures and urban layout, as a „cultural and economic centre that has influenced the whole of West Africa”.<sup>1</sup> Its architectural legacy reflects a pivotal chapter in colonial and postcolonial history, sustained to date by its residents, with each generation of the local community contributing through restoration efforts, adaptive reuse of historic buildings, and preservation of traditional craftsmanship.

The coastal island city now faces escalating environmental and socioeconomic threats linked to climate change and the development of the Great Tortue Ahmeyim (GTA) Liquid Natural Gas (LNG) Project and related infrastructure, the first of a series of planned large offshore LNG projects. The project's scale and rapid development have raised serious concerns about its environmental and socio-economic impacts. With the operationalization of GTA Phase I, these threats now directly imperil the marine ecosystem and the artisanal fishing economy, compromising livelihoods of the site's inhabitants and thus its architectural integrity as an inhabited living cultural heritage site (Fig. 1).



Fig. 1: Saint-Louis fishermen protesting the restricted access of Diattara with the platform visible from the shoreline.

Source: Anonymous, shared by Action Solidaire Internationale

## The Greater Tortue Ahmeyim Project

The Greater Tortue Ahmeyim Project, tied for the third largest LNG terminal in Africa, aims to tap into an estimated 15 trillion cubic feet of recoverable natural gas resources, with an annual target of 2.5 million metric tons<sup>2</sup> of LNG primarily for export (Fig. 2).

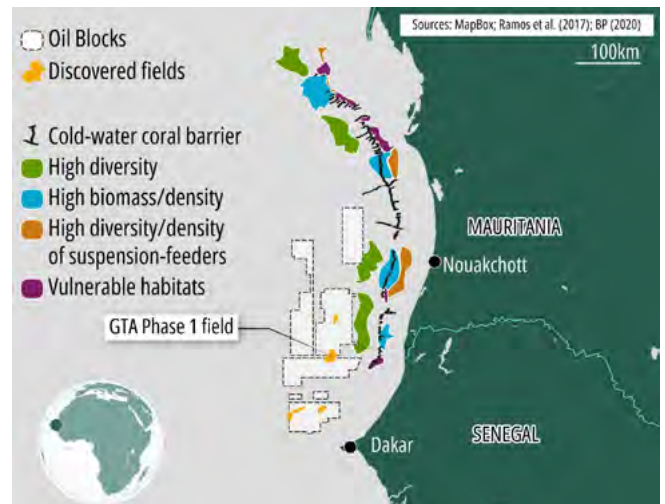


Fig. 2: BP's Greater Tortue Ahmeyim (GTA) Project and world's largest cold deep-water coral reef. Map: Mongabay

**2015** – The discovery of natural gas in an ultra-deep offshore reserve straddling Senegal and Mauritania.

**2016** – The Société des Pétroles du Sénégal (Petrosen), the Société Mauritanienne des Hydrocarbures et de Patrimoine Minier (SMHPM), Kosmos Energy with a 26.8% share<sup>3</sup>, and BP — currently the project's operator and majority stakeholder with a 56% share<sup>4</sup> — formally joined the initiative.

**2017** – BP project engineering and planning.

**2018** – FID (Final Investment Decision)<sup>5</sup> and Phase I initiation.

**January 2025** – Production began.

**February 2025** – First gas leak detected from the GTA A02 well.

**2026 and beyond** – Phase I estimated to produce 2.3 million tonnes of LNG annually for more than 20 years<sup>6</sup> with plans for Phase II.

The series of pipelines that transport gas and LNG was constructed through the world's largest deep water coral reef, home to over 150<sup>7</sup> species. The project's rapid development has raised serious concerns about its environmental and socio-economic impacts on Saint-Louis' fishing communities which rely on the Langue de Barbarie peninsula. The gas leak in February 2025 confirms concerns not only about the surrounding GTA field ecosystem, but also about the lack of transparency concerning the local Senegalese artisanal fishermen who told Mauritanian media<sup>8</sup> that they had not been informed.

## Lack of provisions: threats to cultural and natural heritage

The Direction de l'Environnement et des Établissements Classés (DEEC) requested Senegal's Ministry of the Environment to provide an independent opinion of Environmental and Social Impact Assessment (ESIA) for the GTA Project. The Netherlands Commission for Environmental Assessment (CNEE), however, concluded that the characterization of the impacts in the report had not been "sufficiently exploited," and presented relevant, albeit incomplete, environmental information.

According to Law no. 2023-15 of August 02, 2023 of the Environmental Code, an impact assessment is a pre-project study to assess the environmental impact of development, construction, or equipment installation. The social dimension of the impact assessment enables risk evaluation and mitigation planning. However, the shortcomings in the ESIA identified by CNEE, particularly in analyzing marine, coastal, and socio-economic vulnerabilities, made it difficult to gauge impact severity and mitigation measures<sup>9</sup>.

Fishermen face pirogue and vessel collisions, loss of artisanal fishing equipment, and restricted access to fishing zones. Gas exploration in this area will overburden the region in its resources, potentially leading to conflicts over the usage of space and fishing resources and concerns about industrial privatization.<sup>10</sup> The development of fisheries policies and access rights, often defined through complex mechanisms like quotas, frequently exclude artisanal fishermen.

## Existing Threats to the Historic Fishing Communities of the Langue de Barbarie

The Langue de Barbarie is a long, narrow peninsula that runs parallel to L'île de Saint-Louis and officially described as a buffer zone or an "integral component of the State Party's commitment to the protection, conservation and management of the World Heritage property<sup>11</sup>" (Fig. 3).

A quarter of the population of Saint-Louis – fishermen and their families – reside in the three major districts on the Langue de Barbarie: Guet Ndar, Ndar-Toute, and Goxumbathie. According to UN Habitat, the city of Saint-Louis is the most threatened by sea-level rise in Africa.<sup>12</sup> Coastal erosion has reshaped the facades, leading to the loss of homes and businesses. The rising sea levels intensify intrusion of saltwater into freshwater sources and agricultural lands, threatening food security in the region, while flooding has displaced residents, particularly in low-lying areas.

Intensified competition with foreign fishing vessels and declining fish stocks have compelled many fishermen to migrate illegally to Europe by pirogue — a journey that is frequently fatal. Entire families experience heightened economic vulner-



Fig. 3: The protected perimeter and zones of the Island of Saint-Louis World Heritage property, with a proposed buffer zone extension.

Map: Elisabeth Blanc, Alain Coulon, Suzanne Hirsch, Chéhrzade Nafa, Marie-Noël Tournoux, Delphine Deleneuve and Clément Vertaille / UNESCO

ability, manifesting in various socio-economic challenges such as declining household incomes, food insecurity, limited access to education and healthcare, and reliance on prostitution<sup>13</sup> which was particularly exacerbated by the gas activities. The compounded impacts, related to the GTA Project and climate change, are mutually intensifying.

### Loss of access to the Diattara fishing zone

Diattara is one of the most vital fishing zones for the fishermen of the Langue de Barbarie using line nets (félé-félé), measuring 10 kilometers from the shore and 35 meters deep (Fig. 4).

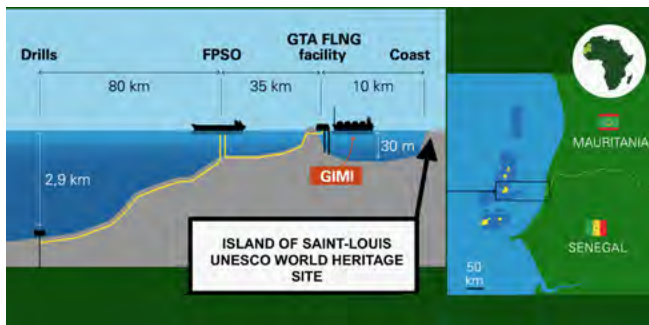


Fig. 4: Diagram of the GTA Field with a supplementary indication relevant to the proximity of Langue de Barbarie. Source: BP GTA Gazette Newsletter 2024

The installation of the GTA continental hub was constructed upon the Diattara fishing zone and remains visible from the shoreline, drastically changing the coastal landscape. The platform restricts the fishermen particularly from Goxxu Mbacc and Guet-Ndar by a 500m security cordon<sup>14</sup>, two districts that play a dynamic role in processing fish. Unlike other fishing communities within the GTA Project’s restricted area, the fishermen of Langue de Barbarie are predominantly engaged exclusively in fishing within the restricted zone.<sup>15</sup> Due to loss of fishing grounds and destruction by trawlers, out of twenty or so fishing grounds, “only three are still considered productive.” The Diattara ecosystem supports Thiof fish used in Thiebou Jenn, the national dish of Senegal. Fish constitutes almost 70% of the animal protein people consume in Senegal,<sup>16</sup> aggravating the risk of food insecurity. Still in its early stages, the GTA Project has caused issues that threaten integral parts of Saint-Louis’ society.

### Place, patrimoine, and provenance

The inscribed L’île de Saint-Louis World Heritage site, along with its buffer zones, do not focus solely on the 19th-century architecture as a historical crossroads between the African and European continents, but

are home to hundreds of thousands of people and rich biodiversity. Diattara is more than a fishing zone; it is a living cultural symbol of Saint-Louis that sustains fishermen’s livelihoods, supplies ingredients to cultural dishes, and preserves traditional fishing practices. The GTA Project threatens both the tangible and intangible cultural heritage of Saint-Louis, endangering its city’s infrastructure and intensifying social inequalities. “The architect’s work lies in the creation of meaningful places that help man to inhabit. Taking this intangible heritage into account and its enhancement can then enable greater ownership of the project and participation by the inhabitants of the Saint-Louis commune”.<sup>17</sup>

Local communities must be empowered not just as beneficiaries but as active stewards and protectors of their heritage, shaping conservation efforts in ways that reflect their lived experiences and priorities for future generations. Engaging both international and local stakeholders is imperative to prevent the acceleration of the irreversible devastation by the GTA Project. The loss of access and potential permanent damage to Diattara will have negative cascading effects creating a larger financial gap between the tourism sector, the fishing communities, and the architectural integrity of Saint-Louis. Without fostering a true sense of ownership among the people of Saint-Louis, preservation will remain an abstract goal rather than a collective mission.

### Conclusion

As activities progress, we call upon the World Heritage Centre to request that the State Parties thoroughly revisit the recommendations made in Decision 45 COM 7B.131 in 2023 regarding the GTA project. The Decision urged for the continuation of the consultations with the World Heritage Centre and the

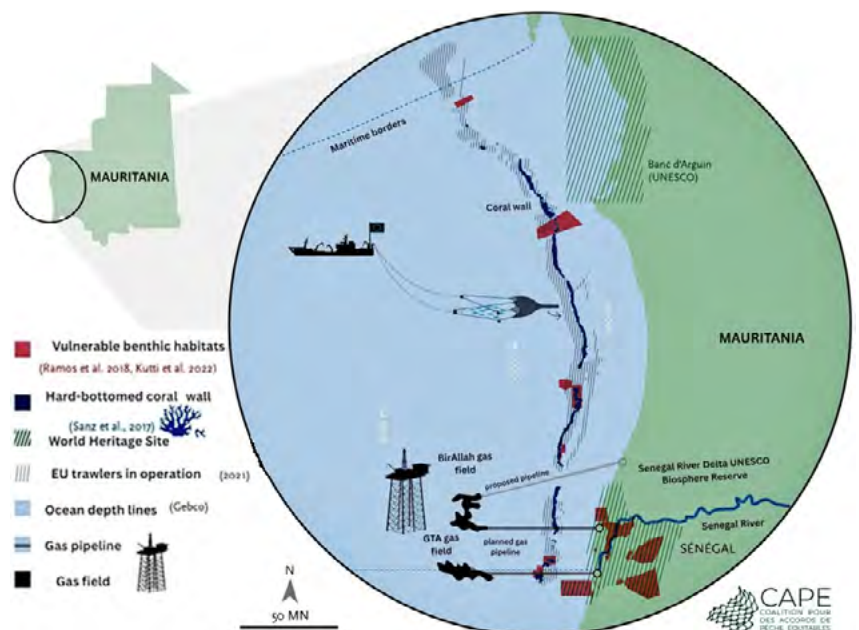


Fig. 5: Vulnerable benthic habitats in the vicinity of the Island of Saint-Louis and Banc d’Arguin World Heritage properties. Graphic: Coalition pour des Accords de Pêche Équitables

Advisory Bodies with BP Petroleum, initiated in January 2021. The meeting provided an opportunity to discuss maritime traffic, coastal erosion studies and the link with the Senegalese Integrated Coastal Management Programme, and the impact on other World Heritage properties in the area<sup>18</sup> (Fig. 5).

The Decision requested that the State Party could provide more information on their ecological and heritage commitments and “provide its full support to raise awareness among all government bodies involved of the heritage prerogatives to protect the property and which could be impacted by this project”.<sup>19</sup> The Committee requested the State Party to submit the ESIA to the World Heritage Centre for evaluation<sup>20</sup> by the Advisory Bodies which was submitted in 2023 and has the necessity to be revisited with a more current, in-depth analysis.

In the aftermath of the gas leak, all stakeholders must be held accountable and engage in clear, ongoing communication. Substantial structural deterioration has occurred on the coastlines of the Langue de Barbarie, but direct consequences have yet to arise on L’île de Saint-Louis. This warrants the reiteration for protection measures regarding the city’s infrastructure not only from climate change impacts but from GTA Project impacts on the community. We urge the World Heritage Centre to request the State Parties to invite a monitoring mission to visit the Langue de Barbarie and L’île de Saint-Louis with particular concern regarding the coastal and architectural integrity.

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- 19 Decision 45 COM 7B.131
- 20 Decision 44 COM 7B.120

# SOS: Save our Saltaire: To Protect the World Heritage Status of Saltaire

Ben Stern and Kate Rawnsley, Save Our Saltaire

Saltaire, West Yorkshire, UK, is a near-complete and well-preserved 19th Century industrial village, comprising of a textile mill, public buildings and workers' housing. Saltaire was inscribed on the World Heritage List in December 2001: *Criterion (ii): Saltaire is an outstanding and well preserved example of a mid 19th century industrial town, the layout of which was to exert a major influence on the development of the "garden city" movement. Criterion (iv): The layout and architecture of Saltaire admirably reflect mid 19th century philanthropic paternalism, as well as the important role played by the textile industry in economic and social development* (WHC Nomination Documentation).



Fig. 1: Aerial view of the centre of Saltaire with the proposed location of the new building outlined in yellow. Adapted from the World Heritage Site Management Plan 2014

Currently, Saltaire is mixed use, the mill is privately owned and in use by businesses, part-open to the public for retail, gallery and museum (e.g. David Hockney gallery, Peace museum, Saltaire School of Music). Many of the public buildings are occupied and maintained by Shipley College (16-18 year old provision). The approximately 800 workers houses are largely privately owned. This means there are multiple, sometimes competing, 'users' of Saltaire; College staff and students, business owners, commuters, residents (owners and rental), tourists (local and international). The entire property is protected by the UK planning system with World Heritage status being a key material consideration that planning authorities must take into account when considering applications. The City of Bradford Metropolitan District Council leads the management of the property and the buffer zone.



Fig. 2: Unattributed, ~1850's, original architect-commissioned watercolour of Salts Mill illustrating Titus Salts' original vision of the mill and its aspect.

Source: <https://saltsmillshop.co.uk/products/old-salts-mill-architects-watercolour>

## The 2017 Development



Fig. 3: Despite huge community opposition in 2017 Shipley college, without informing UNESCO, developed the gardens in front of the 1887 Exhibition Building, Saltaire. This photo was taken before the development and shows the iconic view of Salt's Mill.

Photo: Save Our Saltaire



Fig. 4: This photo was taken from the end house on Caroline Street and evidences the irreversible destruction of green open space, and the loss of the view of the mill from the Exhibition Building which was built by Titus Salt junior in memory of his father.

Photo: Save Our Saltaire



Fig. 5: The building erected in 2017 is 15 metres away from the new development proposed by Shipley College, which will also destroy one of the last remaining open spaces in the village of Saltaire. Photo: Save Our Saltaire

### The Risk

In 2022 Shipley College was awarded £5.39 million of towns fund money to part-fund a new building ‘Community, Arts, Heritage and Future Technology Centre’. This is Government-funded through the Shipley Towns Fund. The site is within the World Heritage Boundary and in the Buffer Zone at a central and highly visible location in Saltaire (Fig.s 1–3).

December 2022 Shipley college submitted a §172 Notification to UNESCO to seek advice on their proposal. On the 27<sup>th</sup> Feb-



Fig. 7: Detail showing the World Heritage site (red) with the proposed location of the new building in yellow.

*Fig.s 1 and 2 adapted from the Saltaire World Heritage Site Management Plan 2014*

ruary 2023, ICOMOS/UNESCO responded with a letter and a report. This response was a clear and categorical NO to the development as it “would have a highly adverse impact on the Outstanding Universal Value of Saltaire” (UNESCO/ ICOMOS report). March 2023 Shipley college and Bradford Planning de-

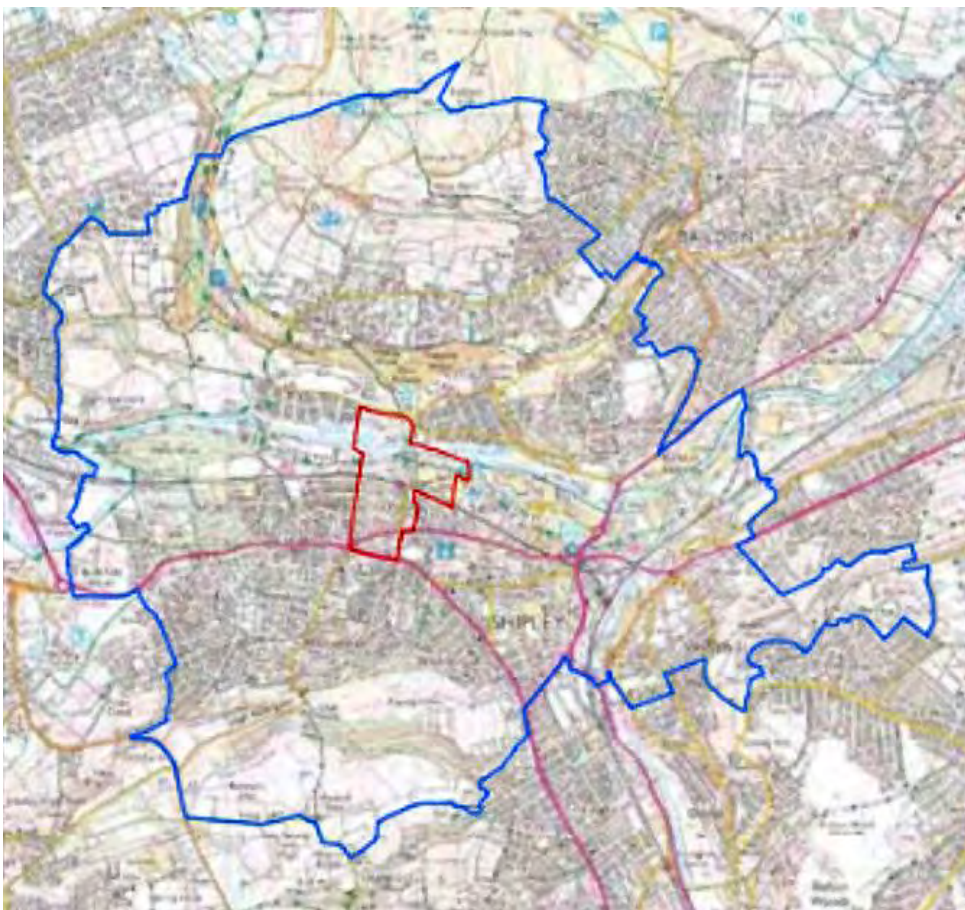


Fig. 6: Ordnance survey map showing the borders of the buffer zone (blue) and World Heritage site (red).

partment have sight of the ICOMOS report. 17 April 2023 the Shipley College project team advised others to keep the report out of the public domain: "...Any pre-application advice/ guidance is confidential and as this is a key point, as we wouldn't want ICOMOS' inaccurate response getting out into the public domain, where it would develop a life of its own. This will inevitably delay the project and we're not sure for how long at present. Please could you keep this confidential between yourselves and as fewer people as possible".

29 February 2024 the development received planning permission. Key material information was withheld as the ICOMOS report was not made available to the public (who overwhelmingly rejected the proposal during an initial community consultation and at the formal planning stage). At the planning meeting, the Senior planning officer, (who was in receipt of the UNESCO letter and ICOMOS report) stated that "Although numerous attempts had been made to obtain a view from UNESCO, to date, they had not responded on the application..." Minutes of the Planning meeting 29 February 2024. The ICOMOS report should have been the material consideration presented to the planning committee. It is against UK planning law if planning application documents contain false and/or misleading information. Unfortunately there is only a 6 week window to challenge this (which was after we obtained the ICOMOS report).

### Highlights from the ICOMOS/UNESCO report

*'ICOMOS international has concluded that the community centre should be reconsidered, and if it proves not possible to house it in an existing structure, relocated outside of the property'..... 'The way this whole area in front of the Mill is now presented is not ideal, as the car park and temporary buildings impact adversely on views of the Mill and overall on the intactness of the property. Putting a new building on this lot will not improve the situation as it will completely alter the original spatial plan'.....'At the moment, the original use of this area as a green space could readily be reinstated – either as allotments or as a small park. Once a major new building has been constructed, reinstatement as a green space will become almost impossible.'.....'it is very difficult to understand how this site could be considered as acceptable for a large new building'..... 'The compactness and intactness of Saltaire means that every detail of the original plan is important and needs to be sustained. The complex should be considered and protected as a single entity. ICOMOS considers that the intactness would be compromised by the addition of this proposed new building.'..... 'As proposed, it is likely that the Centre would have a highly adverse impact on the integrity of the property and its Outstanding Universal Value, through*



Fig. 8: A visualization of the extent to which the view on the Mill will be obstructed by the new building. Left image: a recent photograph taken from the south pavement of Caroline street looking north towards the proposed site and mill. The height of the railing was measured at 1.2 m as shown by the red line, in both images. Right image: includes a superimposed view of the planned building (dark grey) as provided to the planning committee, UNESCO and Historic England. The overlay has been aligned to the mill (roof and windowsill lines). The visualization appears to be from an unrealistic perspective, with a view point from much further back and therefore deceiving the viewer as to the real height of the new building which is 6 m from ground to the top of the lantern. At 6 m in height, the view of the mill would be blocked from this viewpoint.

*changing the original plan, interrupting its legibility and removing part of a designated green space.'*

We conclude from this that it would be reckless to risk the World Heritage Status of Saltaire. World Heritage status was removed from Liverpool for loss of the same Outstanding Universal Value due to new building. Loss of World Heritage status would have a significant detrimental effect, both culturally and financially on Saltaire, the Bradford district, nationally and globally, and would be particularly embarrassing during Bradfords' UK City of Culture 2025.

### What we have done

We have tried to obtain information about the sequence of the planning decision and who was involved – largely via freedom of information requests. We have an expert advisor, a former member of ICOMOS world heritage committee UK, now an independent consultant on international law, including UK heritage law, specific to World Heritage Sites. Our conclusions are based on expert advice and evidence which we can provide as necessary.

We have raised public awareness of our findings, publishing the ICOMOS report via the Media, Facebook and public meetings. We launched a Petition (Revisit Planning Application for Caroline Street car park site, Saltaire), currently >2325 signatures. But we were not allowed to present this to Bradford council. We have founded a local group "SOS: Save our Saltaire", with the sole purpose of preserving the World Heritage Status of Saltaire. Each of us has our own views on the new building (some like it, some don't), the same applies to other areas such as the loss of the carpark, gain of tourist information, design style, like/dislike of Bradford council or Shipley college etc. We are not NIMBYs, our sole purpose is to preserve the World Heritage Status of Saltaire for humanity.

We have written to local and national politicians (all 90 councillors, the West Yorkshire Mayor, Members of Parliament, relevant UK cabinet ministers, Historic England, the King and others). Informing them of our findings, sharing documents and asking that rather than proceeding with building work now, the sensible, appropriate, and wholly reasonable approach is for the applicants to revert to ICOMOS / UNESCO with their own arguments as to why this building will not adversely affect OUV, and with clarifications of any perceived or factual inaccuracies, and for ICOMOS / UNESCO to give an explicit determination, with these documents being made publicly available.

In general, the responses from Bradford Council and Shipley College have been disappointing: When we have received replies, they give their own opinion that World Heritage it not at risk, despite being informed that it is UNESCO alone that sets the criteria for world heritage inscription, that UNESCO alone has the power to award and remove World Heritage status and

it is not bound by the local authority's planning decision, or the views of others. They question the validity of the ICOMOS Technical Report, and therefore its expert reviewers. They state that the concerns raised in the ICOMOS Technical Report had been addressed prior to submission of the full planning application (we can find no evidence that their concerns have been answered in relation to continuing with a new building on the site). They state that the planning committee were led to believe that efforts were made to obtain further views of UNESCO before the planning application was heard and that UNESCO had not responded to the application. And that no response from UNESCO is equivalent to 'declining to comment'. We can find no evidence to support the claim that UNESCO was contacted a second time by Shipley college or Bradford Council. Historic England have confirmed that no other approach was made to UNESCO before the planning decision of 29 February 2024.

The new building is going ahead, currently delayed, but parts of the site are being prepared for building. Recent development in the buffer zone were also discovered by chance by UNESCO from newspaper articles. We can find no references to any communication with UNESCO regarding these and these may also act adversely on the OUV of Saltaire.

The majority views of the local community (during planning, after publication of the ICOMOS report during our campaign) have been disregarded. The opinion of Bradford council and Shipley College is that the ICOMOS report is flawed, this is reckless set against the much larger backdrop of all that could be lost.

### Which action should be taken and by whom

We wish to retain the World Heritage status of Saltaire, but we feel that Saltaire should be put on the agenda of the World Heritage Committee with urgency.

The World Heritage Committee should publicly and unequivocally state (or restate the comments from the ICOMOS report) whether the new building would lead to the loss (or not) of world Heritage status of Saltaire.

Bradford council have not provided a 2023 periodic review (the last periodic review was in 2013). There has been no public consultation, or 2024 ten year update to the 2014 management plan. UNESCO have been actively asking for this information from Bradford Council. It would appear that Bradford Council who are the custodians of Saltaire have been neglecting their responsibilities in relation to the protection of this World Heritage site.

The World Heritage Committee should publicly and unequivocally remind the UK Government and the City of Bradford Metropolitan District Council that they are answerable to UNESCO,

as well as to the wider international community, for the future conservation and preservation of Saltaire as a World Heritage Site.

Bradford council should include representation from the local community, who should be given this right as part of accountable democracy. At present the local community is shut out of the decision-making processes regarding Saltaire.

There is no doubt that if this development goes ahead, the world heritage status of Saltaire will be at risk. When ICOMOS state that the building will cause *"a highly adverse impact on the Outstanding Universal Value of Saltaire"*, this is a clear NO to the development, leading to loss of World Heritage status.

The new building will ruin the open vistas looking towards the Mill and severely impact on the original views of the village from the Mill (Fig.s 4 and 5). ICOMOS are unequivocal in their report. We believe that the World Heritage status of Saltaire is at risk and needs safeguarding.

### References

Saltaire World Heritage Site Management Plan 2014.

<https://www.bradford.gov.uk/environment/saltaire/saltaire-world-heritage-site-management-plan/>

UNESCO/ ICOMOS report:

<https://www.facebook.com/groups/926618392480067/permalink/956134922861747>

WHC Nomination Document <https://whc.unesco.org/uploads/nominations/1028.pdf>

# Problems Accumulate in Goslar and the Upper Harz Water Management System

Henning Frase

The Old Town of Goslar, a World Heritage Site since 1992 with approx. 4,000 buildings on 124.5 ha, and the Upper Harz Water Management System, with 1.009,89 ha, a World Heritage Site since 2010, are two of three component parts of the same World Heritage property (no. 623ter) although they are very distinct and located far from each other,

## Goslar Old Town

The past few months have been characterized by contradictory trends. Positive news was closely followed by alarming reports on the city's financial difficulties, the "Foundation World Heritage in the Harz", and the 165 recommendations on the expert study by Price Waterhouse Coopers (PwC) from 2024 on the administration of the city of Goslar, which have not yet been published in full by the city of Goslar.



Fig. 1: The change of ownership of the important Hotel Kaiserworth, shown here, and Brusttuch buildings has brought great relief to the residents of Goslar's old town. The sale of the buildings will help to revitalize the entire area around the market square and the market church.

Photo: Henning Frase, 2024

The renewed attempt to introduce a building materials exchange for historic building materials, as well as better accessibility to questions relating to monument protection and financial support programs are positive attempts to preserve the old town. It was also decided to draw up a management plan by 2027.

## Preservation of buildings and protection of cultural assets

In the old town of Goslar, the dilapidated or structurally poor condition of many privately owned buildings is becoming ever more visible. Added to this is the continuing poor state of preservation of some buildings under responsibility of the town of Goslar. For example, as already reported several times, no recognizable renovation measures have been initiated for the cathedral vestibule dating from 1050 or other small buildings.

There have been repeated reports in recent years about the lack of necessary measures or funding programs for historically significant buildings. Similar problems exist with the storage of historical building files, which was criticized by the Lower Saxony Ministry of Science and Culture in 2024, and other known problems in dealing with the entire cultural heritage in Goslar. The city's renewed over-indebtedness is already indicating a willingness to further abandon cultural assets such as the city museum, the closure of the Kaiserpfalz (Imperial Palace) for daily visits and other structural facilities. In addition, many residents are questioning the actual purpose of the World Heritage Site.

For the citizens of Goslar, the question arises as to whether UNESCO considers the complete preservation of the old town to be necessary at all. We ask UNESCO for a declaration and explanation of the significance of historically authentic preservation of the entire old town for the World Heritage Site.

Furthermore, we ask UNESCO to request a comprehensive status report from the German State Party on the structural preservation, underpinned by sufficient financing, of the old town.

## Flood protection

There is still no flood protection to divert the Gose and Abzucht rivers from a catchment area of approx. 40 km<sup>2</sup> in front of the old town because the relief tunnel for the old town has been removed from the state funding. Instead, alternative plans such as a new tunnel between the River Gose and the Granetal dam, and the upgrading of the Herzberg pond by installing a bottom outlet are being implemented. However, their effectiveness is

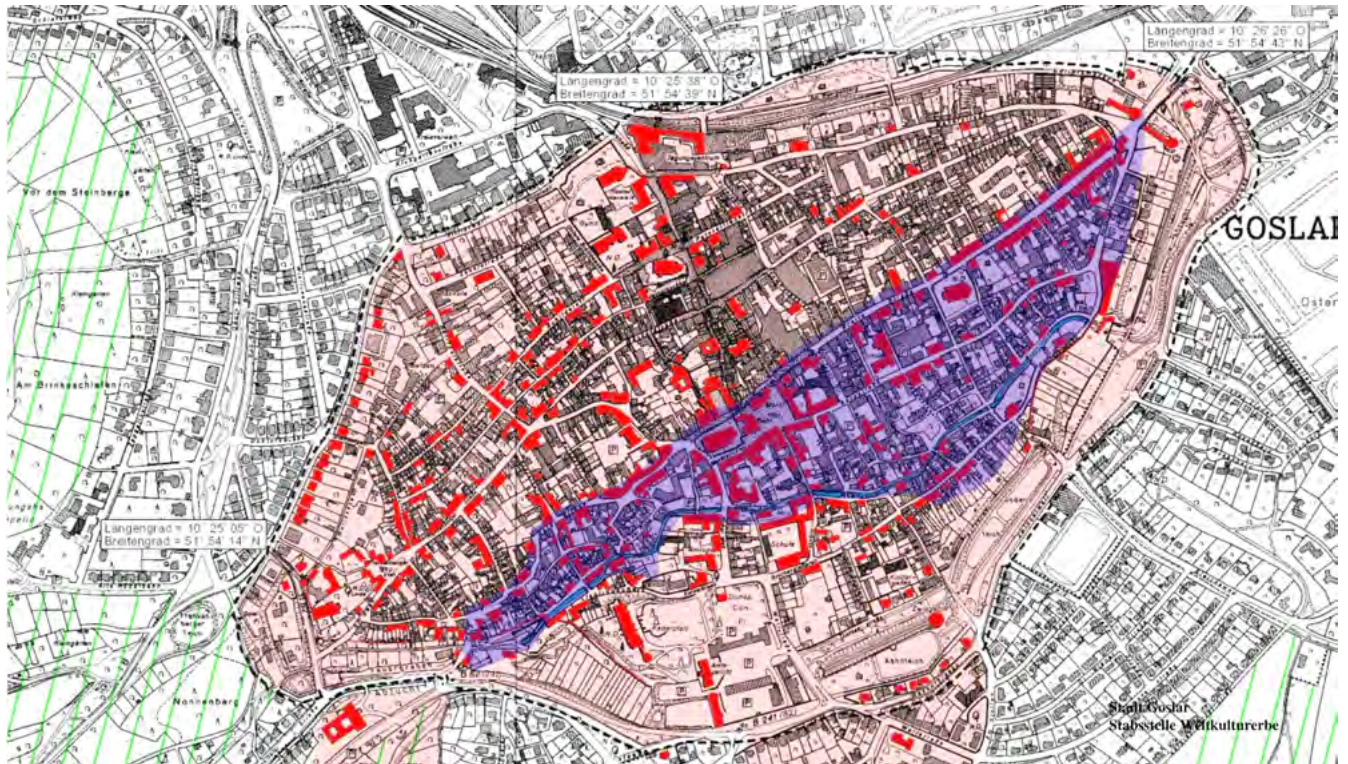


Fig. 2: The inscribed World Heritage component of the Old Town of Goslar (pink) with the approx. 22 ha of flood-prone area in blue and the individual monuments in red.

Map: Adapted from the City of Goslar Masterplan

not comparable to that of a local relief tunnel. 5 years of planning and costs for another tunnel project have already been fruitless, and the risk of a new flood is growing with increasing climate change.



Fig. 3: The 2017 flash flood caused serious damage in Goslar's old town.

Photo: Uwe Epping

In the event of renewed flooding within the old town, this would lead to further extensive damage to buildings. Many restaurants and businesses, retail outlets, hotels and guesthouses would be affected. The often already low property prices for houses in the old town would fall further, and insurers would make it much more difficult to take out natural hazard insurance after another flood. In addition, important buildings such as the town hall, the market church, the Great Holy Cross, St. Stephen's Church and many important town houses are at risk.

The city archive with its important archive holdings is also located in the flood-prone area. The old town will become permanently unattractive as a place to live.

It would be desirable that UNESCO puts the following questions to the German State Party:

- When will the planning for effective flood protection be completed with public participation, what costs will be incurred, and when will construction begin?
- What priority is given to the profit-making intentions of the private water industry in the planning of flood protection, and are alternatives fully taken into account?
- In view of the poor budgetary situation, is flood protection being put on hold in favor of the financial commitment to the Kaiserpfalz quarter?

### The managing body

The "Foundation World Heritage in the Harz", which is the managing body of the World Heritage property, has been in serious financial difficulties that almost resulted in insolvency. On March 3, 2025, the employees of the "World Heritage in the Harz Mountains" Foundation demonstrated in Goslar to save their jobs within the Foundation for the Protection of World Heritage in Lower Saxony. Due to a lack of financial resources, there was a threat of staff cuts and a significant loss of cultural funding in the World Heritage area.

The Chairwoman of the Foundation's Workers Council had already made reference in a press release to a "crisis threatening the existence of the Foundation" and to the fact that financial resources have not been adjusted in line with rising costs for eight years. References to this can be found in the meeting documents of the city administration together with the question of who is responsible for the financial audit. In the subsequent negotiations between the parties involved, further financial resources were made available for 2025 in order to avert the threat of insolvency.

We ask UNESCO to request precise information on the state of the "Foundation World Heritage in the Harz", and on securing funding.



Fig. 4: "World Heritage is more than a backdrop. We bring it to life!" Placard on a public demonstration in Goslar, March 3, 2025. Photo: Giovanni Graziano

## Management plan

In accordance with a resolution of 10.12.2024 on the meeting document 2024/330 of the City of Goslar, a comprehensive management plan is to be drawn up for the World Heritage Site "Rammelsberg Mine, Old Town of Goslar and Upper Harz Water Management" in accordance with the UNESCO guidelines, as is mandatory for World Heritage Sites. A moderated process with all owners, museum institutions and authorities involved in the extensive World Heritage Site is planned for this under the leadership of the "Stiftung Welterbe im Harz".

The total costs amount to approx. 387,000.00 euros. The Lower Saxony Ministry for Science and Culture intends to support this process with 220,000.00 euros, but on condition that the owners and responsible administrative units participate in co-financing. For the city of Goslar, co-financing amounting to 32,000.00 distributed over the years 2025-2027 is planned. As part of the management plan, the overarching objectives for the conservation and development of the World Heritage Site are to be defined and the complex administrative structures set out in accordance with UNESCO requirements.

- We ask UNESCO why the lack of a management plan has been accepted for so many years and whether any requests have been made for its submission in the meantime.
- We ask UNESCO to request the German State Party to set a binding deadline for the submission of the management plan.

## Inventory of buildings

As part of the creation of a management plan, which is scheduled to run until 2027, a survey of the existing building fabric is also to be carried out. This survey is the basis for urban planning and monument protection and will hopefully provide detailed information on the structural condition and usage patterns throughout the World Heritage Site. Despite requests from citizens, the administration has not yet carried out this survey. The recognizable investment backlog in Goslar already shows considerable financing problems that will increase in the coming years. It is already clear that the costs incurred for the maintenance of around 4,000 buildings and approximately 20 km of roads and paths cannot be met by either private owners or the public sector alone.

## The Upper Harz Water Management System

310 kilometers of ditches and 30 kilometers of watercourses belong to the Upper Harz Water Management System World Heritage Site. A total of 63 of the 107 preserved ponds are still in use and serve as flood retention, drinking water reservoirs or bathing ponds. In 2024, plans were announced to construct a new Upper Innerste Reservoir ("Obere Innerstetalsperre") upstream from the existing Innerste Reservoir ("Innerstetalsperre"), which would flood an additional area of 94 ha in the Valley of the Innerste river north of Wildemann. The new reservoir would have a capacity of 14 million m<sup>3</sup>.

If built, the Obere Innerstetal Reservoir will irretrievably flood 94 ha of valuable parts of the Upper Harz Water Management System World Heritage Site, including a large tract of the Lautenthaler Kunstgraben ("Artificial Ditch of Lautenthal") which is part of its core zone. Reducing its surface area will not help because it needs a road running parallel to its bank as an emergency access, which would also destroy the ditch. The reservoir

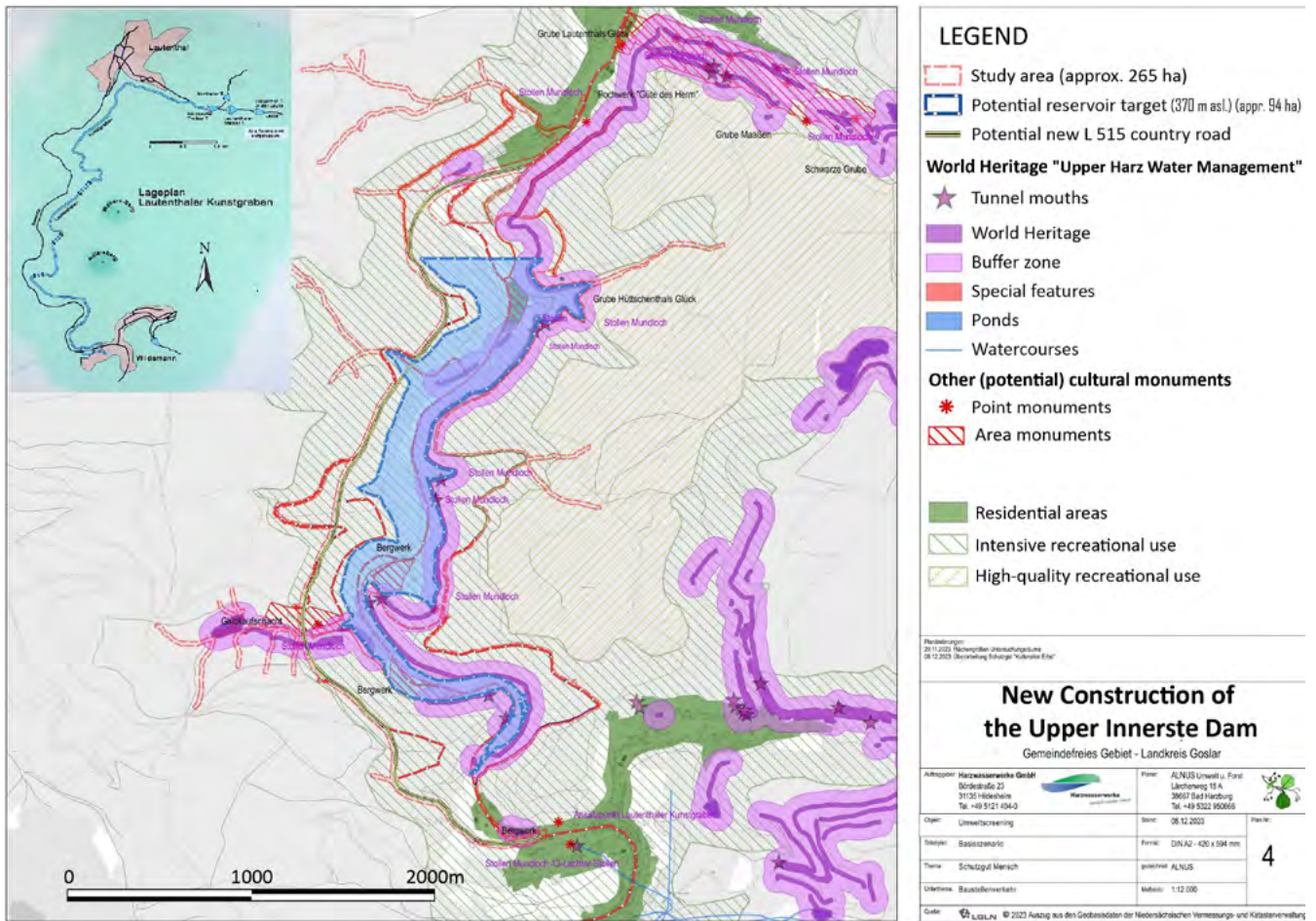


Fig. 5: The eastern side of the planned Oberste Innerstetalsperre will drown the Lautenthaler Kunstgraben, indicated by the violet line, and its buffer zone to the west, covering an area of 94 ha. Source: Extract of the Lower Saxony geo data base of the Lower Saxony Surveying and Cadastre Administration, processed by ALNUS Umwelt und Forst Bad Harzburg, 2023



Fig. 6: A computer-animated view from the North of the planned Upper Innerste Reservoir showing its impact on the landscape. The blue line represents the Lautenthaler Artificial Ditch. Graphic: Martin Lenk

and its related infrastructure will change the landscape beyond recognition – no trace of its original appearance will be left.

The plan for the new reservoir is justified by its proponents with a mix of economic and ecological arguments. Due to climate change and the associated shift in rainfall, parts of the Harz region are developing into a heavy rainfall zone. As a result, there is greater interest in exploiting the water resources economically. Around 182 mio. m<sup>3</sup> of water reserve is already stored in the Harz region. The “Energy and Water Storage Harz” (EWAZ) project by the Harz Wasser Werke (Harz Water Works) illustrates a systemic approach to linking energy and water management,

combining the production of drinking water with regulated (low) water discharge, flood protection, renewable energy generation and water management. While this approach may be laudable, it is incompatible with key attributes of the Outstanding Universal Value of the World Heritage property.

We ask the UNESCO World Heritage Committee to request from the State Party of Germany all planning documents of the Oberste Innerstetalsperre according to §172 of the Operational Guidelines for review by the Committee and its Advisory Bodies, to halt any practical activity on the ground, and not to take any decision about this project which would be difficult to reverse.



Fig. 7: The Lautenthaler Kunstgraben includes a number of technical features such as stabilizing walls, tunnels, channels, weirs, ponds and scoop wheels which diverted water to the various mines in the Harz. Its dilapidated state has been criticized by NGOs. Photo: Anja Deubl / NDR

# The Zehlendorf Forest Estate in Berlin Between Monument and Climate Protection

Gabriele Schulze, Parrot Estate Association



Almost 100 years ago, from 1926, GEHAG built another large housing estate in Berlin, the Waldsiedlung Zehlendorf, on the edge of the Grunewald forest in Zehlendorf, where the pine trees were already thinning out. GEHAG was founded in 1924 as a cooperative housing company. It built and managed the rental apartments until it was privatized in the 1990s. Today, the real estate company VONOVIA owns the property with “Deutsche Wohnen”, a DAX-listed group. These houses and apartments by Bruno Taut, Hugo Häring are also relatively small but functional. Even back then, they were comfortably equipped with a kitchen, bathroom and terrace or loggia. The buildings of the multi-storey apartments and terraced houses are characterized by their different colours. This is why the Waldsiedlung is also known as the parrot estate. Not only do the buildings look very different due to their colorfulness, but the urban design with only a few house types means that they are neither plain nor boring or monotonous.

A sense of neighborhood is encouraged due to the settlement structure. The narrow plots, usually only 5 meters wide, and the shared stairwells in the multi-storey buildings usually inevitably promote neighbourly contact, as Taut intended. At the same time, privacy is maintained thanks to the covered loggias, terraces and conservatories, because “nobody has to if they don’t want to”. Although there is a high density of architects in the feel-good estate, especially in the terraced houses, with a pronounced awareness of historic preservation, the majority of residents are also in favor of renewable energies, effective thermal insulation, climate-friendly mobility and climate protection in general.

Our non-profit association Papageiensiedlung e.V. (Parrot Estate Association), founded in 2010, is committed to preserving the forest estate with its social and ecological character. In light of the climate crisis and the Paris Climate Agreement of 2015, it initiated the “climate-friendly neighborhood – kliQ” project in 2019, which became an independent cooperative in Berlin Zehlendorf in 2024.

The UNESCO World Heritage status should not change the monument protection requirements for the Waldsiedlung Zehlendorf, we were repeatedly assured by the Monuments Agency of the Land Berlin. Most residents do not believe this.

They suspect that everything will be more regulated and controlled. This extends to their constitutionally protected homes and the use of their gardens. If monument protection will remain the same, why should the Parrot Estate become a World Heritage Site?

The largest group in the estate are the tenants in the 1,100 multi-storey apartments owned by VONOVIA, the largest landowner and landlord, and in the two condominium owners’ associations (WEG) in the VII construction phase. They were not able to participate in the development of the conservation plan for their rental apartments. A draft for the multi-storey buildings was not published and, as a result, it was not possible for the residents to give their opinion. The approximately 300 apartment owners with their two management companies in the VII construction phase were also not presented with a draft for comment. Presumably, the monument preservation plan for the multi-storey buildings was only agreed with VONOVIA. Based on their previous experience with monument protection and World Heritage procedures, the tenants in particular fear that the initiators and the state authorities will continue to ignore the legitimate interests of the local residents and will not allow fair participation in the future either.

The tenants concerned do not feel that either VONOVIA or the authorities take them seriously or value them. If you talk to the residents about the World Heritage nomination, the response is usually an indifferent shrug of the shoulders or a clear rejection. This is not only the case for tenants, for whom there are only disadvantages: no energy-efficient refurbishment, no photovoltaic systems as tenant electricity models, but higher rents and high ancillary costs for space heating. However, if an energy-efficient refurbishment is carried out, it is a modernization measure, as a result of which their rent increases in proportion to the investment costs.

Last autumn, the Monuments Agency of the Land Berlin invited representatives of the Shopping Street, the district office, churches, the kliQ Berlin cooperative and the neighborhood association as well as VONOVIA, the largest real estate company in the Papageiensiedlung, and residents who are architects to a stakeholder meeting. Representatives of the Südwest tenants’ initiative were not invited. At the suggestion of the



Fig. 1: Waste bags hung up high on a street lamp to be protected from wild boars, waiting for recycling. Photo: Gabriele Schulze

Papageiensiedlung association, this is now to be made up for. In January 2025, the nomination dossier was sent to the World Heritage Centre in Paris via the Permanent Conference of Culture Ministers. Completeness was confirmed to the Land Berlin in February 2025.

The dossier is currently being translated. The German translation is to be published, but it is not known when.

The main unresolved conflicts between residents and authorities are listed below:

- Inadequate participation in the upstream process of drawing up monument conservation plans. For the main group of residents with more than 1,000 tenants living in the multi-storey apartments, there was no offer of participation in the new guidelines for monument protection. Our non-profit neighborhood association for the Parrot Estate also did not receive a draft for the multi-storey apartment buildings. Presumably, this monument preservation plan was only discussed bilaterally with the real estate company VONOVIA.

- No solution-oriented, citizen-friendly behavior on the part of the Berlin authorities, particularly with regard to
  - c) the legally prescribed separate waste disposal with an increasing number of waste garbage cans, which cannot be accommodated and managed on the small terraced house plots in a way that is appropriate for listed buildings,
  - d) the lack of e-charging infrastructure in the public street area on main and residential streets for private cars and
  - e) the private, above-ground roof surface drainage onto the public road via the public sidewalk, which must be retained for reasons of monument protection. In frosty weather, this leads to frozen slippery sidewalks which create an acute, life-threatening risk of accidents for pedestrians. In this case, the owners of the terraced houses are even obliged to clear the ice as the party responsible.

The “community involvement” prescribed by UNESCO in the World Heritage process, i.e. the participation of citizens in the proposed World Heritage Site, is not being pursued, or only insufficiently pursued, by the monument protection authorities in the state of Berlin, in particular by the Monuments Agency of the Land Berlin commissioned for this purpose. This is why the majority of the local population rejects the UNESCO World Heritage status.

### Uncle Tom’s Hut shopping street

In 2020, large parts of the listed shopping street of the estate at Onkel Toms Hütte subway station were destroyed by a major fire. It is the historic local supply center and also part of the Zehlendorf forest settlement which is intended for World Heritage inscription. For years, not only was the burnt and burnt wooden roof structure demolished, but also the massive



Fig. 2–3: Detail of the restoration of the Uncle Tom’s Hut Shopping Street before and after plastering (August and November 2023). Photos: Gabriele Schulze

building fabric. From the point of view of building and monument experts, the reconstruction was carried out in a questionable manner in terms of both energy efficiency and monument preservation (see Fig. 2–3). It should be noted that the responsible Berlin monument protection authorities apply completely different standards to the terraced houses, the multi-storey residential buildings and the commercially used buildings in the shopping street, especially with regard to the materials, two different standards are applied for commercial owners and private homeowners.

If the Waldsiedlung Zehlendorf is awarded World Heritage status, local politicians and businesses will certainly expect not only a gain in image, but also economic benefits and more tourism.

# A Second Highrise Building Complex in Vienna's Heritage Site Must be Prevented

Herbert Rasinger, Initiative Stadtbildschutz Wien



In the last year 2024 the mayor of Vienna signed 2 new assessment notices, all of them granting the real estate tycoon Mr. Toyner the privilege to erect in the core zone of the UNESCO world heritage site "Historic centre of Vienne" two (2) highrise

buildings without an environmental impact assessment as required by law. The allowed building heights in these assessment notices are:

Assessment notice	Reference number	date	luxury apartment tower	Hotel
1.	834962/2018	16.10.2018	66,30 m	47,30 m
2.	971685/2024	13.08.2024	56,50 m	47,85 m
3.	1454608/2024	12.11.2024	49,95 m	47,95 m

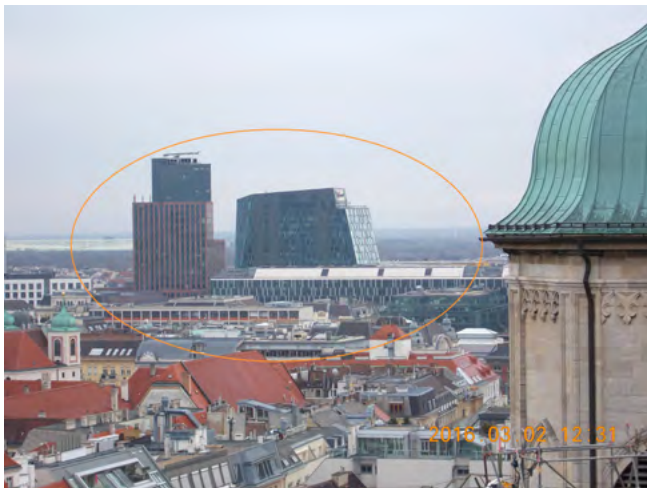


Fig. 1: The first highrise building complex Wien-Mitte in the UNESCO heritage zone erected in 2007–2013.

Photo: Initiative Stadtbildschutz



Fig. 2: Second highrise building complex planned in the core zone of the world heritage site as approved in the mayor's assessment notice 2024-11-12.

Photo: Initiative Stadtbildschutz

All of them are higher than the current hotel building of 38 m and thus in opposition the decision 37 COM 7B.71 of 2013 concerning the Historic Centre of Vienna (Austria) (C 1033) item 4. "to halt any redevelopment higher than existing structures".

## Let's have a look back in history.

Vienna was put on the list of world heritage sites in Helsinki in the year 2001. Shortly thereafter, in 2004, the city of Vienna allowed the construction of a high rise building complex "Wien-Mitte" with several high rise buildings with heights of 90 m and 66,3 m.

This provoked heated discussions with the UNESCO World Heritage Center. Vienna agreed to finance a UNESCO conference with the theme "World Heritage and Contemporary Architecture". The conference took place in Vienna from 12 to 14 May 2005 with 600 participants and with the participation of the director general of the UNESCO World Heritage Center. The results were summarized in the Vienna Memorandum which stipulates

14. Living historic cities, especially World Heritage cities, require a policy of city planning and management that takes conservation as one key point for conservation. In this process, the historic city's authenticity and integrity, which are determined by various factors, must not be compromised.

22. It is important for new development to minimize direct impacts on important historic elements, such as significant structures or archaeological deposits.

- 24. Urban planning infrastructure in heritage zones must include all measures to respect the historic fabric, building stock and context, and to mitigate the negative effects of traffic circulation and parking
- 26. Special care should be taken to ensure that the development of contemporary architecture in World Heritage cities is complementary to values of the historic urban landscape and remains within limits in order not to compromise the historic nature of the city.<sup>1</sup>

In the press release of 2005-05-09 of the City of Vienna, the City of Vienna criticized the urban city development in Puebla, Beijing, Kairo and London:

If individual buildings and monuments are preserved but their urban environment is carelessly changed, the buildings lose their significance and thus much of their value, according to the World Heritage Committee and its experts.

For example, the Archbishop’s Palace and other outstanding examples of Mexican Baroque in the historic center of Puebla (listed as a World Heritage Site in 1987) will probably survive the construction of shopping centers and parking lots in their immediate vicinity, but the identity of this unique city center, which testifies to the meeting of European and American creativity, will be lost.

There are countless examples like this - from Beijing to Cairo to London. But the UNESCO World Heritage Center is not concerned with limiting urban development and modern architecture, assures its director, Francesco Bandarin.<sup>2</sup>

The results of this Vienna Conference from 12–14 May 2005 and the 2006 Management Plan (including the stipulation “no high-rise buildings in World Heritage zones”) were presented by the municipality of Vienna in exhibitions shown in 10 different cities around the world as e.g.:

Dates	Exhibition locations
25.05.–17.06.2011	Bratislava
19.10.–05.11.2010	Den Haag (City Hall)
16.10.–20.10.2008	Ankara (Exhibition Hall Zafer Carsisi Kizilay)
23.09.–04.10.2008	Lviv/Lemberg (University)
27.11.–11.12.2007	Sharja/United Arab Emirates (Exhibition Hall Qanat Al Qasba)
15.11.–26.11.2007	Abu Dhabi/United Arab Emirates (Emirates Palace Hotel)
03.10.–17.10.2007	Innsbruck (Congress Center)
07.05.–30.05.2007	Opatija (art pavillon Juraj Matia Sporer)
05.03.–30.03.2007	New York (Grant Gallery)
27.10.–23.11.2006	Berlin (Austrian Embassy)
09.06.–30.06.2006	Moscow (Prechinstenka)

### Conclusion

Vienna organizes international conferences, records its resolutions in a Vienna Memorandum and in a management plan on December 6, 2006, and does not abide today by its own resolutions.

The above mentioned assessment notice number 1. 834962/2018 issued by the mayor of Vienna on 2018-10-16 culminated in a decision by the European court that makes an environmental impact assessment necessary for high rise building project in the core zone of the world heritage site in Vienna. Nevertheless the city of Vienna issued 2 additional assessment notices ignoring the European court decision.

### Court of Justice: Judgment in Case C-575/21 | WertInvest Hotelbetrieb

Case C-575/21, EU Court of Justice, WertInvest Hotelbetrieb Luxembourg, 25 May 2023, press release No 87/23

The requirement to carry out an environmental impact assessment for an urban development project cannot be dependent exclusively on the size of that project.

In an urban environment in which space is limited, thresholds of land take of at least 15 ha and a gross floor area of more than 150 000 m<sup>2</sup> are so high that, in practice, the majority of urban development projects are exempt in advance from the requirement for an environmental impact assessment. It is ultimately for the Administrative Court, Vienna, to assess whether all, or almost all, of the projects concerned are exempt in advance from that requirement. That would not, as a rule, be compatible with the Directive.

A Joint World Heritage Centre/ICOMOS/ICCROM Advisory mission headed by Mr. Lazare Eloundou Assomo, Director of the UNESCO World Heritage Centre, visited the Historic Centre of

Vienna from 11–13 March 2024. The mission repeated its statement of 2012: “Currently, the hotel Intercontinental disturbs the famous view from Belvedere. Therefore, no increase to the building’s height should be aimed at in connection with the redo. On the contrary, it is warmly recommended to use this opportunity to reduce the height of the building and therefore reduce its negative visual impact.”<sup>3</sup>

This mission underlines that the Heumarkt project has two main problematic elements, which are planned as highrise constructions: the hotel building and the residential building.

The hotel project in its Schwarzenberg Garden still adversely affects the property's OUV.

### Recommendations

Reduce the building height of the planned high rise buildings to 38 m, the maximum allowable building height since 1964. This is the "acceptable threshold" defined in 1964 and reaffirmed by the Reactive Monitoring Mission 17-20 September 2012, item 3.2.1.2. as well as in the HIA report of Michael Kloos of December 2023.

- Abolish land use plan P.D.7984 allowing the high rise buildings with a building height up to +79 m in the core zone of the world heritage site
- A second high rise building complex like Wien-Mitte in the heritage site must not be permitted.

- Abolish land use plan P.D.8190 allowing the superstructure on top of the adjacent Winterthur office building next to the St. Charles Church.
- Establish the public relations and promotion of awareness of the world heritage site as promised in the management plan 2021 on page 133.

### Notes

- 1 UNESCO WHC document WHC-05/15.GA/INF.7
- 2 Sources of press releases of the City of Vienna:  
<https://presse.wien.gv.at/presse/2005/05/09/welterbe-und-zeitgenoessische-architektur>  
<http://www.wien.gv.at/presse/2005/05/12/haeupl-begruesst-teilnehmer-der-unesco-konferenz>  
<http://www.wien.gv.at/presse/2005/05/12/unesco-konferenz-welterbe-und-zeitgenoessische-architektur>  
<https://www.wien.gv.at/presse/2005/05/09/welterbe-und-zeitgenoessische-architektur>
- 3 2012 UNESCO-ICOMOS Reactive Monitoring Mission Report, pp. 17-18

# Safranbolu Under Threat: A Critical Call for UNESCO Oversight

İbrahim Canbulat



Fig. 1: The area depicted in this photograph contains the only known palatial residence of Safranbolu. It is believed to have been constructed by Hasançavuşoğlu Hüseyin Ağa, who served as voyvoda of the Viranşehir sanjak between 1832 and 1834. Today, the complex is commonly referred to as the “Asmazlar Konakları”. In the upper left of the image, the harem section, still owned by the Asmazlar family, is visible. The building to the right at the top was purchased by the Turkish Touring and Automobile Association (TTOK) in 1990 and revitalized as one of the first boutique hotels in Safranbolu. In the foreground, the asphalt road, constructed during the 1970s, was created through the expropriation of part of the complex during the mayoralty of Kiziltan Ulukavak. This road physically divided the palace compound in two and opened the historical settlement to motorized traffic—an irreversible threshold in the urban fabric’s transformation.

On the left, the primary school building appears on the 1990 İsmet Ökçay Conservation Zoning Plan. One of the earliest examples of reinforced concrete “replica” Safranbolu windows is visible on this structure. After 2010, new parcels were allocated in this area, and a reinforced concrete villa imitating a traditional Safranbolu house was constructed. In the lower right, the Bayramgiller House — later known as the Kadıoğlu Sehzade Mansion Hotel — can be seen. Tragically, it burned down in 2024 due to an electrical fault, and the fire spread to the neighboring mansion. This single photograph encapsulates multiple layers of the deterioration of Safranbolu’s cultural heritage: the fragmentation of historical complexes, the introduction of incompatible infrastructure, the proliferation of “replica” architecture, and the rising threat of disaster due to material and functional incompatibilities.

Photo: İbrahim Canbulat

Safranbolu, inscribed in the UNESCO World Heritage List in 1994, is one of the few surviving *living* heritage cities in Turkey. Together with Istanbul, Bursa-Cumalıkızık, and Diyarbakır,<sup>1</sup> it forms part of a small group of historic cities that continue to be inhabited while retaining significant heritage values. Yet,

unlike the others, Safranbolu still preserves a coherent urban morphology with meaningful functional layers—residential, artisanal, religious, agricultural —woven into everyday life.

This makes Safranbolu *unique*. It is not a monumental ensemble fragmented by mega-projects (like Istanbul), nor is it reduced to isolated fragments within a metropolitan sprawl (like Bursa), or transformed beyond recognition by conflict and top-down re-

<sup>1</sup> The author is conducting research on the Hasançavuşoğlu Dynasty and the Voyvoda Palace, with two consecutive papers forthcoming.

development (like Diyarbakır). Safranbolu is the last of its kind — a comprehensively preserved medium-sized Ottoman town with layered cultural landscapes. The loss of such a site would be a failure not just of local governance, but of the very mechanisms designed to protect World Heritage.

### The Growing Threat: Evidence from UNESCO Periodic Reporting Cycles

Three official UNESCO Periodic Reports (2008, 2016, 2024) reveal worsening trends:

- **Lack of Buffer Zone:** Safranbolu was inscribed without a buffer zone, a major shortcoming that violates the Operational Guidelines (UNESCO, 2019). This omission enabled unregulated reinforced-concrete development near and even within the protected zone.
- **New Construction and Urban Pressure:** The absence of a buffer zone allowed uncontrolled reinforced-concrete buildings to emerge around (and even within) the core protected area, compromising visual integrity and structural context.
- **Erosion of Authenticity:** Poor restoration practices—cement-based mortars, PVC windows, industrial roofing—have displaced traditional craftsmanship. Restoration has been aesthetic, not ethical.
- **Loss of Function and Community:** Residential displacement, commodification of space, and overtourism have weakened Safranbolu’s function as a living settlement.

### Deterioration of Three Historic Zones

#### 1. Çarşı (Marketplace and Moslems’ Quarter)

Once a dynamic hub of artisanal culture, Çarşı is now largely abandoned by locals. It has transformed into a stage set for tourists: homes have become boutique hotels; artisan workshops have turned into souvenir shops; and streets, once alive at night, fall silent after the day-trippers depart. The UNESCO listing triggered real estate speculation, leading to rapid ownership turnover. Cultural continuity has been lost even where architectural fabric remains.

#### 2. Kıranköy (Greek Quarter)

Kıranköy has succumbed to hybridized development. Mimicry of Ottoman façades masks inconsistent architecture, while the urban skyline is disrupted by incongruent buildings. Its former identity as a multicultural quarter has been erased. Though partially “preserved” in appearance, the area has lost its functional and cultural cohesion.

#### 3. Bağlar (Vineyard Houses)

Bağlar, representing seasonal rural-urban life, has been dismantled through zoning changes and speculative villa construction. The parcellation of vineyards and loss of traditional land use have erased one of Anatolia’s last surviving bağ cultures. Similar traditions in Gesi, Çinçin, and Erkilet have already vanished. Safranbolu’s Bağlar was the final representative.

### Tourism Pressure and the Day-Tripper Economy

Tourism surged after UNESCO recognition, particularly from 2011–2019, when group tours from East Asia began to dominate. This shifted tourism from a deep cultural experience to fast-paced, surface-level consumption. Three visitor profiles define Safranbolu’s recent tourism trajectory:

- **2003–2010:** Western cultural tourists (academics, retirees) engaged in meaningful heritage interaction: guided tours, book purchases, long stays.
- **2011–2019:** Mass day-trippers from East Asia focused on photos, quick visits, and low local spending. Crafts were replaced by decorative imitations.
- **2020–present:** The pandemic solidified a mono-tourism economy. Western tourists did not return; the remaining profile supports “see and go” visits.

Though economically profitable, day-tripper tourism has devastated local identity. Infrastructure is overloaded. Real estate speculation has displaced permanent residents. And intangible heritage — rituals, crafts, neighborhood cohesion — has eroded.

### Governance Breakdown

Safranbolu’s crisis is primarily administrative and political:

- **Fragmented Authority:** Responsibilities are divided between the Municipality, Governorship, Ministry of Culture and Tourism, and the Ministry of Environment, Urbanization and Climate Change. Coordination is rare; competition and passivity are common.
- **Politicized Decision-making:** Key posts are filled by politically loyal individuals, not heritage experts.
- **Lack of Monitoring and Capacity:** No system exists for monitoring, enforcement, or impact assessment. Despite laws requiring KÜMED (Heritage Impact Assessment) reports since 2011, many new constructions proceeded without them—even within the visual corridor of the protected zone.
- **Omissions at Nomination Stage:** Failure to designate a buffer zone during the initial inscription was a shared failure of national and local authorities.
- **Violation of Operational Guidelines:** Recent construction activity directly abutting the protected core area - without mandatory Heritage Impact Assessments (KÜMED) - suggests a breach of the Operational Guidelines. According to 2011 regulations and the 664 No’lu Ilke Karari, even adjacent development should not proceed without these assessments. The likely absence of KÜMED reports in recent decisions highlights serious procedural gaps, raising the need for international auditing. Some development plans passed by landmark committees without informing the World Heritage Committee undermine transparency.

## Systemic Failures and the Need for Intervention

Beyond visible deterioration, Safranbolu's case exposes systemic flaws in the application of UNESCO's protective mechanisms:

- No buffer zone was ever added despite known risks.
- There is no integrated conservation and management plan.
- Restoration ethics are poor, often driven by tourism image-building rather than preservation.
- The natural and agricultural landscapes are unprotected and left out of heritage narratives.
- New constructions are evaluated through urban planning norms, not heritage guidelines.

Safranbolu is not a case of decay from neglect—it is a textbook example of how politicized heritage management, weak enforcement, and profit-driven interventions can destroy a living cultural heritage despite its international status.

## Comparative Significance

Unlike Istanbul, Bursa, or Diyarbakır, where large-scale transformations have severed historical layers, Safranbolu offers a rare totality: architectural, urban, natural, and intangible elements coexisting in continuity. This makes it not only a Turkish heritage site, but a universal one. Its loss would constitute the disappearance of the *last livable Ottoman city* in Anatolia with functional authenticity.

## Conclusion and Call to Action

Safranbolu's decline demands immediate international attention. The World Heritage Centre and Advisory Bodies must act to protect this globally valuable site from further deterioration. The following steps are urgently needed:

- 1. Request the invitation of a UNESCO/ICOMOS Reactive Monitoring Mission:** To assess the current threats on site and review local governance mechanisms.
- 2. Mandate the Creation of a Buffer Zone:** In line with Operational Guidelines.
- 3. Accredite World Heritage Watch (WHW):** As an official civil society observer. WHW's consistent monitoring, independent reports, and advocacy have proven essential in similar cases.

**4. Stop Tokenistic Restoration:** Restoration must return to its roots—respect for original materials, techniques, and meanings. Restoration should never be a simulation.

**5. Enforce Operational Guidelines:** Including mandatory KÜMED impact assessments for any new construction in or near the heritage zone.

Safranbolu is not just a charming town—it is a test case. If this site fails under UNESCO protection, what message does that send to the world?

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# Changes in Heritage Monuments in Aleppo and an Action Plan for Recovery

Louay Dakhel

This study aims to show the changes that occurred in the World Heritage monuments in Syria after the last war (2011–2017) without talking about the destruction of the war, by talking about ancient Aleppo and explaining the reasons for these changes and making suggestions for solutions.

In this study, I relied on historical References, the reality of the heritage of ancient Aleppo, and my articles published in several previous UNESCO reports (2021–2023), to reach, through extrapolation, objective comparison and scientific analysis, an assessment of the state of heritage in Aleppo and an explanation of the changes that occurred in its features after the war as a result of the restoration work, and to conclude what requires action from the local and international community and UNESCO, to stop these changes and to continue restoration and reconstruction work in a way that preserves heritage features (Fig.1).



Fig. 1

## Reasons for changing heritage monuments in Aleppo after the last war (2011–2017)

Syrian heritage has suffered from the following difficult circumstances:

- (1) The Syrian economy exhausted by the long war,
- (2) in addition to the international economic sanctions on Syria (Caesar Act),
- (3) the large area of ancient Aleppo and its overcrowding with antiquities, The earthquake at February 6, 2024 which destroyed many historic buildings in Old Aleppo, especially the markets.
- (5) The complete absence of UNESCO and the international community, as strong parties supporting the restoration, has made the restoration of this city a huge burden that exceeds the capabilities of the Syrians, especially in these difficult circumstances today.

**All of the above led to the following four factors, which were major direct reasons for changing heritage features:**

**First:** Not carrying out emergency restoration operations for the majority of archaeological buildings damaged by war or earthquakes, which increased the damage to those buildings day after day due to the destruction of some parts of the structural system of the building, which formed intermittent voids

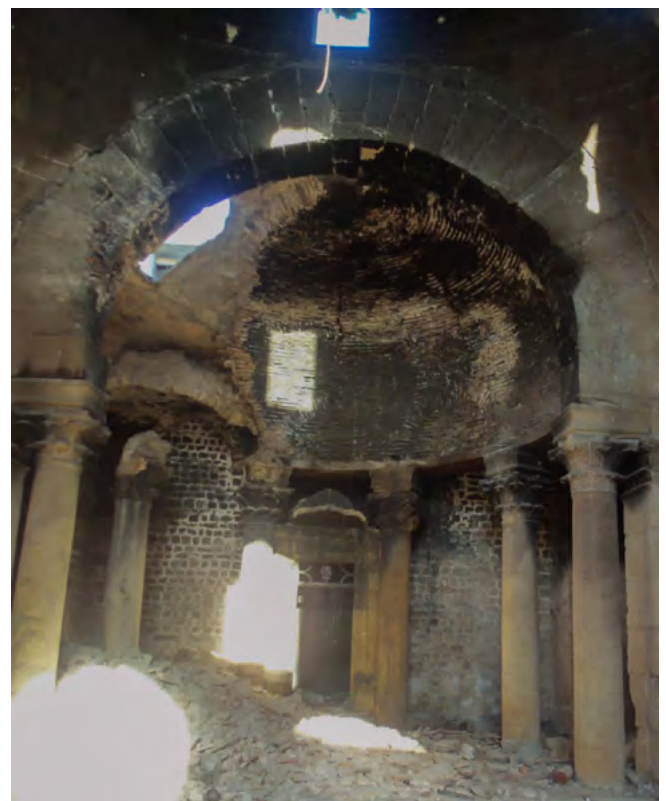


Fig. 2

with which new sections were exposed at the site of the damage, which led to the loss of architectural mass to the state of cohesion necessary for its stability. In addition, these sections were exposed to external weather factors after they became exposed, which necessarily led to a change in the nature of the building material, its resistance and fragility, after it had been a solid part isolated from the outside air and united with the rest of the parts of the cohesive structural system that made up the architectural mass (Fig. 2)

**Second:** The lack of a road map for restoration works in the old city as a whole, and thus the lack of sequence of priorities and the dispersal of efforts.

**Third:** The earthquake of February 6, 2024 AD (Fig. 3).



Fig. 3

**Fourth:** Most buildings were affected by the leakage of sewage from dilapidated sewers due to the passage of time and the recent war.

**Fifth:** The widespread presence of industrial factories and theft of antiquities in Old Aleppo.

After the new government took power in Syria, corruption came to a near-complete halt, along with many of the heritage changes caused by the former Assad regime. There is no doubt that preventing the continued change of heritage monuments after the war in Syria and Aleppo requires stopping all causes of this change.

**The most important changes in the features of Aleppo’s heritage after the war**

But some of the changes in heritage have continued until now, either due to ignorance or due to the influence of a few remnants of the corruption of the former regime that continue until today in a hidden manner.

1) Many archaeological blocks, which are an ancient dark brown color, completely or partially turn into bright white, after removing the outer layer (Fig. 4).



Fig. 4

2) Using shiny, modern materials such as glass and other materials in place of wood, etc., so that the shape of the antiquity after restoration becomes different from its shape before restoration, for example: old markets:

The photo before restoration shows: the lighting is natural and directed from top to bottom, the ceilings are stone without any covering, and the storefronts are wooden with a design that is characteristic of all old markets (Fig. 5)



Fig. 5

The photo after the restoration shows: the lighting is artificial and directed from bottom to top, the ceilings are covered with plaster, and the storefronts are made of glass throughout (Fig. 6).



Fig. 6

3) Adding modern designs to squares around which the most important archaeological buildings in ancient Aleppo are distributed, which led to a lack of harmony between the elements that make up one scene, in addition to the fact that the modern blocks obscure the view of the archaeological blocks from some viewing angles (Fig. 7).



2.8 Fig. 7.jpeg

4) Restoring previous violations that were destroyed by war and earthquakes, so that they return again as newly restored regular violations instead of removing them, because such removal is complicated and difficult, financially and administratively (Fig. 8).



Fig. 8

- 5) Theft of antiquities due to the lack of adequate security.
- 6) The large number of buildings destroyed by war and earthquakes has turned Old Aleppo into a ghost town, lacking security and infested with snakes, insects, rodents, and leaking sewage. Consequently, the human conditions for living at this ancient city are significantly deteriorating.
- 7) Restoration work includes some additions that conflict with the philosophy of traditional architecture in Aleppo.

### Roadmap to stop the change of heritage monuments in Syria and Aleppo

The international community and UNESCO have neglected to care about the Syrian heritage due to the recurrence of some violations of international conventions in restoration, and due to the lack of guarantee of aid (if any) reaching the restoration workshops completely and accurately, so I suggest to UNESCO and the international community:

**First:** Carry out the necessary emergency restorative procedures as quickly as possible.

**Second:** An action plan that ensures the preservation of the world heritage landmarks in Syria and includes supporting scientific research that updates the restoration and reconstruction laws to become more flexible, relevant, and enforceable, explains the additional damage that befell the Syrian heritage after the recent war, and supports researchers to reach an integrated scientific formula for the rules of the traditional Aleppo school in restoration, to be adopted alongside international conventions by all workers in restoration, instead of UNESCO implementing educational workshops, as Syria and Aleppo in particular have enough skilled professionals.

**Third:** Restore life to Old Aleppo through

1. Achieving security.
2. Providing services, electricity, infrastructure, health, and cleanness, and eliminating environmental pollution, the

spread of snakes, rodents, and garbage in the ruins of Old Aleppo.

3. Removing industrial factories, so that Old Aleppo can return to its history as residential, not industrial, form.
4. Supporting humanitarian service projects (clinics, schools, kindergartens, elder care houses).

**Fourth:** Provide assistance. Priority should be given to renovating the homes of poor people, as they constitute the majority of the population in Old Aleppo. Their return to their homes will pave the way for a full return to life in Old Aleppo.

1. Facilitating interest-free loans to support residents in renovating their homes.
2. Partial assistance: for all archaeological buildings that residents are restoring, such that the value of this assistance is equal to the difference between the cost of restoration in violation of international conventions and the cost of restoration in compliance with these conventions, such that this assistance is a reward for the building owner for his commitment to international conventions, and thus UNESCO ensures the absence of violations and thus the conformity of restoration work with international conventions, because people in Syria do not want violations and do not want to change the features of their heritage that they boast about and are proud of.
3. Full assistance for the most important buildings from an archaeological point of view, which include the most important and most of the artistic, architectural and archaeological elements.

**Fifth:** To ensure that major international donors are on the right track and that all of their funds will contribute to the preservation of Syria's world heritage, I propose a plan to manage the movement of funds as follows:

The German Bank for Reconstruction and Development (KfW) offers a grant package to Syria for development engineering projects, through the United Nations, whose office in Aleppo acts as a consultant for these engineering works. Among the many tasks of this office is disbursing funds directly to the contractors implementing these projects, according to data on the completed works. I have personally worked for years and up until today as a representative of the donor in these projects, and I believe that if UNESCO applies this method, the major international donors will ensure that their funds will reach the workshops directly and accurately.

**Sixth:** Support the Syrian government to help them completely eradicate corruption and theft.

Finally... and in return there is no doubt that the continued neglect of heritage in Aleppo and Syria is always paralleled by the continued change of the features of this heritage, and it cannot be denied that the reality of protecting Syrian heritage is a difficult matter, therefore it requires international support, and I believe that the international community can still participate in protecting this world heritage, achieve its sustainability and find solutions to all the problems that hinder it.



### III. Cultural Landscapes and Mixed Properties

# Overloaded or Indifferent? Site Management at the Tehuacán-Cuicatlán Valley

Jack Corbett and Nelly M. Robles García

In 2025 the Tehuacán-Cuicatlán Valley: originary habitat of Mesoamerica, will complete seven years since its inscription on UNESCO's World Heritage List. Given multiple exhortations to the States Party to bolster capacity for site management as well as to encourage attention to the engagement of local communities in management participation it would be reasonable to assess current circumstances for evidence of progress. This is especially true as those same communities are heavily dependent on their natural and cultural resource base for meeting daily needs and aspirations for more secure, rewarding lives. Furthermore, Mexico's presidential election of 2024 recently transferred political power from the president who coincidentally assumed leadership in 2018 (the same year as the Site's inscription) this would seem to be an appropriate moment to take stock of potential accomplishments. It would also be an opportunity to highlight for the new president priorities and needs not only of this World Heritage Site but by extension of many others.

Such an assessment is made more urgent by two other factors. First, three recent World Heritage Watch Reports have been critical of Mexico's management and protection of existing World Heritage properties. With a single site we might explain this due to unusual or transitory circumstances. Three different sites in two years become more troubling; are there systemic factors at play which merit review and correction? Is the arrival of a new national administration an opportune moment for policy corrections or innovations better suited advancing the goals of management effectiveness and community participation? Second, as there are currently twenty-four sites on Mexico's Tentative List, this would be a critical moment to address potential weaknesses in future proposals. To propose additional World Heritage Sites with readily-identifiable flaws is a poor use of resources, not only of the States Party but of UNESCO and the larger World Heritage community.

## Structural considerations

The Tehuacán-Cuicatlán Valley: originary habitat of Mesoamerica presents a somewhat complex situation as it was nominated as a mixed site, advancing both natural

and cultural factors as meriting inclusion on the List. In part this complexity flows from the reality that it therefore is governed by two federal laws managed by two different federal departments. The General Law of Ecological Balance and Environmental Protection provides legal authority to the National Commission on Natural Protected Areas (CONANP), as part of the Secretary of Environment and Natural Resources (SEMARNAT), to manage the natural resource dimensions. The Federal Law on Monuments and Archaeological, Artistic, and Historical Zones assigns protection of cultural resources to the National Institute of Anthropology and History (INAH). The site spreads across two states, 50 municipalities, and hundreds of small villages supported by small-scale agriculture, craft production, petty commerce, and remittances from outmigration. Thus,



Fig. 1: Site map of Tehuacán-Cuicatlán Valley: originary habitat of Mesoamerica.

Map: Arqueología Mexicana

from the start divided authority creates challenges of overlapping or competing arenas for action, while simultaneously leaving potential voids where neither agency asserts responsibility. As a consequence, inter-agency collaboration depends heavily on the initiative of respective managers, not on institutional arrangements.

This creates operational challenges. For example, there is no “site manager”, in the sense of a specific body designated with this responsibility. Yet in practice there is, as when the biosphere reserve was created it was a clear CONANP designation and a biosphere administrative office was established in Tehuacan, charged with overseeing operations and relationships with communities. CONANP had an assigned budget, site personnel, and an administrative presence extending to communities where it had projects. And it had an extensive site management plan, including references to cultural resources. Yet by law and by preference it avoided entanglement in cultural resource management, and any engagement was mediated through its natural resource orientation. When the property received World Heritage status these institutional arrangements dominated its organizational landscape.



Fig. 2: Wall paintings in the Cueva de las Manitas, examples of more than 2000 representations.

Photo: Archive of the Ruta del Rio Grande project – National Institute of Anthropology and History

INAH, in contrast, had a minimal presence in the 490,000 hectare reserve. As the site is shared by the states of Puebla and Oaxaca, it received sporadic attention from the INAH state office in the city of Puebla and arguably even less from its office in the city of Oaxaca. While at one time INAH-Oaxaca had a roving inspector covering Oaxaca’s Cuicatlan Valley, after his retirement the position disappeared and INAH’s presence was limited to an occasional appearance in cases of salvage archaeology or damage to a known archaeological site. While it had formal responsibility for cultural resources in practice it was largely absent from the region.

Mexican law assigns to INAH overall responsibility for managing relations regarding heritage matters, yet INAH had neither resources assigned to the region nor a comprehensive plan for addressing its obligations. By default organizational relationships and planning have therefore fallen largely to the struc-

tures established by CONANP. Yet CONANP cannot claim to be the site manager.

These structural issues were recognized by the Advisory Bodies reviewing the Site proposal. The IUCN assessment was that substantively the proposal was solid in its treatment of regional biodiversity and could benefit from attention to community needs and participation. It recognized years of research, investment in organizational infrastructure, and development of communications and operations networks extending to the community level. ICOMOS was largely critical of the cultural dimension both for substantive reasons and the lack of community-based networking. In effect the Site’s archaeological and social complexity overwhelmed INAH’s institutional capacity to address the critical eye ICOMOS brought to the proposal. Although in the end the World Heritage Committee tilted in the direction of the strength of the natural resource arguments, the challenge to the cultural dimension cannot go unnoticed.



Fig. 3: Deteriorating structures at Santiago Quiotepec archaeological site.

Photo: Angel Robles

### Institutional response

Announcement of the successful application to UNESCO followed the election of President Andres Manuel Lopez Obrador by approximately four weeks, and he ended his term in October, 2024. What happened between mid-2018 and his replacement by his successor? Has Mexico responded to the concerns surfaced by the Advisory Bodies, the World Heritage Committee, or outside observers? In short, little has changed, and what has changed may be more attributable to efforts by civil society than by official institutions. For example, in six years INAH has made no meaningful effort to develop a management plan comparable to that developed by CONANP over the preceding two decades. Nor has it extended its organizational presence in the region, except through participation in a modest archaeological project. While it applauds the efforts of others there is no commitment of resources. CONANP continues its focus on the Puebla portion of the Site, making little effort to address the Cuicatlan Valley in Oaxaca.

It would be easy to treat this as a matter of institutional indifference, as attaching little importance to a geographically-isolated and economically-marginal region, particularly when heavily-trafficked sites elsewhere demand attention. Without

aggressive advocates insisting on support, administrators look elsewhere, and indifference dominates. Yet we cannot overlook conscious policy choice as a factor in this outcome. President Lopez Obrador centered much of his administration on large infrastructure projects such as a train system in Yucatan, the new airport, and a massive oil refinery. To finance infrastructure spending he cut departments such as INAH drastically. Observers believe INAH's research budget was reduced by 70 percent, many researchers lost their positions, and during the Lopez Obrador presidency INAH presented no new additions to its World Heritage List, compared to four in the previous administration, and five each in the two administrations before that.

To the extent public policy choices framed institutional responses it becomes easier to understand the apparent indifference or withdrawal of INAH given new challenges such as this Site's approval for the World Heritage List. With priority given to institutional survival, new initiatives appeared too much of a burden, World Heritage Committee directives notwithstanding. While expectations of closer collaboration with communities were understood, more extensive involvement with communities long ignored could require resource commitments too painful to undertake. When the dominant ethos of the institution became to avoid risk, assuming new relationships with new partners became too burdensome to consider.

The former president has left office so the new president may alter policy preferences and prove more supportive of the needs of heritage management. Yet one of the three adverse World Heritage Watch Reports items noted earlier was a critique of a new vehicle bridge built across the World Heritage Site of Xochimilco in Mexico City. The mayor of Mexico City at the time was Dr. Claudia Sheinbaum, who cited the bridge as keeping a political promise. Today Dr. Sheinbaum is the new president of Mexico, and the list of political promises to be kept is far longer than it was three years ago. No Mexican site appears on the list to be considered at the 2025 World Heritage Committee meeting, and only rumors of a possible submission for 2026. It is too early to know how she will approach heritage management but her prior behavior is not encouraging. For that reason, it is truly important to make her more aware of the critical need to offer sensitive and supportive policies, not further overload the fragile and incomplete institutional systems managing Mexican heritage today.

### A Civil Society alternative?

One response currently emerging in the Cuicatlan Valley is a multi-community organization centered on defining new opportunities on ecotourism and other heritage-related possibilities through collaboration. With a core of seven communities, the organization seeks to tap resources and guidance from an array of partners ranging from local and international foundations to a broad spectrum of professionals, national and foreign universities, and private sector participants. In effect the goal is

to work outside formal policy structures, mobilizing people and resources to innovate and collaborate. This civil society alternative also enables communities consisting of different ethnicities to develop skills in working together, a capacity rarely encouraged. Although CONANP has a community network, it largely functions as a way to support top-down administrative decisions. The new collaborative seeks to unleash other energies and alternatives.

INAH could enhance civil society engagement by signing formal working agreements for cooperation, co-governance, and other efforts extending recognition and authority. Doing so calls for some risk-taking in the form of decentralization, but the gain could be a more dynamic and productive regional network of communities. Rather than further overloading its internal structure INAH could conceivably off-load at least limited tasks to community organizations. In the highly-centralized Mexican administrative state sharing authority or co-governance appears counter-intuitive, but may prove a means of accomplishing goals otherwise beyond reach.



Fig. 4: Community heritage protection committee receiving training.  
Photo: Archive of the Ruta del Rio Grande project – National Institute of Anthropology and History

### A modest innovation

We therefore encourage World Heritage Watch to mobilize its moral authority to urge the Mexican government to pursue new ways to work with communities to unleash local talent, resources, and commitment in addressing productive ways to manage heritage matters. The Site needs systematic, proactive management, not occasional, haphazard attention. We further encourage creative thinking to overcome current obstacles to integrated site management, giving special attention to geographic, professional and organizational constraints so wasteful in resources, ineffective in problem-solving, and contrary to a spirit of engagement and collaboration.

The current circumstances of the World Heritage Site have been decades in the making and require long-term interventions, not quick fixes. We urge systematic, proactive management, working with local communities to build collaboration and commitment.

# Fell Tracks into Off-road Circuits: The Wilful Degradation of the Lake District's OUV

Lake District Green Lanes Alliance

## Summary

- We are concerned that the Lake District National Park Administration (LDNPA) still does not see the protection of OUV as the foundation for a green lanes strategy, prioritising instead the rights of off-road motorists.
- Existing evidence clearly demonstrates harm to attributes of OUV / special qualities, providing direct justification for Traffic Regulation Orders (TROs).
- The monitoring programme proposed by the LDNPA will not assess the degradation of OUV attributes. Instead, its prolonged timeline will allow the continued use of recreational motor vehicles on green lanes, delaying necessary action.

The LDNPA's State of Conservation Report on the use of recreational motor vehicles contains several omissions and misleading statements:

## Use and number of TROs in the Lake District

Contrary to the LDNPA's claims, only two, not four, operative TROs exist in the Lake District: Rusland Pool (seasonal TRO covering the central section of the route only) and Gatescarth Pass



Fig. 1: 4x4 vehicles on Hodge Close green lane. Photo: Lake District Green Lanes Alliance

(permit system). The TRO on the High Nibthwaite to Parkamoor route U5051 has not been in operation since 2006. The TRO on U5531 in Little Langdale is not on a green lane because most of it is sealed with tarmac. It is also not included in the Hierarchy of Trails, a classification and survey system developed in the 1990s by the LDNPA and motorists.

This makes the Lake District an outlier in comparison with the Yorkshire Dales and the Peak District National Parks. Only 2% of its 85 green lanes are subject to TROs or otherwise fully or partially protected, compared to 9% (out of 102) in the Yorkshire Dales and 54% of priority lanes (out of 35) in the Peak District. Notably, the LDNPA has not made any new TROs since receiving new powers to do so in 2006.

## Widespread public concern

The concern over green lane driving is not limited to the "localised concern" of "some people". A petition to protect the green lanes of the Lake District has attracted over 390,000 signatories, with over 7,000 comments, supporting a ban on recreational motor vehicles.

Prominent conservation and advocacy organisations, including the National Trust, the Campaign for National Parks, Friends of the Lake District and The Ramblers, have called for restrictions.

Experts, including 45 environmental scientists, the Cumbria branch of the Botanical Society of Britain and Ireland, and heritage specialist Dr. John Carman, have all highlighted the detrimental impact of motor vehicles on conservation and cultural heritage. Two biographers of Beatrix Potter, Linda Lear and Nadia Cohen, say that Potter would have staunchly opposed off-road vehicle use on her land.

## Cultural heritage

There is no evidence for the LDNPA's argument that motor vehicle use of its unsealed public roads is part of the World Heritage Site's cultural heritage. The detailed Nomination Dossier for World Heritage status mentions driving on unsealed roads only twice, and only in the context of limiting (Gatescarth Pass) or prohibiting (Walna Scar) the use by recreational motor vehicles.

John Dower's 1945 report, which laid the groundwork for National Parks, recognised the problems caused by motor vehicles on green lanes. He said that almost all unsealed routes in National Parks should be closed to all motor vehicles except for access.

In 2006 Parliament passed the Natural Environment and Rural Communities (NERC) Act 2006, which gave National Park Authorities (NPAs) new powers to make TROs. The Government guidance on the use of TROs and similar measures in National Parks is that outdoor recreational activities which "have an adverse effect on the Parks' special qualities *and other people's enjoyment of them may need to be excluded*" and that "a level of recreational vehicular use that may be appropriate in other areas will be inappropriate within National Parks and incompatible with their purposes".



Fig. 2: Motorcycles on Stang End green lane. Photo: Lake District Green Lanes Alliance

## Monitoring

The plan to collect quantitative data for three years on motor vehicle use of nine routes is welcome. But since the LDNPA already has quantitative data for 17 routes for several years between 2000-2009, it would be more informative to monitor more of these.

The LDNPA has not specified how it will use this quantitative data in deciding what action to take, e.g. what level of recreational motor vehicle use is inappropriate and incompatible with National Park purposes.

The qualitative monitoring proposed by the LDNPA ignores the views of those who own and/or farm the land over which the routes run on the impact of recreational motor vehicle use. The National Trust who own the land over which the Tilberthwaite route runs say that motor vehicle use of the route is damaging and should be regulated.

## Impact on OUV

The LDNPA is incorrect in saying that the 2024 qualitative user survey measures impacts on the attributes of OUV and intangible attributes such as the "perception and enjoyment of an open landscape". It only provides information about users' experience of the route, whether users felt comfortable with sharing the route with motorised users, with non-motorised users, and whether meeting a motor vehicle would impact on their enjoyment.

Contrary to the LDNPA's claim the LDGLA had no influence on the survey design. We formally objected to the LDNPA's approach and proposed a number of amendments. All were ignored.

When the LDNPA conducted an online survey of users of the Tilberthwaite route in 2018 and 2019 many respondents described the negative impact of motor vehicles on the special qualities of the National Park and on the World Heritage Site's OUV. Environmental psychologist Dr Ryan Lumber's independent analysis of these comments confirms that they align with the legal grounds for TROs:

- **Tranquillity and beauty diminished:**  
Respondents report that motor vehicles disrupt the peace and natural beauty they seek in the Lake District (RTRA84 grounds 5 and 6).
- **Safety and wellbeing threatened:**  
Vehicles cause physical danger, noise, and pollution, increasing anxiety and disrupting the visitor experience. (RTRA84 grounds 1, 5 and 6).
- **Cultural and environmental harm:**  
Motor vehicles conflict with the traditional ethos of the Lake District, i.e. quiet enjoyment, conservation, and protection of natural and cultural heritage. They also contribute to landscape erosion and other forms of damage (RTRA84 grounds 2, 3 and 4).

These findings correspond to the LDNPA's own view in 2003, when it considered that recreational driving on unsealed roads was incompatible with the special qualities of the National Park.

## LDNPA surveys and evidence

In its State of Conservation Report September 2023 the World Heritage Centre stresses the need for an interpretation strategy

as the basis for “defining how the property is understood and presented, what kind of future should be pursued for it and what would be the preferred uses compatible with sustaining its OUV.”

Any survey should therefore be based on the interpretation of OUV attributes for a particular area and whether or not these attributes are being impacted by recreational motor vehicles.

The LDNPA says that where there is unequivocal evidence of harm to OUV or the special qualities of the National Park it will consider consulting on a TRO. But it has not explained how the monitoring it started in 2024 will provide evidence, unequivocal or otherwise, of harm to OUV or the special qualities. It says that the previous TROs were made on the basis of evidence of harm to special qualities. If this were the case, why has the TRO on the Nibthwaite -Parkamoor route not been activated since 2006, despite increasing motor vehicle use and resulting damage? The Rusland Pool TRO was made following a request by the Environment Agency to protect salmonid spawning, and it was made on the basis of reasonable risk of harm, not because of harm that had already occurred, **a preventative policy recommended by Defra in its TRO guidance.**

The LDNPA commissioned an independent inspector to hold a public inquiry into its Gatescarth Pass TRO proposal, because the evidence of harm to special qualities was disputed, i.e. was not unequivocal.

### **Access for all, not for all activities**

The LDNPA stresses its duty to maintain access for all. This mistakenly suggests that all forms of access are equally acceptable, even when some activities degrade the National Park’s core attributes. Restricting harmful activities is not about limiting access to people, but about protecting the World Heritage Site for everyone.

### **Conclusion**

We ask for UNESCO’s help in persuading the LDNPA to look afresh at the existing evidence, including impact statements and expert assessments. The rights of off-road motorists on green lanes should not trump the overriding duty to protect this World Heritage Site for future generations,

# Impacts of the Lake District World Heritage Site on Climate, Nature, Culture and Community

Karen Lloyd, Lancaster University Future Places Centre  
 Ian Convery, University of Cumbria  
 Lee Schofield, ecologist & author

Since its inscription in 2017, it has become increasingly obvious that the Lake District World Heritage Site is promoting a model of farming that is both economically and ecologically unsustainable. Further, the Statement of Outstanding Universal Value which justifies the inscription of the site, and the way it has been managed, have driven a dangerous wedge between culture and nature, do not support the livelihood of farmers, is not wanted by local people and is contributing to damaging over-tourism. While initially intended to boost the local economy and celebrate the area's unique cultural and natural heritage, the World Heritage status has led to unintended and detrimental consequences for nature. In particular, the designation has created a 'false narrative' around the sustainability and ecological impact of sheep farming - a practice that has significantly contributed to environmental degradation within the Lake District National Park (LDNP). The Glover Review highlighted the vital role of landscapes in supporting human well-being and biodiversity, and identified significant failings in a substantial proportion of UK protected areas in meeting their statutory nature protection duties.<sup>1</sup>

## Overgrazing

Until relatively recently, farming in the Lake District was considerably more diverse and existed within the natural carrying capacity of the landscape. The farm steadings demonstrate that historical agricultural diversity in physical form. Most farms have facilities for poultry, pigs, cattle and horses, as well as sheep. Old maps show how ubiquitous orchards and vegetable plots were, as well as small arable fields. This is not the type of farming that predominates in the Lake District today. The post-war drive for food security and the decades of government subsidy that followed swept a relatively benign farming system aside, replacing it with an intensive, sheep dominated, production-focused, input-heavy one.

As multiple reports have shown, upland sheep farming is hugely destructive to wildlife habitats and economically unsound. Yet it is this latest, most damaging, iteration of farming the World Heritage Designation celebrates and seeks to maintain. As the UK government rolls out a farming support system based on the principle of 'public payments for public goods', environmentally damaging and economically precarious farming sys-

tems, such as Lake District sheep farming, are likely to become unviable without significant change. If the Lake District World Heritage Site is dependent on the continuation of sheep farming, then frankly, it is doomed...and there are an awful lot of sheep in the Lake District.

According to the Department for Environment, Food and Rural Affairs (DEFRA)'s 2021 statistics, approximately 62% of the Lake District's 236,200 hectares are farmed, supporting a population of 672,685 sheep – an average sheep density of 284.5 sheep per km<sup>2</sup>. By comparison, humans make up just 7.66% of medium-sized mammals in the region by weight, with sheep accounting for 89.73%, deer 2.13%, and badgers 0.53%. 'Wild mammals' collectively comprise only about 3% – and that figure would drop further if domestic pets were included<sup>2</sup>. This imbalance is symptomatic of an ecologically depleted system, where sheep farming is prioritised over biodiversity.



Fig. 1: Stampede of Herdwick sheep in Cumbria. Sheep grazing is a major inhibitor of landscape recovery across the Lake District. As an indicator of former woodland, bracken (seen in this image as large areas of brown) exemplifies the degraded state of the National Park uplands due to over-grazing. Around 12% of its entire area is dominated by bracken, and on Langdale Common, one of the largest and most degraded commons, the figure is much higher, at 30%. The prioritising of sheep-grazing over landscape recovery must be reversed. Photo: Andy Docker

The UK is one of the most nature depleted countries in the world, and in midst of climate and ecological collapse, there is no time to lose if we are to avoid the worst of the impending catastrophes. The Lake District National Park Management Plan talks about thirteen 'special qualities.' Amongst these is the assertion that the Lakes contains a 'Wealth of habitats and wildlife: almost 20% of the Lake District National Park is designated for its biodiversity value.'<sup>3</sup> This is interesting to us, because with many others working in the field, we do not see a wealth of wildlife and habitats here. Far from it.



Fig. 2: This image taken from Clough Head in the North Lakes again shows large areas of bracken due to overgrazing. It exemplifies the sheer scale of habitat loss, inhibiting the recovery of wild plants, scrub, birds, pollinators and mammals entirely because of the dominance of sheep farming in the uplands. Photo: Karen Lloyd

In this photograph alone, taken from Clough Head in the northern Lakes, it is fundamentally clear how little green infrastructure there is for wild species to survive or thrive. Across this vast area, there's almost a complete absence of scrub, woodlands and hedges. For wildlife, this is an insurmountable problem. Despite what the National Park infers, the biodiversity crisis here is acute, again rendering the WH inscription unfit for purpose. Under its current remit, the WH inscription is hidebound by the redundant dogma of sheep farming as culturally important. What, we might ask, would Wordsworth and Beatrix Potter—both significant figures cited in the WH cultural landscape inscription and both pragmatists who were also acutely attuned to natural cycles - have to say about such natural devastation. We imagine it would be, *World Heritage? Not in my name.*



Fig.3: An entire hillside landscape covered with secondary bracken vegetation near Windermere, with only a few scattered trees remaining of its natural vegetation. Photo: Stephan Doempke

How we manage the landscape is irretrievably bound up with re-engaging people with nature, which as we know is urgent. We cannot expect tourists staying for a week to become engaged with caring for wildlife; thus, social and environmental justice are irretrievably entwined. The LDNPA talks a lot about 'sustainable' tourism, but we have yet to understand exactly what this is when no-one talks about limits, and growth is the only certainty. Added to this, serious and ever-present threats from extreme weather events such as Storm Desmond in 2015<sup>4</sup> appears not to be taken seriously by the body responsible for

managing the WH site, together with sustainable futures planning – the Lake District National Park Authority.

Our people, communities, wildlife and habitats are placed under ever-increasing pressures of many kinds. Little remains off limits to humans, meaning wildlife has precious few areas of peace and quiet where they can live undisturbed. A landscape *cannot* be considered fully 'cultural' unless the needs of *all* its inhabitants are given due regard in terms of climate, wildlife and ecosystems, and functioning communities served by protected housing. By disregarding these irrevocably intertwined dynamics, we bury our collective heads in the sand. The status quo must not be allowed to continue. There is much truth in the adage that we should pass the world to our children in a better condition than we ourselves inherited it. Under the current priorities of the Lake District WH inscription, this sentiment has little meaning.

### Overtourism

Since the WH inscription, tourism has risen off the scale. It is now at industrial levels – and rising – over 18 million per annum according to the Lake District National Park Authority;<sup>5</sup> over 42 million in the wider county of Cumbria.<sup>6</sup> Not only is this rampant direction of travel contributing to the hollowing out of our communities through second and holiday homes, but perpetuates poorly paid, insecure and seasonal jobs, with no long-term meaningful strategies in place to protect and enhance the lives of residents.

The website Air DNA shows that almost 14,000 Air B&B properties are registered in the Lake District,<sup>7</sup> with an 'active' number of over 9,000. The knock-on effect of uncontrolled second home ownership on local communities is devastating, with dangerously low levels of social housing and rising homelessness. In the town of Keswick alone, almost **fifty percent** of domestic properties are either holiday lets or second homes. According to council tax records, the figure has more than doubled since 2017.<sup>8</sup> The impacts spill out into surrounding towns and villages such as Kendal and Ulverston, reducing the availability of affordable housing. What does meaningful sustainability look like, against local families abandoned in the ruins of hyper-tourism?



Fig. 4: Overcrowded Bowness Bay. Photo source: <https://falconwoodgcsegeography.weebly.com/a-uk-national-park-case-study.html>

## A need to reimagine the Lake District

For centuries the Lake District has been a place where the human imagination has resulted in works of global significance. In order to live and work sustainably in this special, but heavily compromised landscape, we urgently need to reimagine the future less as one hidebound under the climate-denying preservation order of the UNESCO World Heritage Site inscription, and more as one that functions for *all* its inhabitants, that values local communities and places humans back into relationship with the wild. Where recovery projects are taking place, such as Reforesting Hardknott, Cumbria Connect, Wild Haweswater, Lowther Estates and on individual farms, the rise in wild species is evident and soils recover and function for slowing the flow of heavy rain.



Fig. 4: In the absence of sheep grazing, the Lake District would revert to a mosaic of broadleaf woodland, scrub, heath, mire and grassland, as shown in this long-term grazing enclosure near Haweswater. Photo: David Morris

Nature is resilient, but it needs our continued engagement. Given the twin crises of climate and nature loss, to deny the possibility of recovery feels morally bankrupt. We argue that WH urgently needs to engage with the actual times we are living through, rather than some flawed bucolic vision of farming practices from the past. This is the Lake District we *must* begin to shape. Our recommendations to support this change are as follows:

- A reassessment of the WHS criteria: The criteria should be revised to reflect current ecological understanding, including consideration of the Lake District landscape over a longer temporal scale (rather than just the last few hundred years of sheep farming) and much greater emphasis on biodiversity conservation.
- Support for sustainable farming practices: Financial and technical support should be provided to Lake District farmers to facilitate their transition to more sustainable and diverse agricultural practices.
- Tourism management strategies: Develop effective tourism management strategies to mitigate the negative impacts of overtourism while creating a positive visitor experience.

The current WHS designation is not serving the interests of the Lake District's biodiversity and unique environment and threatens its future sustainability. Moreover, farming and tourism interests hold substantial influence and representation within the Lake District National Park Partnership, sometimes potentially leading to an imbalance in decision-making. The Glover Review pointed to inconsistencies in designation, inadequate funding, fragmented governance, and a lack of joined-up thinking across different agencies responsible for different aspects of land management. It revealed that many protected areas weren't achieving their conservation objectives. A joined-up, proactive approach to address these concerns is crucial to ensure the long-term health and well-being of this heavily degraded landscape.

## Notes

- 1 <https://www.gov.uk/government/publications/designated-landscapes-national-parks-and-aonbs-2018-review/landscapes-review-summary-of-findings>
- 2 Based on a population estimate of 41000 people with an average weight of 70kg, 672,685 sheep with an average weight of 50kg, 40000 deer (red and roe) with an average weight of 20kg and 10000 badgers, with an average weight of 10 kg.
- 3 <https://www.lakedistrict.gov.uk/caringfor/lake-district-special-qualities>
- 4 In a period of 24 hours, 341.4mm (13.44 inches) of rain fell on Cumbria in a 24-hour period. Thirlmere recorded 405mm (15.9 inches) in 38 hours, setting a new UK record for rainfall in a 48-hour period.
- 5 <https://www.lakedistrict.gov.uk/learning/forteachers/teachers-resources/ks2tourists#:~:text=Current%20surveys%20show%20that%20about,self%2Dcatering%20and%20serviced%20accommodation.>
- 6 <https://www.thecumbrialep.co.uk/visitor-economy/#:~:text=Cumbria's%20visitor%20economy%20is%20hugely,over%2020%25%20of%20our%20economy.>
- 7 <https://www.airdna.co/vacation-rental-data/app/gb/north-west-england/lake-district/overview>
- 8 <https://keswickreminder.co.uk/2020/10/05/figures-reveal-half-of-keswicks-properties-are-holiday-lets-or-second-homes/#:~:text=He%20said%20the%20Lake%20District,cent%20of%20the%20housing%20stock.>

# The Paradox of Preservation and Development at Blenheim Palace: Threats from Within

Adrian J. Delnevo and Andrew Rein



Blenheim Palace, a UNESCO World Heritage Site (WHS) since 1987, is celebrated not only for its grand architecture and historical significance but also for its picturesque landscape, designed by the illustrious Capability Brown. However, recent developments around and within its setting raise critical concerns about the preservation of its integrity. We previously documented three major housing developments within the setting of the Blenheim WHS<sup>1</sup>. One of these initially failed to gain planning permission (in part due to their being within the Blenheim setting) but have subsequently been granted building permission following an appeal by the applicant (Blenheim) at a public inquiry. The other site was granted planning permission pending a mitigation agreement, which has not yet been agreed.

Since our previous paper to WHW, one of Europe's largest Solar Projects has been proposed on land owned by Blenheim and largely within the setting of the Blenheim WHS. Blenheim itself is the major land owner of the land for the solar farm, and is a major advocate of the solar project<sup>2</sup>. This paper addresses the paradox of Blenheim's own housing development program combined with new and extensive plans for a vast Solar Project<sup>3</sup>, which together compound the substantial threats to the visual and aesthetic character of this iconic site, and its immediate setting. Even the UK Secretary of State for Energy Security and Net Zero, with reference to the Clean Energy Superpower Mission, said ... "We know that not all planning applications are good"<sup>4</sup>.



Fig. 1: Aerial view of Blenheim Palace and Park.

## The Significance of Blenheim Palace

Blenheim Palace, the birthplace of Sir Winston Churchill, stands as a testament to the English Baroque style and represents a unique fusion of art, architecture, and landscape. Its setting—encompassing expansive grounds and vistas—plays a vital role in the heritage narrative of the site. UNESCO recognizes that the significance of a WHS extends beyond its physical boundaries, emphasizing the importance of its setting in maintaining the site's authenticity and integrity. Indeed, Blenheim itself recognises that ... "the conversion of significant areas of agricultural land for other purposes, or the large scale loss of woodland would detract from the distinctiveness of the setting"<sup>5</sup>. Blenheim is the promoter of extensive housing development and the major landowner promoting a massive solar project, and yet it acknowledges that ... "one of the key characteristics of the surroundings of Blenheim Park is that much of the setting lies within the wider extent of the Blenheim Estate", and that solar farms etc. - could detrimentally influence the character of the adjoining rural areas"<sup>5</sup>.

## Threats from Housing Developments

Blenheim has purchased its own building company<sup>6</sup> and has embarked on a housing development program, involving at least 730 housing units within the immediate environs of the WHS (Fig. 2). However, this initiative has raised alarm among conservationists and heritage advocates. The construction of so many residential units near the Blenheim WHS threatens to disrupt the historic landscape that has naturally evolved but hitherto has been meticulously preserved.

The visual integrity of the landscape, which was designed to evoke a sense of grandeur and harmony, is jeopardized when modern developments encroach upon these historical vistas. New housing developments can lead to increased traffic, noise, and light pollution, which adversely affect both the tranquillity, and visual aesthetics of the WHS. Furthermore, the potential for urban sprawl compromises the

Photo: Dreilly95

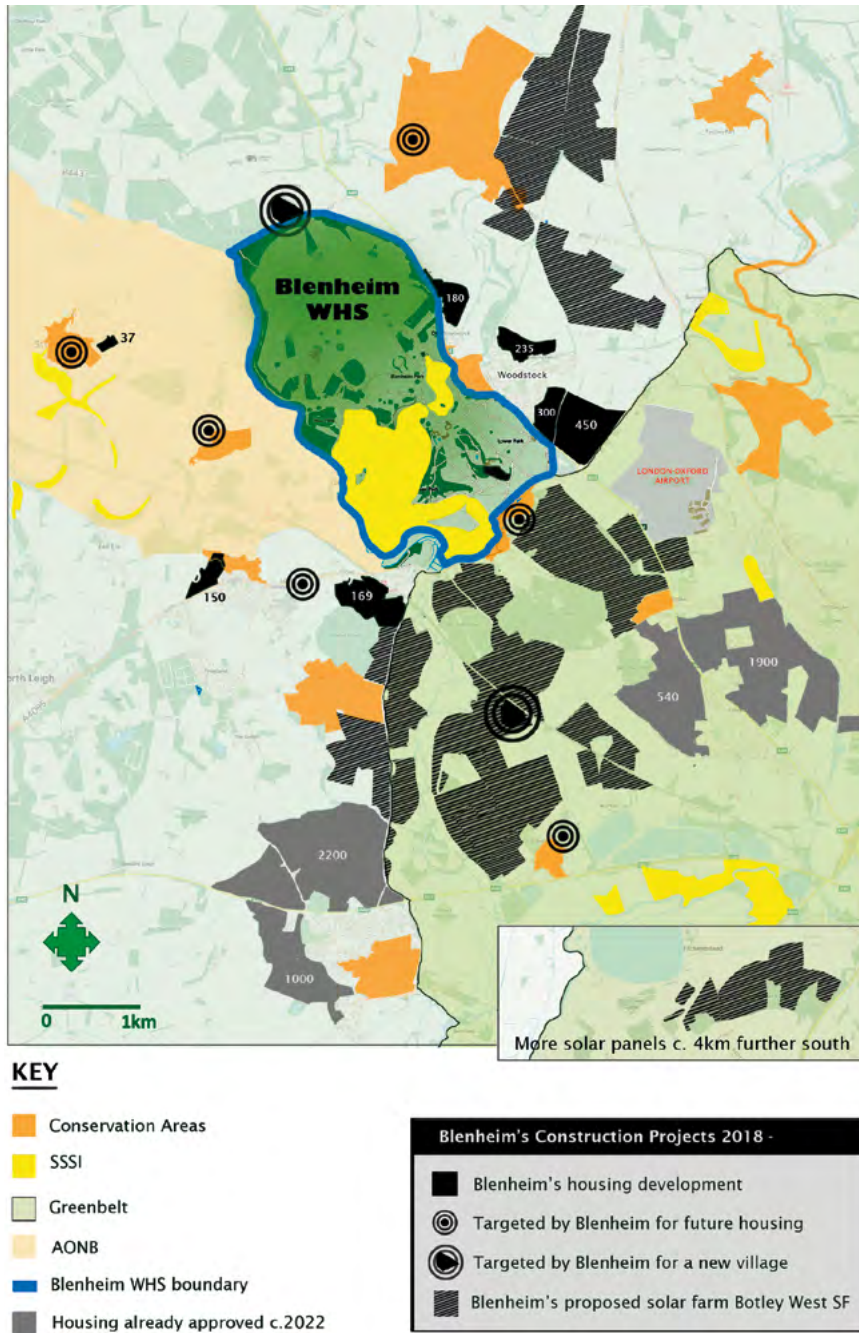


Fig. 2: Blenheim's housing and solar panel construction projects. Map: Delnevo / Rein

2 million solar panels, and 110 km of security fencing. The solar panels will cover 45% of the 'best and most versatile' agricultural land, and 75% of this is on a designated 'Green Belt'<sup>8,9</sup> (Figs 2 and 3). A significant proportion of the solar project will come within the setting of the Blenheim WHS.

The Botley West Solar Farm further complicates the preservation narrative. While the shift towards renewable energy is a commendable endeavour, the location and scale of this project within the setting of the WHS raises significant concerns. The visual impact of extensive solar panels within the landscape is profound, and these aesthetic impacts are incompatible with the historic landscape – as Blenheim itself has recognised in its own WHS revised management plan (Appendix III)<sup>5</sup>.

The site's OUV is rooted in its unaltered natural beauty and historical authenticity. The introduction of large-scale solar infrastructure would visually dominate the landscape, compromising the site's integrity and contravening the preservation objectives mandated by UNESCO. This juxtaposition of industrial installations against the backdrop of a Baroque masterpiece starkly contrasts with the WHS's character, pastoral charm and cultural significance. Moreover, the visual intrusion of the solar farm could diminish the experience of visitors, altering the way they

historical context of Blenheim Palace, detracting from its significance as a cultural landmark. The scale and proximity of these housing developments threaten the visual coherence of the landscape. Blenheim Palace's setting, characterized by meticulously designed parkland, contributes to its Outstanding Universal Value (OUV). New housing projects risk introducing incongruous elements that disrupt this historic landscape, thereby diminishing the site's aesthetic and historical integrity.

### The Botley West Solar Farm: A Controversial Initiative

Blenheim Palace's own plan for one of Europe's largest solar panel projects, The Botley West Solar Farm<sup>7</sup>, will occupy 1,214 hectares of farmland, that is 18 km × 6.4 km, involving over

engage with the WHS. Heritage sites are not just about the physical structures; they are also about the experience and the connections they evoke. The aesthetic disruption caused by modern developments can detract from Blenheim Palace's historical resonance.

### Balancing Development and Heritage Preservation

The challenges presented by housing developments plus the recently proposed development of a colossal Solar Project highlight a critical tension between development and heritage preservation. While the need for housing and renewable energy is undeniable, these initiatives must be carefully evaluated against their potential impacts on the WHS.



Fig. 3: Stylised view of the Blenheim WHS and part of the proposed solar project adjacent to the WHS, located within its setting. Blenheim palace is in orange, and the WHS and boundary are in green. Proposed solar panel development areas are in red. Image: Delnevo/ Google Earth

Unfortunately, such protections have not prevented the proposed housing and are unlikely to prevent the construction of the huge solar project within the Blenheim Palace setting. Thus, the Blenheim WHS is in danger of contravening the WHS Operational Guidelines<sup>18</sup>.

The Blenheim WHS needs to ... "Ensure buffer zones are supported by appropriate protection and management regimes in line with the property's OUV, that build connectivity with the wider setting in cultural, environmental and landscape terms"<sup>19</sup>. We invite UNESCO to request that a buffer zone within the broader setting of Blenheim Palace is urgently

identified and ratified at the earliest opportunity. Without a buffer zone, Blenheim's own actions are seriously threatening the long-term sustainability of its own cultural heritage.

## Conclusion

There are several WHSs where housing development poses a threat to either the site itself or its setting, for example, Blaenavon Industrial Landscape, UK<sup>10</sup>, Palace and Gardens of Schönbrunn, Austria<sup>11</sup>, and the Dolomites, Italy<sup>12</sup>. Equally, there are several WHSs that have been or may be impacted by extensive solar panels and their infrastructure, for example, Hadrian's Wall, UK<sup>13</sup>, Kronberg Castle, Denmark<sup>14</sup>, and the Pyrénées – Mont Perdu, France/Spain<sup>15</sup>. We are aware of at least one WHS that is exposed to both housing and solar panel development: Aranjuez Cultural Landscape, Spain<sup>16</sup>. However, we are not aware of any WHS, other than Blenheim, where the custodians of the WHS (Blenheim) are the promoters of major housing developments and are also supporting a massive solar project on land within the WHS's setting.

It is ironic that the custodians of the Blenheim WHS who have the responsibility to preserve its unique heritage, which is more than its mere physical conservation, are the same persons who are compromising this cultural heritage by promoting major housing developments and one of Europe's largest solar projects within its setting. The challenges posed by housing development and extensive areas of Solar Panels underscore the urgent need for a balanced approach that considers contemporary needs with prioritised historical integrity. It is imperative that future actions taken by Blenheim Palace align with the principles of sustainable heritage management, ensuring that this remarkable site continues to inspire and educate generations to come. In navigating the delicate interplay between development and preservation, Blenheim Palace should be setting a precedent for responsible stewardship of cultural heritage in an ever-evolving world.

Regrettably, Blenheim Palace WHS does not have a designated buffer zone. UNESCO has stated that "The West Oxfordshire Local Plan contains policies to protect the property"<sup>17</sup>.

## Acknowledgements

We thank Tony McHugh for his insightful comments, and Mandy Miller for the map research, design and compilation.

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# State Party Interests Clash with UNESCO Protection at the Upper Middle Rhine Valley

Klaus Thomas



Cultural and natural heritage sites are among the priceless and irreplaceable assets that belong not only to individual nations, but to humanity as a whole. It is the will of the nations of this world to protect these assets together and to pass them on intact to future generations. It is the task of UNESCO to ensure this protection.

But do the interests of the States Parties and those of UNESCO in the development of their World Heritage sites always correspond in the same way to these protection interests? The regionally active NGOs report from their experience that the governments do not always or not sufficiently inform UNESCO about the actual, current situation of the World Heritage sites. The Upper Middle Rhine Valley World Heritage Site clearly demonstrates such differences.

## Railway noise

Several hundred freight trains pass through the World Heritage Valley every day, causing a noise level comparable to that of airplanes taking off. Since the Upper Middle Rhine Valley was inscribed on the World Heritage List, UNESCO has repeatedly called on the State Party to reduce railroad noise. The State Party has regularly reported successes in noise reduction. UNESCO has now stated: "Twenty years after inscription, the noise problem in the Upper Middle Rhine Valley is still far from being solved. Only a feasibility study is in progress. The noise poses a threat to the OUV."

The World Heritage Committee is calling for consistent action to be taken and demands "successful long-term solutions for diverting freight trains from the site" and "limiting the speed of freight trains to 50 km/h as quickly as possible".

**The State Party decided the opposite: The railroad lines in the World Heritage site will be upgraded to high-capacity lines with at least 30% higher transport capacity.** This decision is not mentioned in the State Party's report to UNESCO.

The State Party wants to reduce noise pollution for people living near the railroad line by means of so-called "noise barriers". UNESCO has taken a clear position on this: "In future, such walls will change the appearance of the villages and small

towns along the Rhine in the entire Middle Rhine Valley". The State Party, however, decided to erect noise barriers throughout the World Heritage Site and did not inform UNESCO about it.



Fig. 1: Several hundred freight trains pass through villages and towns every day.

Photo: Klaus Thomas



Fig. 2: So-called "noise barriers" are supposed to reduce the infernal noise. The State Party reports successes, UNESCO does not.

Photo: Klaus Thomas

## The Middle Rhine Bridge

The State Party intends to build a bridge in the World Heritage Valley. For many years, they have told UNESCO that the bridge would be very low and hardly noticeable. But such a low bridge would considerably limit shipping traffic on the Rhine. A bridge must therefore be as high as the surrounding church towers. However, this significantly disrupts the OUV of the World Heritage Site at this location, directly below the "Maus" castle and within sight of the world-famous Loreley plateau.

The bridge over the Middle Rhine connects the trunk roads on both sides of the Rhine. The State Party has not explained how additional traffic through the Middle Rhine Valley will be avoided via this new link.



Fig. 3: The bridge would be very low and barely noticeable, the state party reported for many years. Photo: Land Rheinland-Pfalz



Fig. 4: But ships of this size must also be able to pass through. The bridge will be 27 m high, as high as the church tower in the background. Photo: Klaus Thomas

### The Loreley plateau

#### Roof on the “myth room”

When the State Party planned to build a “glass crystal” on the Loreley plateau, UNESCO objected, arguing that it would dominate the visual appearance of the Loreley plateau and would significantly impair the landscape of the Upper Middle Rhine Valley. Yet, the so-called crystal rock has been built. The overall construction is an alien body in this landscape, and completely unrelated to the cultural history and the folk legend of the Loreley, which has influenced poets and writers.

#### The Loreley stage

The Loreley Open-air theatre is situated on the top of the Loreley plateau. It has recently been covered with a new protection foil to cover the stage. While UNESCO considers that this cover over the stage should be replaced as soon as possible, the bright white roof of the Loreley stage still exists. There is no indication that it will be dismantled or changed in any other way to be adapted to the landscape.

#### The Summer toboggan run

For many years UNESCO has been calling for the summer toboggan run to be dismantled, as it impairs the OUV. The State Party reports that the operator has a valid permit, but has failed to mention if and when that operating permit will expire.



Fig. 5:

Photo: Otto Schamari



Fig. 6:

Photo: Loreley Werkteam



Fig. 7:

Photo: Klaus Thomas

Fig. 5–7: The glass roof on top of the “myth room” has a very significant adverse impact on the OUV of the site. The construction can be seen from the river valley and will be illuminated at night so that it can also be seen in the dark.



Fig. 8: Aerial view of the Loreley plateau: tent roof, glass box and toboggan run document the complete ignorance of UNESCO resolutions by the State Party. Photo: Klaus Thomas

### Heavy traffic through Braubach

The historic town of Braubach is heavily burdened by road traffic (Fig. 9 and 10). UNESCO is calling for the construction of a bypass road far away from Braubach. The final project design for this is to be submitted to UNESCO for examination before a final decision is made. The access road must be kept to a necessary minimum for truck traffic in the old town in order to improve the quality of life of citizens and ensure their safety.



Fig. 9

Photo: Klaus Thomas



Fig. 10

Photo: Klaus Thomas

Fig. 9 and 10: Instead of reducing traffic, the regional road no. 335 to the city of Braubach is currently being expanded to around twice its capacity of up to 15,000 vehicles per day, including 300 trucks (Fig. 11 and 12).

The State Party (the Minister of Transport of the State of Rhineland-Palatinate), justifies the situation stating: “The road traffic regulations do not provide for the imposition of traffic restrictions on the basis of World Heritage status”.

#### The Federal Horticultural Show 2029 (BUGA)

The Federal Horticultural Show (BUGA) will take place in the Upper Middle Rhine Valley World Heritage Site in 2029. UNESCO has requested the State party to ensure that the projects proposed and implemented within the framework of the BUGA 2029 do not result in negative impacts on the property, and that the event is managed as a possibility for heritage conservation and growth of cultural tourism.

However, an example of a negative impact of the BUGA has already been created: The riverside facilities in Boppard are being remodelled for the BUGA. Old trees of the 19<sup>th</sup> century ar-



Fig. 11

Photo: Klaus Thomas



Fig. 12

Photo: Klaus Thomas



Fig. 13: A concrete skating track with noise barrier to protect the old 19<sup>th</sup> century villas (background) has been built into the centre of the Boppard arboretum. The wall is an invitation to graffiti sprayers.

Photo: Klaus Thomas



Fig. 14: The arboretum in Boppard with its old trees is a unique cultural heritage site on the Rhine river.

Photo: Klaus Thomas

boretum have been felled and a concreted “generation park” has been built.

The State Party is funding this project with € 8 million, to make them “world heritage ready” Total costs are about € 14 Mio.

The entire Upper Middle Rhine Valley is to be included in the BUGA. Garden and flower areas are to be designed, castles



Fig. 15: The winning design of the competition: This will be passed on to future generations as a legacy of humanity. Photo: Franz Reschke Landschaftsarchitekten GmbH

and the viewpoints of the most beautiful natural and cultural treasures in the World Heritage area will be included. Parking spaces, sanitary facilities and catering facilities must be created for the expected two million visitors. Where in the narrow valley should this be built without disturbing the historic cultural and natural landscape?

With 439 properties not having any information about their state of conservation on their UNESCO websites as of April 2024, UNESCO does not seem to be able to monitor them and thus fulfil one of its statutory tasks. Does this mean that State Parties can safely assume that their activities will go unchecked? What will then happen to World Heritage sites such as the Upper Middle Rhine Valley?

# The Truth About “The Semmering Railway” and the Serious Misconduct of UNESCO

Christian Schuböck, Alliance For Nature

ALLIANCE  
FOR NATURE

Serious misconduct on the part of the UNESCO World Heritage Centre has led to court proceedings at the highest level in Austria for years.

Although the UNESCO World Heritage Committee declared the Semmering Railway with its surrounding landscape and an area of 8,861 hectares a “World Heritage of Humanity” in 1998, a few years later the Republic of Austria arbitrarily reduced the size of the World Heritage area (which extends over two federal states) to just 156 hectares – namely to the area of the railway line alone – in favour of the controversial large-scale construction project “Semmering Base Tunnel new” without a corresponding decision by the UNESCO World Heritage Committee. The UNESCO World Heritage Centre took note of the reduction in size of this World Heritage Site by more than 98 percent without requesting a new nomination by the Republic of Austria in accordance with № 165 of the UNESCO Operational Guidelines.

UNESCO is thus violating its own “Operational Guidelines for the Implementation of the World Heritage Convention”.

## Brief description and justification of UNESCO

The Semmering Railway, built over 41 km of high mountains between 1848 and 1854, is one of the greatest feats of civil engineering from this pioneering phase of railway building. The high standard of the tunnels, viaducts and other works has ensured the continuous use of the line up to the present day. It runs through a spectacular mountain landscape and there are many fine buildings designed for leisure activities along the way, built when the area was opened up due to the advent of the railway.

## Two new categories of property

The declaration of the Semmering Railway and its surrounding landscape as a “World Heritage of Humanity” was unanimous, with the delegates of the UNESCO World Heritage Committee also supporting the inscription of this exceptional railway cultural landscape as it reflected the inclusion of new categories of properties on the World Heritage List. This is because two new

categories of property were added to the UNESCO World Heritage List, namely

- *Criterion (ii)*: The Semmering Railway represents an outstanding technological solution to a major physical problem in the construction of early railways.
- *Criterion (iv)*: With the construction of the Semmering Railway, areas of great natural beauty became more easily accessible and as a result these were developed for residential as well recreational use, creating a new form of landscape.

It is therefore clear that both categories were decisive for

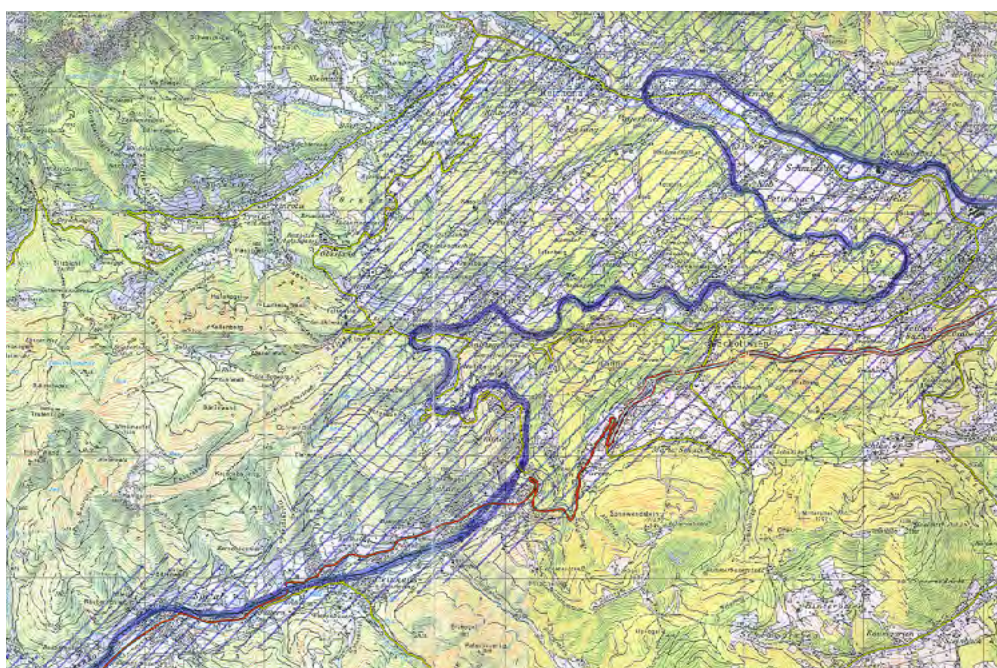


Fig. 1: The property as nominated and inscribed in the World Heritage List. It shows no buffer zone.

Map source: UNESCO <http://whc.unesco.org/uploads/nominations/785.pdf>

the decision, as applied for by the Republic of Austria in 1995. Accordingly, the Semmering Railway and its surrounding cultural landscape are to be regarded as a single UNESCO World Heritage Site.

### Clarification from the then Director of the UNESCO World Heritage Centre

This was also confirmed by the then Director of the UNESCO World Heritage Centre, Bernd von Droste zu Hülshoff, in the following written clarification:<sup>1</sup>

(...) In September 1995, the Republic of Austria submitted the documentation "Semmering railway - cultural site - Semmeringbahn - cultural landscape" to UNESCO for nomination as a World Heritage Site (<http://whc.unesco.org/uploads/nominations/785.pdf>). This documentation described the Semmering Railway and its surrounding landscape, including villas and hotels, without dividing it into core and buffer zones. As part of the evaluation, ICOMOS (International Council on Monuments and Sites), as UNESCO's advisory body on World Heritage Sites, examined both the Semmering Railway and its surrounding cultural landscape for their outstanding universal value, for which special documents relating to the protection of the cultural landscape were also requested ([http://whc.unesco.org/archive/advisory\\_body\\_evaluation/785.pdf](http://whc.unesco.org/archive/advisory_body_evaluation/785.pdf)). ICOMOS came to the conclusion that the Semmering Railway with its surrounding landscape fulfils criteria ii) and iv) for inscription on the UNESCO World Heritage List (...) In December 1998, the UNESCO World Heritage Committee followed the ICOMOS recommendation and inscribed the Semmering Railway with its surrounding landscape on the "World Heritage List". Document WHC-98/CONF.203/18 (<https://whc.unesco.org/en/decisions/2746>) states the following under the title "The Semmering Railway" (ld. № 785):

The Committee inscribed this site on the World Heritage List on the basis of criteria (ii) and (iv):

- Criterion (ii): The Semmering Railway represents an outstanding technological solution to a major physical problem in the construction of early railways.
- Criterion (iv): With the construction of the Semmering Railway, areas of great natural beauty became more easily accessible and as a result these were developed for residential and recreational use, creating a new form of cultural landscape.

Several delegates supported this inscription as it reflected the inclusion on the World Heritage List of new categories of properties.

The UNESCO World Heritage Committee thus followed the ICOMOS recommendations exactly and also noted that the delegates supported this inscription as it reflected the inclusion of new categories of properties on the World Heritage List. The Semmering railway line and the surrounding landscape were clearly recognized as a single World Heritage property and inscribed as a whole on the UNESCO World Heritage List. There was no subdivision into a core zone and a buffer zone. (...) Should the Republic of Austria now wish to consider only the railway system of the Semmering Railway – without the surrounding landscape – as a World Heritage Site, it would have to make a new nomination in accordance with № 165 of the UNESCO World Heritage Operational Guidelines. This is because № 165 of the UNESCO Operational Guidelines stipulates that:

If a State Party wishes to significantly modify the boundaries of a property already on the World Heritage List, the State Party shall submit this proposal as if it was a new nomination.

Without the surrounding cultural landscape, the 8,861-hectare World Heritage property "The Semmering Railway" would only be 156 hectares in size and would represent a reduction in size of more than 98 per cent. According to № 165 of the Operational Guidelines, this would not only be a significant but a considerable and extremely extensive change to the boundaries of the property inscribed on the World Heritage List in 1998.



Fig. 2: Official presentation of the World Heritage certificate by Bernd von Droste zu Hülshoff, Director of the UNESCO World Heritage Centre, at the Semmering railway station in 1999.  
Photo: Alliance For Nature

### Disregard of the unified UNESCO World Heritage

The Semmering railway line and the surrounding landscape were thus clearly recognized as a single UNESCO World Heritage Site and inscribed as a whole on the "World Heritage List". However, this serious fact was not taken into account or disregarded by the responsible authorities, the Federal Administrative Court and the Administrative Court of Justice in the

1. Letter from Bernd von Droste zu Hülshoff, the Director of the UNESCO World Heritage Centre at the time when the Semmering Railway and surrounding landscape were inscribed on the UNESCO World Heritage List, to "Alliance For Nature" dated 12 May 2023. (Translation from the original German text into English)

approval, appeal and revision procedures for the controversial Semmering Base Tunnel, which is currently under construction, although “Alliance For Nature” explicitly drew attention to this in the proceedings. This means that all procedures relating to this billion-euro tunnel project, which is already having a significant impact on the natural water balance of the Semmering region, have been carried out under the wrong circumstances.<sup>2</sup>

### UNESCO bears a considerable share of the blame

UNESCO also bears a considerable share of the blame for this environmental disaster. Because when the EIA approval procedures for the controversial Semmering Base Tunnel began in 2010 and the appeal proceedings before the Austrian courts began in the following years, “Alliance For Nature” drew the attention of ICOMOS International and the UNESCO World Heritage Centre to the fact that the Republic of Austria only considered the route of the Semmering Railway with an area of 156 ha and no longer the railway line and its surrounding landscape with an area of 8,861 hectares to be a UNESCO World Heritage Site. As a result, ICOMOS International classified the World Heritage Site “Semmering Railway” as a “Heritage at Risk”<sup>3</sup> and made it clear that the Semmering Railway and the surrounding cultural landscape were jointly declared a World Heritage Site.

However, the (then) Director of the UNESCO World Heritage Centre, Kishore Rao, suggested in his letter of 10 December 2013 (CLT/WHC/7061/AT/AOD) to “Alliance For Nature”, a copy of which he also sent to Austrian officials:

1. *The property was inscribed as a cultural property by the World Heritage Committee in 1998. The inscribed area is 156.18 ha, closely following the train tracks, and is surrounded by a buffer zone of 8581.21 ha (Decision 22COM VIII.B.1 ). As you rightly point out, the Buffer Zone is not considered part of a World Heritage property as such.*
2. *The property was inscribed on the basis of criteria (ii) and (iv), both of which are cultural criteria. The formulation of those criteria, as adopted by the Committee, highlights that it is the technical aspects of the railway’s construction as well as the accessibility of those “areas of great natural beauty” and the subsequent built developments that constitute the property’s Outstanding Universal Value. The landscape itself is therefore not part of the Outstanding Universal Value for which the property was inscribed. Please also note that the property is not, to this date, inscribed as a Cultural Landscape. (...)*

This letter (based on false allegations) from the then director of the World Heritage Centre, Kishore Rao, which a representative

<sup>2</sup> As a landscape ecologist, the author of this article fears that as a result of the construction of the Semmering base tunnel – even after its completion and commissioning – it will sooner or later lead to the Semmering region.

<sup>3</sup> Source: „Heritage at Risk – World Report 2011–2013 on Monuments and Sites in Danger“ (ICOMOS 2014)

of the Ministry of Culture presented to the Federal Administrative Court in Vienna during an oral hearing, made it possible to build the Semmering Base Tunnel, which had been controversial for years and is now causing numerous springs in the Semmering region, which is protected several times over, to dry up. Farmers on both sides of the Semmering (Lower Austria, Styria) are complaining that they can no longer water their cattle because the springs have dried up.<sup>4</sup>

### Construction of the Kurhaus Semmering and the Südbahnhotel

However, it is not only the natural environment of Semmering that is suffering immense damage due to UNESCO’s misconduct.<sup>5</sup> Cultural assets are now also under threat. For example, the listed Kurhaus Semmering on the Wolfsbergkogel is to be built on without a prior environmental impact assessment, which is why “Alliance For Nature” (AFN) has lodged a complaint against the authority’s decision in this regard. The AFN complaint has already led to two court proceedings before the Federal Administrative Court and one before the Administrative Court. This is because both the authority and the courts regard the Semmering Railway as a core zone and the surrounding landscape as a buffer zone. A final court judgement has not yet been issued in this matter.



3.6 Fig. 3 Semmeringbahn Haltestelle Wolfsbergkogel Kurhaus Semmering. Photo: Christian Schuhböck / Alliance For Nature

Fig. 3: Wolfsbergkogel station on the Semmering Railway and Kurhaus Semmering.

Photo: Christian Schuhböck / Alliance For Nature

<sup>4</sup> See the articles “Semmering Railway and Surrounding Landscape in Danger: Incessant Water Inrushes” in the “World Heritage Watch Report 2021” and “The Environmental Disaster at Semmering and UNESCO’s Acquiescence” in the “World Heritage Watch Report 2023”.

<sup>5</sup> Once the Semmering Base Tunnel is completed, around 38 million liters of water per day (!) will be extracted from the natural water balance of the Semmering, according to the approval documents. This would be the entire daily (!) drinking water requirement of Austria’s second largest city, the Styrian capital Graz.

The legendary Südbahnhotel is also to be built on. To this end, the municipality of Semmering intends to amend the local spatial planning programme (local development concept and zoning plan) and issue a new partial development plan for the “Südbahnhotel area”.<sup>6</sup> The Kurhaus Semmering and the Südbahnhotel were explicitly listed as part of the surrounding cultural landscape in the World Heritage nomination.

**UNESCO should admit its mistake and clear it up**

UNESCO would be well advised to finally admit its wrongdoing and rectify the mistake as quickly as possible by

1. informing the Republic of Austria that the UNESCO World Heritage Site “The Semmering Railway” (as nominated by the Republic of Austria, evaluated by ICOMOS and decided by the UNESCO World Heritage Committee) comprises the Semmering Railway with its surrounding landscape covering an area of 8,861 hectares – and
2. correcting its website (<https://whc.unesco.org/en/list/785>) accordingly.

Otherwise, the cultural and natural heritage of the World Heritage Site “The Semmering Railway” will suffer even more damage, and UNESCO would lose its credibility.



Fig. 4: North-east view of the Südbahnhotel in June 2022. Photo: C.Stadler/Bwag

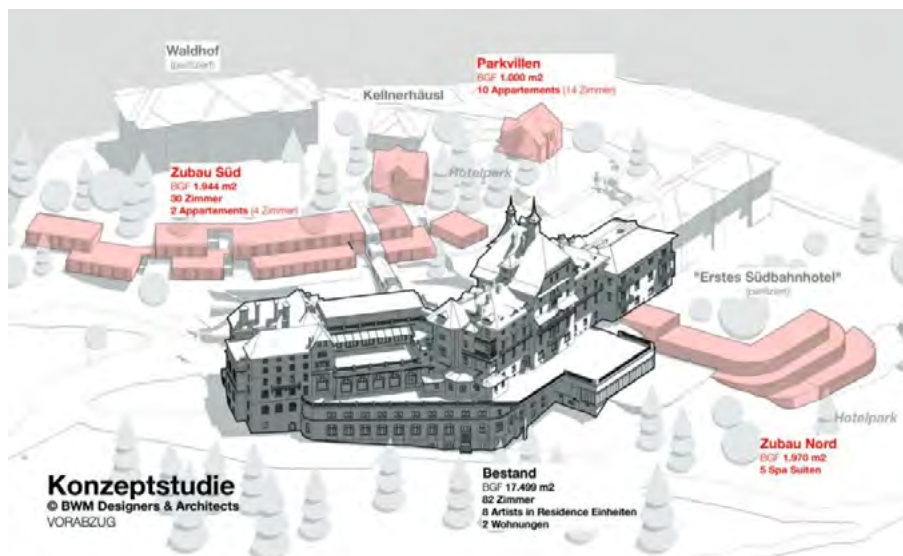


Fig. 5: The planned additions to the Südbahnhotel. Graphic: BWM Designers & Architects

<sup>6</sup> Source: Announcements of the municipality of Semmering from 2 April 2024

# Appeal to Halt the Irreversible Destruction of the Kotor Region's Outstanding Universal Value

EXPEDITIO - Centre for Sustainable Spatial Development  
The Friends of Boka Kotorska Heritage Society



Ten years after the first article about the Natural and Culturo-Historical Region of Kotor<sup>1</sup> (hereinafter referred to as Kotor Region) and repeated warnings about serious problems in 2018<sup>2</sup> and 2020<sup>3</sup>, we are compelled once again to speak out and send an appeal to stop the irreversible destruction of the Outstanding Universal Value (OUV) of this World Heritage Site.

As far back as since 2003 the World Heritage Committee Decisions have been continuously and clearly focusing on the problematic situation in the Kotor Region, primarily in relation to *excessive urbanization*, but also to the *inefficient protection and management system*.

At the beginning of 2025, excessive urbanization – particularly intensified over the past few years – continues, destroying the OUV of the area. The most problematic aspect is that it is being carried out under the existing spatial plan of the Municipality of Kotor. The current management system is entirely dysfunctional, with no revised Management Plan for over five years, and a Management Council that did not meet even once between 2021 and mid-2024. Excessive urbanization is solely linked to the development of tourism infrastructure, and the pressure from overtourism, particularly cruise tourism, now represents an enormous problem for the region's infrastructure and the quality of life for its residents.

In recent years, the **deterioration of the region has accelerated**. Unfortunately, this decline is not evident in the State of Conservation Reports by the State Party, which fail to address the key problems and instead create the impression that everything is under control. For example, the 2024 report contains false information, stating that the draft Management Plan is in the "final stage of preparation and will soon be sent to the Government for adoption," and that for the buffer zone study, "ongoing negotiations are taking place to finalize the conceptualization of this document." **Particularly concerning is the official stance of the state in the 2024 report regarding the "Heritage Impact Assessment for Natural and Culturo-Historical Region of Kotor for Harmonizing Policy/Planning Framework and Instruments"**. In the decisions of the World Heritage Committee, the updating of this HIA has been repeatedly requested for years. In its 2020 report, the State Party stated that the update was in progress; however, in the 2022

report, it was not mentioned at all, and in the 2024 report, it was stated that **"the relevance of this document has become redundant."**

This is a highly concerning position, especially because there is a visible problem with the huge number of individual HIAs that are being produced. The Committee has emphasized the need to consider the cumulative impact, rather than relying on fragmented individual assessments. Furthermore, the preparation of this assessment is explicitly recognized as a legal obligation under the Law on the Protection of the Natural and Culturo-Historical Region of Kotor, which states that: "Planning documents must be aligned with the Heritage Impact Assessment (HIA) for the entire Kotor Region, as well as for its individual parts."

## Planning and the Spatial-Urban Plan of the Municipality of Kotor

The current state of the area reflects excessive urbanization, which is implemented on the basis of **Spatial Urban Plan of the Municipality of Kotor** (hereinafter referred as the SUP) **adopted in 2020**. The implementation of this plan continues to destroy the cultural landscape and OUV, which is **"embodied in the quality of the architecture in its fortified and open cities, settlements, palaces and monastic ensembles, and their harmonious integration to the cultivated terraced landscape on the slopes of high rocky hills."**

One of the most obvious examples is Dobrota, where the **"cultivated terraced landscape"** has been completely destroyed. All new constructions involve unnecessarily **large interventions in the natural terrain, completely altering its configuration**. As a result, the **terraced fields, one of the attributes of the OUV, are disappearing**. Additionally, the **density of buildings allowed by the SUP completely erases the inherited structure of settlements**, while the new buildings, due to their size and volume, dominate the space, overshadowing traditional structures, including the largest baroque palaces. **SUP does not consider the specific characteristics of individual historic settlements** within the Kotor Region, applying uniform parameters across all areas. The function of the buildings constructed in recent years is particularly problematic. Despite be-

ing designated for “residential use” in the plan, they are almost exclusively **built for tourism**, specifically as rental apartments.

Perhaps the most critical issue is that **the SUP does not comply with the Cultural Heritage Protection Study**. Because of this, institutions are requesting individual HIAs for non-compliant zones. This only leads to an overproduction of individual HIAs, failing to address the cumulative impact on the OUV, which was also pointed out by the WHC.

In addition to all, there are also **problematic interventions** that are **not in accordance with the SUP**, like **newly built road from Donji to Gornji Stoliv**, in the zone of special importance for OUV, where roads were not planned.

### The Management Council and revision of the Management Plan

The Council for the Management of the Natural and Culturo-Historical Region of Kotor, which is formed by the Government for the purpose of coordination of the activities of protection, preservation and management of Kotor Region, **is not functional**. As early as 2017, Council members clearly stated that the role of the Council did not entail management function (which had been recognized in the Management Plan itself) and that it is “necessary to review the legal and institutional framework which would improve the mechanisms and the bodies that were to manage the region.”<sup>4</sup> However, the situation has worsened since then. The **Law on the Protection of Natural and Culturo-Historical Region of Kotor defines that the Council sessions are held at least once a month**. During 2020, the Council met only twice, and **from 2021 to mid-2024 there were no meetings at all**.<sup>5</sup> The Government of Montenegro appointed new members of the Council on 20 June 2024, and that **Council held only two meetings until 1 February 2025**, on 13 August 2024 and 24 January.<sup>6</sup> It is clear from the above that the Council is not functional at all, which represents a big problem for the management of the Kotor Region. In addition to that, one of the key problems, pointed out already by the WH Committee, is that **the Revision of the Management Plan**, the key instrument for management, which **started in March 2019, has not yet been completed**.

### Overtourism and the decline in the residents’ quality of life

In recent years, **overtourism**, especially mass cruise tourism, has put extreme pressure on the Kotor Region<sup>7</sup>. While in 2003, Kotor had 100 cruise ships, with around 34,000 passengers, in 2025, 485 ships with 700,000 passengers are expected.<sup>8</sup> At the same time, **statistical data indicate that the population of Kotor is declining, while the number of housing units is rapidly increasing**. While the entire municipality of Kotor

had 22,601 residents in 2011, according to the 2023 census, the number has decreased to 21,916. In the Old Town of Kotor, the population dropped from 961 residents in 2011 to 562 in 2023. However, the number of housing units in the entire municipality increased—from 13,516 in 2011 to approximately 17,092 in 2023, a rise of about 3,500 units. All of this highlights the **impact of tourism on excessive urbanization** and the enormous pressure from cruise tourism on the entire Kotor Region, especially on the town of **Kotor, which, with only 562 residents in 2025, is expected to receive at least 700,000 cruise ship tourists**. In addition to that, the issue of **traffic congestion** has become increasingly pronounced, not only within the protected area but throughout the entire bay. The problem largely stems from the fact that automobile traffic is dominant, the number of cars continues to rise, and the area is becoming more densely built-up.

Kotor Municipality has **no official Tourism Development Strategy**. In July 2024, the **Global Sustainable Tourism Council** prepared “**GSTC Destination Assessment**” for Kotor<sup>9</sup>. The State of Conservation report by the State Party for 2025 states that “*this Study should answer the questions of how successfully Kotor can respond to the problem of the pressure of a large number of tourists*”. However, **this assessment focuses exclusively on the town of Kotor, without taking into account the entire Kotor Region, inscribed on the World Heritage List**, and therefore, it cannot be considered sufficient. Additionally, it would be highly beneficial to conduct a Strategic Environmental Assessment (SEA) for the Kotor Region, as stated in the decisions of the Committee. We must emphasize that the SEA for the Spatial Plan of Montenegro until 2040<sup>10</sup>, which is mentioned in the State of Conservation report by the State Party for 2025, is not the document of the same level and does not adequately address the impact of tourism on the Kotor Region.

### Conclusions and Recommendations

Considering all the above and referring to Decision 46 COM 7B.11 of the World Heritage Committee, we believe that:

- It is essential that Montenegro complies with the Committee’s decisions and **invite an Advisory Mission** to avoid any risk of cumulative impacts on the property’s OUV. Along with the Advisory Mission, we believe that, **due to the overall condition of the Kotor Region, a Reactive Monitoring Mission should also be organized**.
- The current **Spatial Urban Plan (SUP) of the Municipality of Kotor must be urgently repealed**. Following this, it is necessary to initiate the development of a new plan aligned with the Cultural Heritage Protection Study, which will halt further devastation of the area.
- It is necessary to **immediately initiate the preparation of a HIA for the entire Kotor Region**, as required by law, with its process running parallel to the development of a new

SUP. This would help put an end to the overproduction of individual HIAs, which fail to assess the cumulative impact on OUV of the Kotor Region.

- In accordance with the Committee's decisions, a **Strategic Environmental Assessment** must be conducted to proactively manage tourism development throughout the property.
- A **new model for the effective management of the Kotor Region must be developed**, including a **new model for the Management Council**. **In the meantime, the existing Council must be reactivated and operate in accordance with the law.**
- The **revised Management Plan must be urgently completed, with the involvement of experienced experts** who would lead the process in line with internationally recognized best practices. The assistance of the Advisory Mission throughout this process from its beginning would be of great importance.

- The process of developing a **Cultural Heritage Protection Study for the buffer zone** must finally begin, along with its implementation into spatial planning documentation.
- An **integrated transport plan** should be developed for Kotor Region and its buffer zone, incorporating also alternative modes of transport, particularly maritime transport.
- A **tourism development strategy** must be created, along with a **new tourism impact assessment**, for the entire **Kotor Region and its buffer zone.**

Considering all of the above, we urge local and national authorities to take responsibility and stop the irreversible destruction of the Outstanding Universal Value of the Natural and Cultural-Historical Region of Kotor.

## Annex: Photographic Documentation

All photos by EXPEDITIO

The illustrations show the condition of the Natural and Cultural-Historical Region of Kotor in January 2025, mostly through the most problematic example of the settlement of Dobrota.

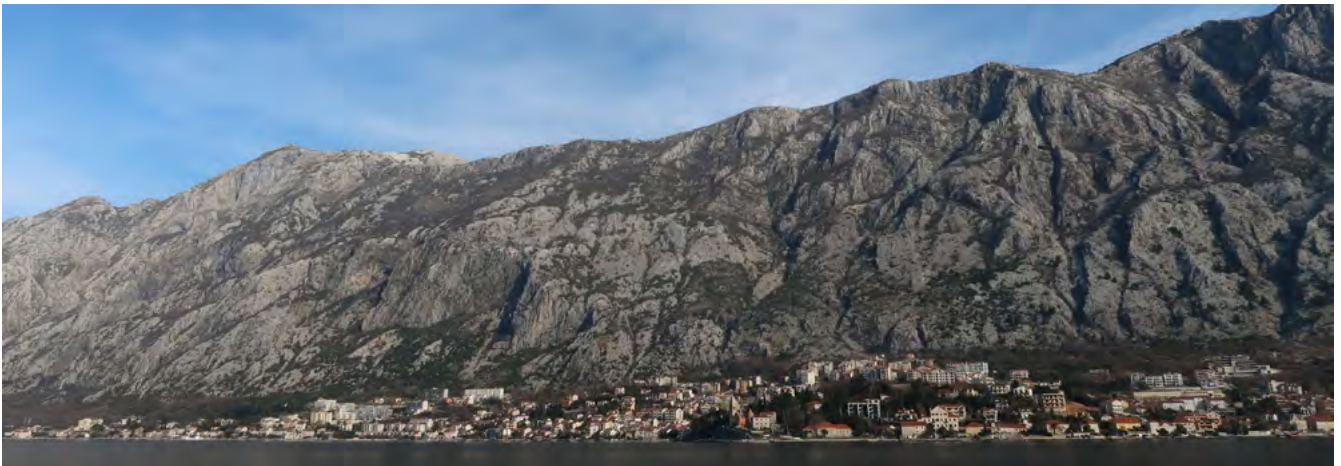


Fig. 1: Above the historic settlement of Dobrota, the characteristic cultivated terraced landscape is almost completely destroyed. The traditional ensembles, baroque palaces, and churches have been entirely buried by contemporary urbanization. Therefore, the characteristic vertical landscape profile and visual landmarks, recognized as attributes of outstanding universal value of Kotor Region, have been completely lost.

Fig. 2: An example of the complete destruction of traditional terraced landscape in Dobrota is evident in the preparatory works for the construction of a new residential complex in the upper zone of Dobrota, where originally traditional buildings (an old stone house and a threshing floor) and terraced fields were preserved. This zone was not designated for construction in the Cultural Heritage Protection Study, but it was in the Spatial Urban Plan (SUP), and therefore an individual Heritage Impact Assessment (HIA) was required.





Fig. 3: High density of construction in historic settlement of Dobrota.



Fig. 4: Part of Dobrota south of the Church of St. Eustace, including the Ivanović and Dabinović Palaces, with marked historic structures and overdevelopment in the zone of terraced landscape. The area around the Dabinović Palace has already been completely overbuilt with excessive density, with buildings of inappropriate size and volume. In the area above the Ivanović Palace, in the recent years large-scale structures have been built, and preparations are underway for the construction of a new residential complex to the right of the palace.



Fig. 5: Zone above Ivanović palace: remains of the cultivated terraced landscape at the left, and the area where new construction is beginning in the already overbuilt area at the right.



Fig. 6: The historic settlement of Dobrota, south of the Church of St. Matthew, with Milošević palace (early 19th c.) the largest Dobrota palace, along with ensembles of traditional buildings. Yellow - buildings of traditional architecture, including the Milošević palace. Red - oversized structures built in recent years, including the complex currently under construction on the right. In the upper zone, residential houses were built throughout the 20th century, but their density and volume did not significantly threaten the traditional terraced structure. However, the structures built in recent years, as well as those currently under construction, have completely degraded the inherited structure of the historic settlement and the overall landscape due to their high density, volume, and placement.



Fig. 7: Another example from Dobrota, below the Church of St. John, where a building under construction with a ground floor and four floors completely surpasses all existing structures. The building at the right, was built in the past two years on cultivated terraced landscape with very ancient oak trees, which have been removed. This building represents an example of structure permitted under the SUP.



Fig. 8: Example of structures currently under construction in Ljuta under the provisions of the Spatial Urban Plan for Kotor Municipality (SUP). Although the basement should be an underground part of the structure, this is often not the case. As a result, buildings presented in the plan as having just first floor and attic usually comprise four full levels, with large volumes that deviate from traditional structures, and disrupting the historic urban fabric. The largest traditional buildings, palaces, typically feature a ground floor, two floors, and an attic with a belvedere. But those new structures vastly exceed the traditional structures, including even the palaces.

## Notes

- 1 <https://world-heritage-watch.org/content/wp-content/uploads/2021/06/2015-WHW-Bonn-Conference-Proceedings.pdf>
- 2 <http://world-heritage-watch.de/wp-content/uploads/2018/06/2018-Report-WHW.pdf>
- 3 <https://world-heritage-watch.org/wp-content/uploads/2020/06/WHW-Report-2020.pdf>
- 4 Report on the Implementation of the Management Plan for the year 2017, prepared by the Council <http://www.kotor.me/me/savjet-za-upravljanje-podru%C4%8Djem-kotora/>
- 5 Secretariat for the Protection of Natural and Cultural Heritage of the Municipality of Kotor, document from 23 January 2025, issued on the basis of the request on free access to information of the NGO MANS.
- 6 <https://radiokotor.info/clanak/drustvo/-sastao-se-savjet-za-upravljanje-podru%C4%8Cjem-kotora-prva-sjednica-u-novom-sazivu/0> i <https://www.kotor.me/opstinakotor/vijesti/druga-sjednica-savjeta-za-upravljanje-podru%C4%8Cjem-kotora/>
- 7 <https://www.reuters.com/world/europe/montenegros-adriatic-gem-struggles-with-tourist-influx-2024-08-09/>
- 8 <https://www.portofkotor.com/en/cruise-ships/statistics/>, [https://radiokotor.info/clanak/drustvo/danilovi%C4%86:-u-toku-2025.-oko-485-brodova-i-700.000-putnika-\(audio\)/0](https://radiokotor.info/clanak/drustvo/danilovi%C4%86:-u-toku-2025.-oko-485-brodova-i-700.000-putnika-(audio)/0)
- 9 <https://www.gstcouncil.org/wp-content/uploads/GSTC-Assessment-Kotor-2023.pdf>
- 10 Document "SPU Nacrt PPCG" at the web page <https://www.gov.me/clanak/prostorni-plan-crne-gore>



Fig. 9a and b: The historic settlement of Ljuta in 2020 and with new constructions in January 2025. The historic settlement of Ljuta was one of the most well-preserved historic settlements along the coast. However, the buildings newly constructed under the SUP vastly exceed in volume the traditional structures, including even the largest palaces. The most significant complex in Ljuta, the Church of St. Peter, has been visually degraded by new construction behind it.



Fig. 10: In the north part of Ljuta, at the first row along the coast, a newly constructed building, interpolated into a row of traditional structures, exceeds the highest traditional building - a small palace - by an entire floor. The approval document for the project states that the building has a three floors P+1+Pk (three visible levels: ground floor, first floor, and attic). However, it is evident that the floor count was not calculated from the coastal road elevation, which should have been a requirement, and the attic was constructed as a full-height floor.

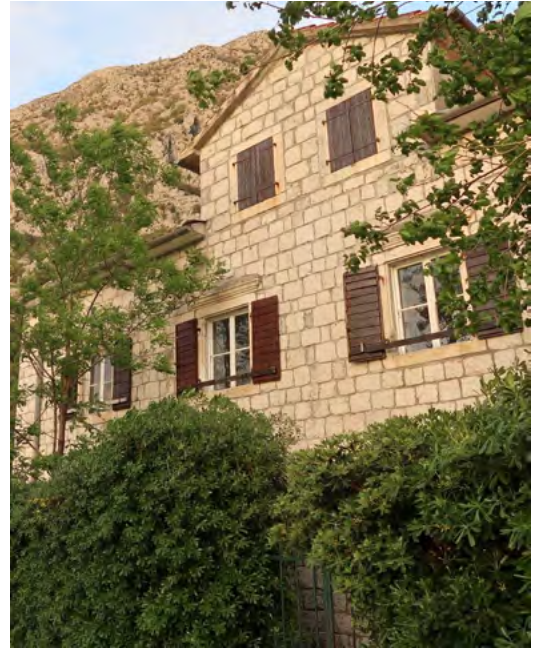


Fig. 11a, b and 12a, b: Kavalin area in Dobrota, and detail of traditional house (2018) and after restoration (2025). Parallel to the new constructions, there are also cases of inappropriate restoration works on traditional buildings. In this traditional house, original stone window frames - previously in good condition - were removed and replaced with profile dimensions and stone type that are not in accordance with the traditional ones. The authentic roof cornice was replaced by a new oversized and profiled cornice that is not at all characteristic of the traditional architecture of Bay of Kotor.



Fig. 13: Overtourism: Four cruise ships anchored simultaneously in the Bay, November 2024

# Destructive Developments in the Diyarbakır Fortress and Hevsel Gardens Continue

## World Heritage Site Monitoring Commission of the Diyarbakır Culture and City Solidarity Platform

The 2024 findings of the systematic monitoring and reporting work carried out by the World Heritage Site Monitoring Commission, established by NGOs under the Diyarbakır Culture and City Solidarity Platform following the UNESCO DMM decision, form the basis of this report.

The February 2025 report summary once again highlighted that the State Party continues to limit its conservation efforts to the city walls, neglecting the protection of the World Heritage Site as a whole, including its component areas and buffer zones. While the long-standing issues since 2016 largely persist, this report draws attention to new conservation problems that emerged in 2024, as well as practices that threaten the site's outstanding universal value and integrity.

### The Fortress Walls (inscribed world heritage)

Due to the asphalt road constructed by the Provincial Directorate of Environment and Urbanization for the National Garden, which extends between İçkale and Yenikapı adjacent to the eastern section of the city walls, excessive vehicle traffic persists. No effective measures have been taken to mitigate this issue (Fig. 1).



Fig. 1: The road that runs along the bottom of the city walls is open to vehicle traffic.  
Photo: Pinar Can, DKVD Diyarbakır City Archive, 5.03.2025

The walls continue to be misused as advertising and announcement boards by official institutions, including the Ministry of Culture and Tourism, the Governorship, municipalities, and political parties. The hanging of large banners and posters not

only causes physical damage but also degrades the site's visual integrity and public conservation awareness.

While some restoration work on the southern and western sections of the main walls has been successfully completed, the same cannot be said for the eastern walls and the citadel walls. Particularly on the eastern walls, which are less visible, careless restoration work has been carried out, giving the impression of ordinary wall repairs with superficial applications and rough patches on the surface (Fig. 2).



Fig. 2: Restoration of the eastern city walls. See also Fig. 1.

Photo: Pinar Can, DKVD Diyarbakır City Archive, 5.03.2025

Visitor control of the city walls has not been carried out in accordance with a specific plan, resulting in an intense flow of visitors that has led to accidents, some of them fatal. This high level of visitor circulation not only accelerates the deterioration of the city walls but also leads to deadly accidents. Instead of implementing a visitor plan that prioritizes the protection of the city walls and a holistic function program, the authorities have opted for simplistic measures that damage the walls and compromise their authenticity. The installation of crude iron railings from Yedikardeş bastion No. 42, one of the most visually important bastions of Diyarbakır Fortress, to bastion No. 39 and the walls of İçkale (the citadel) has caused a strong reaction from NGOs and the public (Fig. 3–7).



Fig. 3: Railings built on the upper parts of the walls of İçkale.  
Photo: Pinar Can, DKVD Diyarbakır City Archive, 5.03.2025



Fig. 4: Railings built on the city walls between Yedikardeş Bastion numbered 41 and the bastion numbered 40.  
Photo: Pinar Can, DKVD Diyarbakır City Archive, 5.03.2025



Fig. 5: Ugly railing appearance on the city walls.  
Photo: Pinar Can, DKVD Diyarbakır City Archive, 5.03.2025

It was learned from the Diyarbakır Governorate's letter and the press<sup>1</sup> that historically and architecturally important bastions such as Ben U Sen Bastion, Yedikardeş Bastion and Dağkapı Bastions were transferred for use and contracts were signed, and general information was given about the intended functions. It is learned from the aforementioned letter that 21 bastions have been contracted for use and will be used for restaurant-cafeteria, handicraft production and sales functions. Considering that the fortifications are monumental structures



Fig. 6: Ugly railing appearance on the city walls.  
Photo: Pinar Can, DKVD Diyarbakır City Archive, 5.03.2025



Fig. 7: A detail image from the installation of the railings.  
Photo: Pinar Can, DKVD Diyarbakır City Archive, 5.03.2025

protected under the Law No. 2863 on the Protection of Cultural Assets, commercial functions requiring wet areas and excessive visitor circulation pose a serious risk to conservation efforts. The lack of a comprehensive conservation master plan and cultural impact assessments raises concerns that the adaptive reuse of the city walls, if not carefully managed, could lead to irreversible damage.

### Historic City (Suriçi)

In Suriçi, the newly constructed buildings in neighbourhoods demolished after the conflict have been allocated to pro-government NGOs and religious foundations for functions such as Quran courses, as well as to the social facilities of official institutions like the Judge's House, Police House, and District Governor's Office. There has yet to be any initiative to transform Suriçi into a mixed-use area that supports residential life alongside commercial and institutional functions. Despite its long history as a residential area, the newly built sections within the historic city walls remain largely uninhabited, having been transformed into a commercial and administrative zone. In other neighbourhoods, policies encouraging depopulation continue, yet no steps have been taken to counteract this trend.

The "Disaster Risk Area Decision" of October 22, 2012, and the expropriation decision of March 21, 2016, covering the entire city wall remain in effect. These legal measures continue to fa-

<sup>1</sup> <https://www.iha.com.tr/diyarbakir-haberleri/diyarbakir-surlarinin-bazi-burclari-kiralandi-126738623>

facilitate demolition, transformation, and renewal projects that threaten the historical authenticity of the city wall. Residents of Suriçi remain deeply aware of these risks, as their memories of forced displacement, expropriation, and urban transformation are still fresh. For this reason, the neighborhoods where urban transformation has not yet been implemented, such as Lalebey, residents fearing demolition have begun selling and abandoning their homes, leading to the progressive deterioration of historic structures.

The aftermath of the February 6 earthquake has exacerbated this situation, with damaged multi-story reinforced concrete buildings being vacated, becoming sites for illicit activities and further accelerating depopulation. Without intervention, this situation will serve as justification for further urban transformation projects under existing legal frameworks. The current revised Conservation Zoning Plan does not provide sufficient criteria or measures to prevent such transformation.

It is crucial that the Ministry of Environment and Urbanization takes immediate action to reduce both physical and social deterioration in neighborhoods where urban transformation has not



Fig. 8: A view of the fires in Hevsel Gardens.

Photo: Diyarbakır Ecology Association Archive, February 2025

yet been implemented. However, in order to avoid repeating the mistakes of the past, the “Area under Risk” decision and the “Expropriation Decision” should be canceled. In addition, registered but vacant buildings should receive financial and technical support from the state and be restored and opened for occupation by the rightful owners. Unregistered buildings should also be reconstructed in cooperation with the owners in accordance with the cultural and historical fabric of the area. This approach will help revitalize the social fabric of Suriçi and preserve its cultural heritage.

### Hevsel Gardens, Tigris Valley, Ongözlü Bridge, and Surroundings

- Unauthorized land reclamation along the Tigris River, expanding agricultural boundaries and altering the riverbed, continues without effective sanctions. This has encouraged further environmental destruction.

- Industrial agriculture expansion and deliberate fires set to clear land have led to deforestation and the loss of green spaces.
- Illegal constructions are increasing in the Hevsel Gardens, with many of these unauthorized structures used for commercial purposes such as cafes (Fig. 9–11).



Fig. 9: Illegally built structures in Hevsel Gardens and operated as cafes.

Photo: Diyarbakır Ecology Association Archive, February 2025



Fig. 10: Illegally built structures in Hevsel Gardens and operated as cafes.

Photo: Diyarbakır Ecology Association Archive, February 2025

The UNESCO WHC report confirms that illegal construction and unauthorized activities persist on both sides of Ongözlü (Ten-Eyed) Bridge, within Hevsel Gardens, and along the Tigris River. Authorities have yet to take effective measures to remove these structures.

### World Heritage Site Management and Participation

Local representation in the management of the Diyarbakır World Heritage Site remains insufficient. In 2012, a participatory management system was established, including the Advisory Board, the Coordination and Supervision Board, and the Scientific Board, to ensure broad stakeholder involvement. This system, aligned with the Valetta Principles for the Protection and Management of Historic Cities and Urban Areas, incorporated representatives from local and central public institutions, academics from diverse fields, and civil society organizations

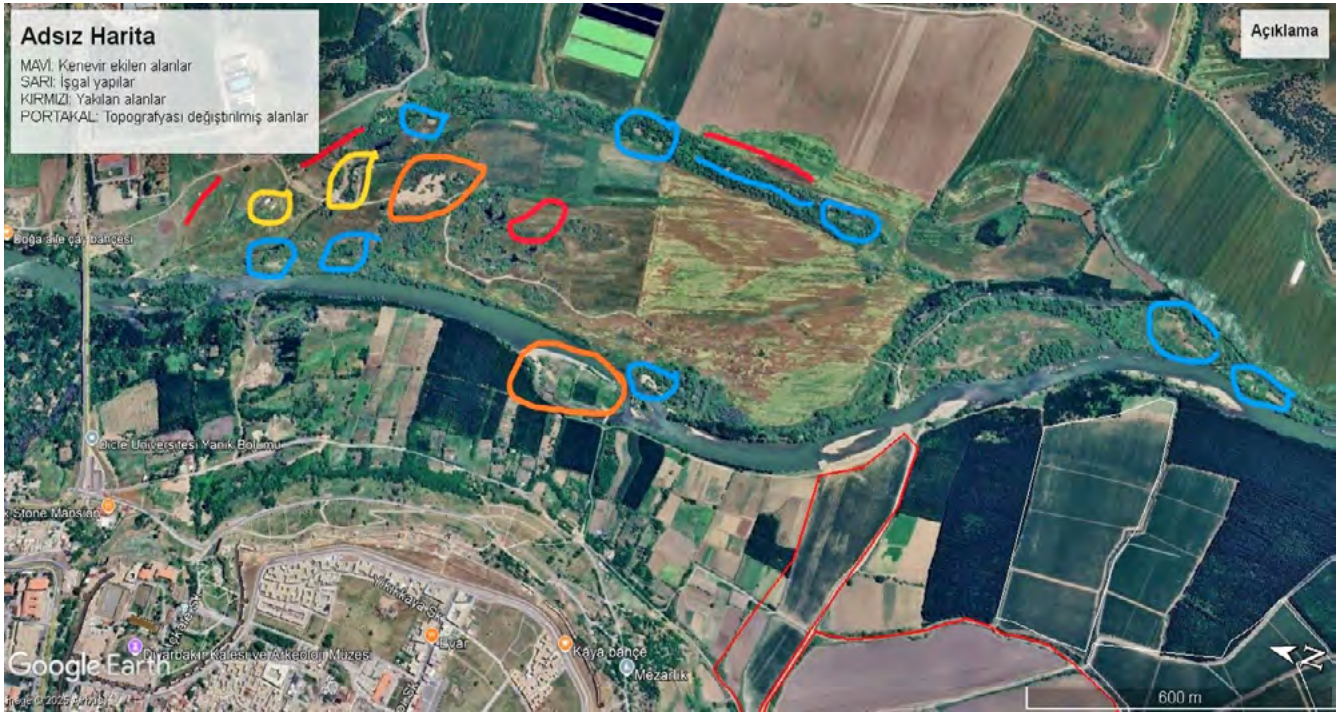


Fig. 11: Damaged areas marked on a satellite image of the Hevsel Gardens. Blue: Cannabis cultivated areas, Yellow: Illegal building occupation, Red: Burned Areas, Orange: Areas with modified topography.

Photo: Diyarbakır Ecology Association Archive, February 2025

(including 10 NGOs). It also included neighborhood headmen from the walled areas, urban volunteers, and specialized sub-working groups under the Advisory Board, fostering inclusive governance.

However, in 2016, a legal change transferred the authority over Area Management from local governments to the Ministry of Culture. This resulted in the termination of the Area Director, previously appointed by the Diyarbakır Metropolitan Municipality, and the dissolution of locally formed boards. Today, the Area Management operates entirely under the Ministry of Culture, with no active local monitoring mechanisms. The reconstituted Advisory Board (2017, revised in 2023) is dominated by government representatives, with limited civil society participation restricted to the Diyarbakır Branches of the TMMOB Cham-

ber of Architects, the Chamber of Agricultural Engineers, and the Chamber of Urban and Regional Planning.

Diyarbakır's civil society organizations have repeatedly raised concerns about this lack of participation with both the Ministry of Culture and the Diyarbakır Metropolitan Municipality, which has been tasked with revising the Site Management Plan. However, despite municipal advocacy, the Ministry has not responded positively. As a result, a genuinely participatory and effective management structure for the local monitoring, reporting, and conservation of the World Heritage Site has yet to be established. The absence of local representation weakens the protection of the site and hampers efforts to ensure its sustainable conservation.

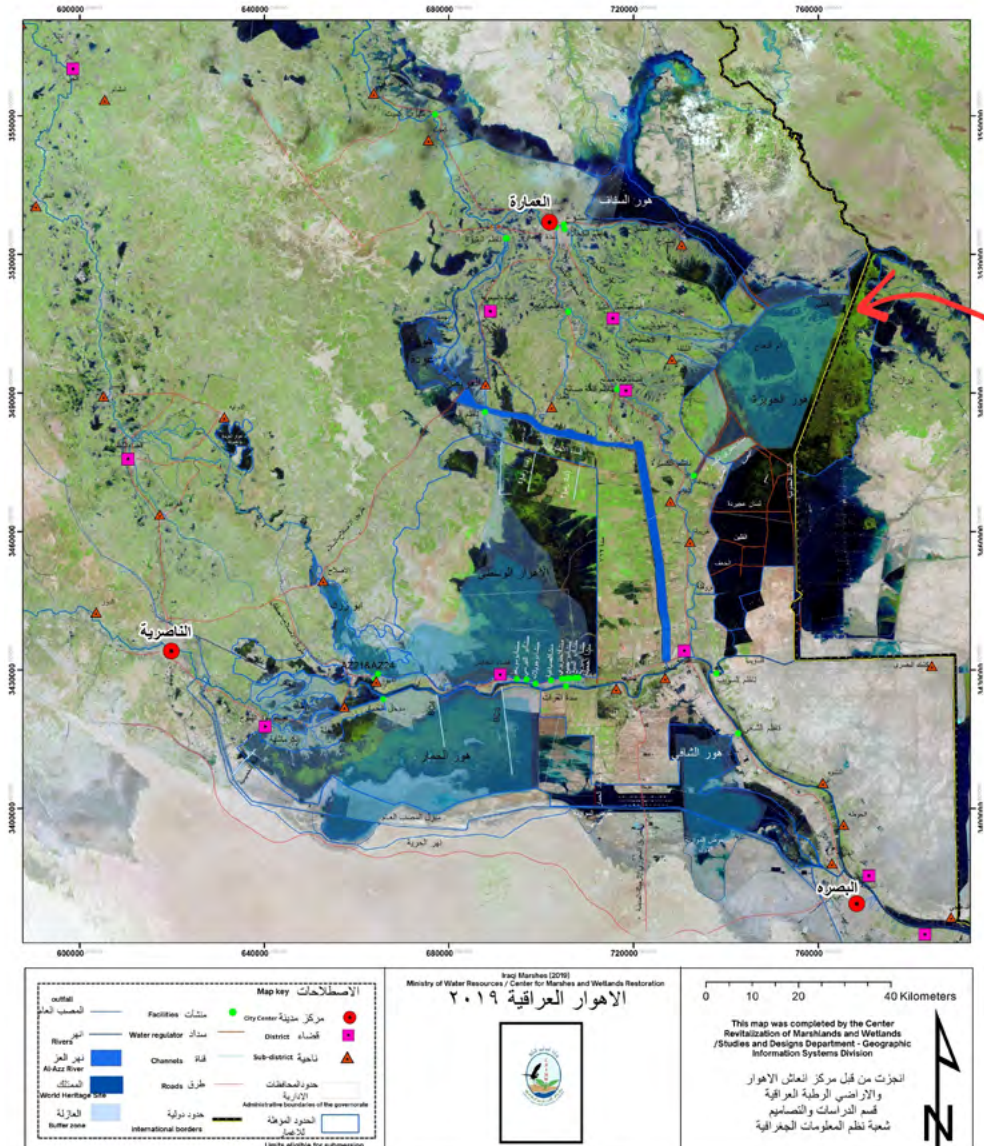
# Oil Exploration has Started in the Ahwar of Southern Iraq

Save the Tigris Foundation



We write as a coalition of civil society organizations from nine countries concerned with the protection of the Ahwar of Southern Iraq. For over a decade, our network has been monitoring the status of the Iraqi Marshes. We would like to express our urgent concerns over the State Party of Iraq's commitment to Decision 46COM7B.49 of the World Heritage Committee.

Our concerns relate specifically to Al-Hawizeh Marshes, which forms the natural property of the Iraqi Marshes together with Hammar and Central Marshes and straddles along the Iran–Iraq border. The Hawizeh Marshes are critical to the survival of the Ahwar. According to information from several local sources, oil activities in the area have increased significantly, with areas in the Al-Hawizeh Marshes currently being explored for oil.

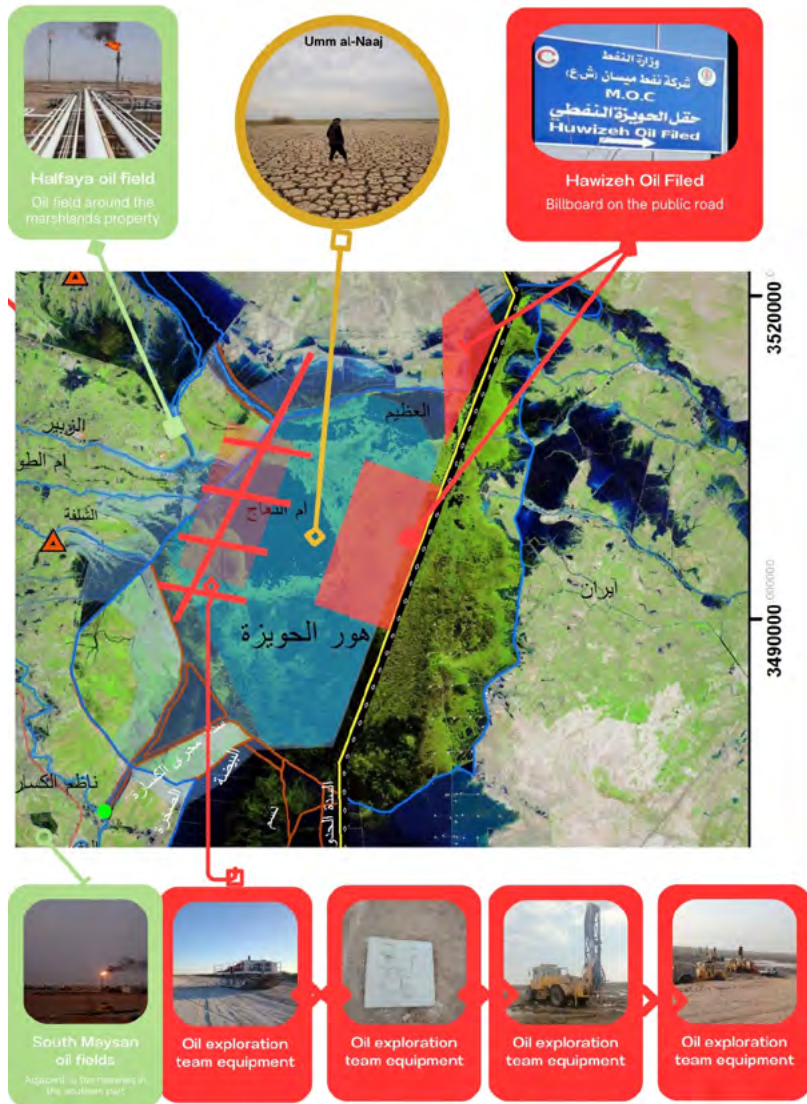


On 18 October 2023, Maysan Oil Company hosted a joint meeting with several government entities to prepare for the development of the Hawizeh Oil Field. The meeting covered key pre-development activities, including technical and seismic surveys, pipeline route planning, construction works, and oil well drilling, aiming to expedite the development process. Attendees included representatives from Maysan Oil Company, the Oil Exploration Company, the Ministry of Defense, the Civil Defense Directorate, the Mine Affairs Directorate, and the Chinese company Geo-Jade, which will oversee the field's development.

In November 2024 reports indicated that extensive oil exploration activities were underway in areas such as Suda, Al-Mujfifat, and Haur Al-Sanaf, the main tributary of Al-Hawizeh. These operations confirm the presence of substantial oil reserves in the area. Some of these fields date back to the 1980s but were later

Fig. 1: Oil Exploration in the Hawizeh Marshes.

Map: Save the Tigris Foundation and the Tigris River Protectors Association, based on information from local Marsh Arab sources and a member of the Iraqi parliament.



abandoned. Current exploration and expansion efforts suggest a long-term strategy for resource extraction. With 79% of the Marshes located within Iraq and the remainder in Iran (where similar projects have already been developed), civil society in Al-Hawizeh Marshes has observed in the past years construction roads and networks within Iraq’s portion of the marshes reportedly to facilitate oil extraction. This shift from protection towards resource extraction raises critical concerns, particularly given the Marshes’ World Heritage designation within the Ah-



Fig. 2: The Halfaya oil field, northwest of the Hawizeh Marsh, extends to the borders of the marshes, March 2025.

war of Iraq Property and their centrality to the livelihoods of local communities.

Most of the Hawizeh Marshes area in Maysan Governorate have completely dried up at various periods of time since 2020, indicating severe water scarcity. The water levels of Hawizeh Marshes throughout the past years have been below the required minimum. The remaining water is of bad quality and contains no oxygen, while in some months the area is completely dry. Local communities in the Marshes believe that the Iraqi authorities are deliberately aiming to desiccate some of the marsh areas in order to re-arrange the boundaries and reduce the area of the natural property, possibly for oil extraction.

Local communities reported in November 2024 that vehicles of the Iraqi Oil Exploration Company, affiliated with the Iraqi Ministry of Oil entered up to 2 km deep into the Hawizeh Marsh area in the first phase of their exploration. The location of the machinery was estimated at 31.6965° N, 47.7039° E near the Al-Soudah and Al-Madfaat area. These tools, which include oil extraction and seismic equipment, confirm 100% the presence of oil resources in this area. The Al-Soudah and Al-Madfaat areas have been severely impacted by water scarcity in the past years and are completely dry. The locations where the oil exploration tools have been observed to operate have been accurately mapped

by Iraqi civil society actors, and include the areas of Al-Hawizeh Marsh, Birkat Manaj, Al-Soudah, and Al-Azim Marshes. Oil wells were discovered in these areas in the 1980s. While no oil was extracted from these sites, they are currently being re-surveyed. Furthermore, the sites of Al-Majafaat and Al-Sanaf Marsh have also seen oil explorations recently.

On February 21, 2025, on Facebook. Raed Al-Maliki, a member of the Iraqi parliament representing Maysan province, con-



Fig. 3: Detonators for oil surveying, 4 kilometers within Al-Hawizeh Marshes, November 2024



Fig. 4: A sign indicating Al-Hawizeh oil field, December 2024

firmed on social media that developments are taking place in the Hawizeh Oil Field. Mr Al-Maliki posted that the development and production contract for the Hawizeh Oil Field was awarded to the Chinese company GeoJade. Local sources have been informed that further exploration is expected to begin in the first half of 2025. Exploration tools are set to reach Al-Sanaf Marsh to complete exploration work. This Marsh has been dried up over the past years. Later on, the exploration is set to head to desiccated marshes to resume their operations.

Current oil exploration activities in Al-Soudah Marsh and Al-Azim Marsh are similar to Iranian oil extraction activities across the border that have taken place for over two decades. They raise concerns about their impact on the local environment and the communities that depend on these marshes for their daily lives. The attached photos show the presence of machinery in these areas as well as the announcement of the oil field, which confirms the expansion of exploration activities in the area.

Save the Tigris contacted the Ministry of Water Resources in January 2025 to inquire about the oil developments in the

Hawizeh Marshes. Our aim was to obtain official clarifications. However, we did not receive any response.

### Recommendations

In light of these developments, we reiterate the importance for the World Heritage Center to urge the State Party of Iraq to strengthen environmental protection mechanisms and ensure that the marsh ecosystem of the Ahwar World Heritage Property is not negatively affected. Save the Tigris emphasizes the need to provide comprehensive environmental assessments for all oil projects in the region to ensure the protection of natural sites that are part of the World Heritage. In its Decision 46COM 7B.49, the World Heritage Committee recalled its “significant concern over the continued vulnerability of the marsh components and the related natural values of the property to oil and gas developments”.

The State Party of Iraq committed that any proposed extractive activities that may impact the Ahwar World Heritage Property would be assessed for their potential impacts, prior to taking any decisions to approve such projects. In fact, the State Party of Iraq in its 2024 State of Conservation Report expressed that “Iraq affirms its pledge and commitment to ensure that no oil activity or exploration is carried out that may cause damage to the property”. Yet the World Heritage Committee in its Decision 46COM 7B.49 urged the State Party of Iraq to “Extend its commitment to a permanent ban on all extractive industries, including oil and gas, within the property”. We ask the World Heritage Center whether the State Party of Iraq has reported on these potential oil extraction activities that we indicated, to the World Heritage Center and whether the State Party is committed to undertake and share their impact assessment. We also reiterate our request for a complete overview of oil and gas development within or in the vicinity of the property.



Fig. 5a and b: Signage inside the oil exploration site, November 2024

All photos provided by local civil society actors in the Ahwar

# The Bali Subak: A Tradition Being Preserved for Tourism?

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UNESCO inscribed the traditional irrigation farming system in Bali, also known as the subak, in 2012. There are 25 subaks inscribed in the World Heritage Site, under the category of Cultural Landscape. The subak system, a land management system of rice cultivation that produces terraced landscapes, is recognized as the physical manifestation of Bali's traditional philosophy known as *Tri Hita Karana*. The Balinese *Tri Hita Karana* philosophy serves as a framework to maintain the harmonious relationship between human, spiritual realms, and the environment, serving as a framework for prosperity and happiness. The subak system in Bali is believed to have been in place for more than a thousand years.

The subak was inscribed to protect it against growing pressure from tourism development, which has become the driver of Bali's economy. The subak is also under pressure from urbanization and climate change, which threatens its survival. Farmers increasingly express concerns about the challenges of water access, difficulty in sustaining labor, seasonal uncertainty, high production costs, and stagnating prices. Some sources estimate that approximately 1,000 hectares of subak rice fields are taken out of production every year. The rapid loss of the subak system led to the proposal for UNESCO World Cultural Heritage status. Heritage protection is seen as a key solution for safeguarding this cultural landscape that has been passed down for many generations.

The World Heritage Site includes four locations spread across five districts in Bali, each highlighting the significance of the subak. The four locations include: the Supreme Water Temple of Pura Ulun Danu Batur, the Subak Landscape of the Pakerisan Watershed, the Subak Landscape of Catur Angga Batukaru, and the Royal Water temple of Pura Taman Ayun (UNESCO, 2024). However, due to reports highlighting the ineffectiveness of managing Bali's cultural landscape sites and the continued changes in land use and other concerns, UNESCO recommended that Indonesia invite ICOMOS and ICCROM to carry out an advisory mission in 2015. In their report, ICOMOS and ICCROM recognized the popularity of subak as a unique draw for tourists and recommended strategic planning for

community-centered eco-tourism. This article revisits the findings of the 2015 advisory mission a decade on, focusing on various unaddressed issues. Issues center on farmers that face challenges in maintaining and sustaining agricultural practices after UNESCO World Heritage site designation.

## A Tradition at Risk

In the 2024 Republic of Indonesia State of Conservation (SOC) Report, the government reported measures to address UNESCO's recommendations, including programs to improve subak livelihoods. The Indonesian government acknowledges that the volume of tourism presents a challenge, particularly at the most iconic site, Subak Jatiluwih. This article reports on current conditions, with specific reference to Subak Jatiluwih.

Indeed, government agencies are working to enhance Bali's irrigation infrastructure, particularly in subak areas under the Irrigation Water Utilization Improvement Acceleration Program. This program provides *pekaseh*, as subak leadership, with direct access to submit improvement requests to authorities for enhancing irrigation channels in their region. *Pekaseh* and other farmers report that actual implementation, however, has been limited. In the Jatiluwih area, one major irrigation channel collapsed. Subak farmers repeatedly called for government support for its repair, and the issue was highlighted in an international photovoice exhibition in 2019. Years hence, the government has not taken the necessary steps to repair the situation. Meanwhile, local farmers are doing their best to provide temporary fixes to the channel on their own.

In addition, subak roads have suffered landslides, but repair support was limited. Farmers worked together to construct bamboo bridge access, but temporary fixes require more structural support. Additionally, the main subak road at Jatiluwih gets significant attention, repurposed to prioritize the tourism industry for trekking and cycling, benefiting accruing to outside tourism interests. Some farmers also express frustration with tourists entering their rice fields on their treks to take photos, at times trampling plantings and even pulling out rice stalks as souvenirs.



Fig. 1: Subak Tempek Kedamaian.

Photos: Anonymous

Other tourism initiatives have had significant impacts on the functioning of the subak. In November 2024, the government implemented a major Subak Spirit Festival. This festival was promoted as a synergy between sustainable agriculture and tourism to support Bali's economy. It is estimated that Subak Jatiluwih attracts around 800-1,000 foreign tourists and 300-500 domestic tourists daily. During the Festival, the number of domestic tourists surged to an estimated 1,500 per day. Leading up to the festival, in October 2024, it was estimated that 45,000 visitors came to Jatiluwih. Farmers started expressing dissatisfaction about being excluded from these types of activities taking place in their area.



Fig. 2: Festival Stage.

Photos: Anonymous

Several farmers expressed frustration that organizers only reached out to them when their rice fields were used as a stage area for major events. However, a regulation prohibits bringing goods or construction materials into rice fields to preserve the sanctity of the subak. Farmers have had difficulty mitigating these activities. Farmers were also forced to harvest their unripe paddies to build the stage. This is yet another example that



Fig. 3: Announcement Prohibiting Construction (Greenbelt Area).

Photos: Anonymous

tourism initiatives increasingly supersede subak practices. Another festival is being planned annually. Such a volume of tourists creates challenges for farmers in maintaining their fields, undermining cultural practices.

Farmers raise concerns about the changing approach to heritage preservation. They describe the subak as a new tourism object, with its land and practices promoted under the guise of preservation. Moreover, farmers are increasingly regarded as sec-

ondary stakeholders by institutions focused on tourism events. Farmers also believe the newly appointed subak head no longer prioritizes their interests, directing his attention to the tourism-driven economy.

Meanwhile, landscapes are already changing with longer term tourism development planning. The regional spatial plan regulation grants subak heads (*pekaseh*) and traditional village heads (*bendesa*) the authority to offer recommendations on building permits within their areas. This ensures that local knowledge and cultural traditions are acknowledged and respected in the planning process. However, several farmers who built stalls on their land said that permission was sufficient if given by the traditional village, which actually does not have the authority to manage the subak. Since 2015, more infrastructure - including restaurants, villas, and small stalls - has been built throughout the Jatiluwih and surrounding subak. Although there is a ban on construction like the one shown in Figure 3, land alterations continue to take place, even behind the very notice boards that say developments are prohibited.

Subak Jatiluwih is increasingly under the oversight of tourism destination management (*daerah tujuan wisata / DTW*) of Jatiluwih. While DTW outwardly emphasizes the preservation

of subak culture, their overall goal is to promote tourism. Indeed, violations of subak regulations are frequently observed in practice, and has created divisions within subak members. Some internal groups increasingly support tourism, while others wish to maintain agricultural traditions. These farmers do not oppose tourism outright, but they want it to take place outside the subak area.



Fig. 4: Helipad and Laser Show.

Photo source: <https://www.nusabali.com/berita/186566/helipad-dtw-jatiluwih-siap-beroperasi-maret-2025-uji-coba-pendaratan-berjalan-mulus>

There are some examples of local farmers speaking out. The construction of a helipad in one of the subak areas of Jatiluwih to transport VIP guests is especially controversial. The helipad was implemented in 2019, but rejected. It is now being reintroduced in a different location. Local farmers claim the helipad is located on land of one of the leaders of tourism interests. A second example is a laser light show hosted at night in Jatiluwih, lasting two hours with 15-minute intervals. This attraction garnered increasing disapproval among local farmers. Farmers impacted by the laser show have requested compensation of 7 million rupiah, up from the 2 million initially promised. They have yet to receive any response. In protest, farmers threatened to place zinc sheets on their rice fields. Although the light show has been postponed after broad disapproval, farmers find it difficult to prevent similarly disruptive attractions from happening.

Rice fields are considered sacred, and farmers typically stop working once the sun sets. Activities like these do not preserve subak culture, but instead turn it into a tourist attraction. Tourism priority increasingly compels farmers to seek out tourism livelihoods. While some funds are allocated to help farmers with ritual ceremonies, many still struggle to maintain their farms, or to attract interest from the next generation in cultural practices. Last year, when mice infestation occurred, the expenses for performing the *Nangluk Merana* ritual were covered by Subak Jatiluwih and the Temple of Pura Luhur Cantik Kuning

community in Gunung Sari village, with a small contribution from representatives of the Tabanan Cultural Service. These rituals are fundamental cultural practices but increasingly serve as a burden. Farmers find it increasingly difficult to collect the necessary resources and feel the benefits from their practices pop up the tourism industry.

## Conclusion

The government has organized meetings and workshops to conduct a Heritage Impact Assessment (HIA), with plans for implementation in 2025. Engaging with local stakeholders is crucial, particularly among farmers working in the field. Intermediaries for heritage protection are increasingly favoring tourism development to the detriment of subak farming and cultural practices. Furthermore, it is important to recognize that subak and traditional villages are separate institutions. However, in terms of subak management, village institutions now appear to be expanding their authority through tourism, actively participating in regulating how the subak operates. At

this point, World Heritage designation seems to further support the undermining of subak cultural institutions and their farming practices are increasingly at risk. As one farmer noted: *“Just get rid of World Heritage Site to avoid any disruptions like this. We want things to go back to how they were before World Heritage Site, where it was peaceful with no visitors. It doesn’t matter as long as we, as farmers, are comfortable, safe, and live harmoniously with the community.”*

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## IV. Properties with Indigenous Peoples

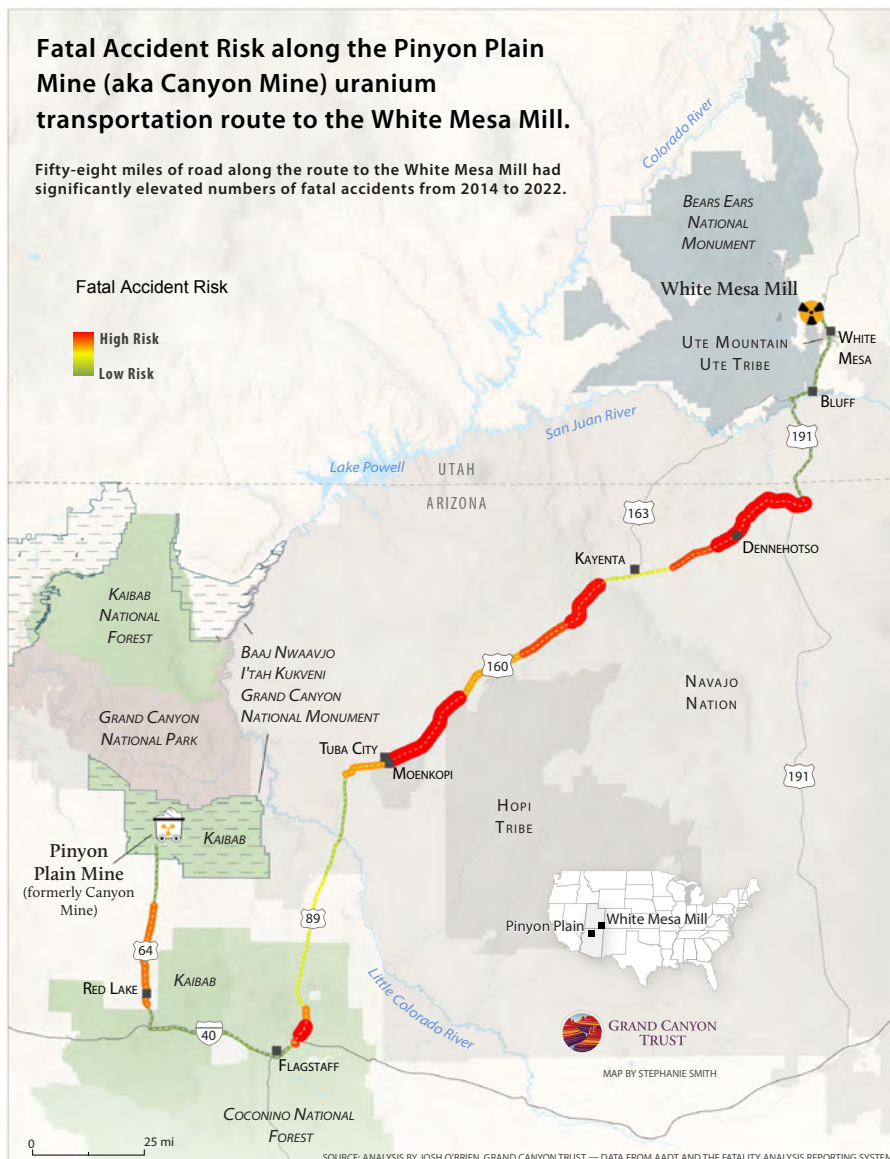
# Uranium Trucks on the Road Near the Grand Canyon

Amber Reimondo, Grand Canyon Trust



When Energy Fuels Resources, the uranium company that owns and operates the controversial Canyon Mine (renamed Pinyon Plain Mine) near Grand Canyon National Park, began trucking uranium ore from the mine to the White Mesa uranium mill in

Utah for the first time in July 2024<sup>1</sup>, it caused an uproar<sup>2</sup>. Tribal governments, local governments, communities, and concerned citizens along the haul route were furious, including the Navajo Nation<sup>3</sup>, across whose lands the trucks were traveling.



Given the public outcry and strong criticism from the Navajo Nation, the Havasupai Tribe, and others, Arizona Governor Katie Hobbs stepped in. She encouraged the company to suspend hauling and enter into discussions with the Navajo Nation. On January 29, 2025, after months of closed-door negotiations, the company announced<sup>4</sup> an agreement. It said it would resume uranium hauling in February 2025. Soon, uranium trucks began running again<sup>5</sup>. Navajo citizens and other community members along the haul route continue to protest.

The agreement also included a promise to move uranium waste from the Navajo Nation to the White Mesa Mill, despite opposition from the nearby White Mesa Ute community.

## The 300-mile uranium haul route crosses tribal lands

Many Grand Canyon region tribes oppose uranium mining on their ancestral lands near the Grand Canyon. Pinyon Plain Mine is located inside the boundaries of Baaj Nwaavjo I'tah Kukveni – Ancestral Footprints of the Grand Canyon National Monument. The haul route from the mine to the White Mesa Mill, where the uranium ore is sent for processing, crosses the

Fig. 1: Fifty-eight miles of road along the route to the White Mesa Mill had significantly elevated numbers of fatal accidents from 2014 to 2022.

Map: Stephanie Smith / Grand Canyon Trust

Navajo Reservation, the Hopi Reservation, and the Ute Mountain Ute Reservation, as well as Native American ancestral homelands. This includes the homelands of many of the 13 tribes of the Grand Canyon Tribal Coalition, who advocated for the monument's designation.

### Navajo Nation reaches agreement with uranium company

On February 12, 2025 the Navajo Nation acting attorney general gave a report<sup>6</sup> to the Navajo Nation Resources and Development Committee on the uranium ore transport agreement signed by the Navajo Nation and Energy Fuels Resources. According to the attorney general, the agreement adds protections including limiting transportation to specified hours of the day. It also introduces more stringent insurance, driver qualification, and training standards. And it further mandates that uranium truck drivers obtain Navajo Nation transportation licenses, and that the company use state-of-the-art cover systems to prevent the spread of radioactive dust.

Notably, the agreement also includes a provision for Energy Fuels Resources to transport 10,000 tons (2.2 million pounds) of "uranium waste"<sup>7</sup> from abandoned uranium mines on the Navajo Nation to the White Mesa Mill for processing and disposal. Over 700 million pounds of radioactive waste are already languishing in the waste pits at the White Mesa Mill<sup>8</sup>. The nearby White Mesa Ute community opposes more waste being sent to the mill. The community is fighting to protect their clean water and way of life.

### About the deal

Some in Navajo Nation leadership have reacted to community backlash by expressing that the Navajo Nation government did not view signing this agreement as their ideal choice, but as the best option available to them. Navajo Nation Environmental Protection Agency Director Stephen Etsitty explained to the press that the Navajo Nation is limited legally in what it can control when it comes to the federal and state highways the haul trucks travel on. Director Etsitty referred specifically to the doctrine of federal pre-emption, which is the idea that when two bodies of law conflict, the higher legal authority takes priority. Rather than risk losing in court and facing hauling resuming on others' terms, the Navajo Nation decided to pursue a deal that it felt would benefit them.

### Havasupai Tribe voices strong opposition to uranium hauling

The Havasupai Tribe has condemned<sup>9</sup> the hauling. The tribe said in a statement: "We are deeply disappointed in EFRI [the mining company] and the Navajo Nation for not including us in their discussions that ultimately led to the dangerous decision to allow hauling of radioactive material across our aboriginal lands." The statement continued, "We are further disheartened that state and federal agencies and officials charged to protect this sacred land stand on the sidelines not saying a word."

As of right now, uranium trucks are traveling from Pinyon Plain Mine to the White Mesa Mill, along a risky haul route<sup>10</sup>.

## Notes

1 <https://www.grandcanyontrust.org/blog/uranium-trucks-hit-road-near-grand-canyon/>

2 Note by the editor: The World Heritage Watch Report 2024, p. 145-148, <https://world-heritage-watch.org/content/wp-content/uploads/2024/06/WHW-Report-2024-final.pdf> reports about the threats the uranium hauls may pose to the Grand Canyon National Park World Heritage Site.

3 <https://apnews.com/article/uranium-navajo-transport-arizona-mine-energy-nygren-d697115b7aed897e366f7f0ef4ee1f14>

4 <https://investors.energyfuels.com/2025-01-29-Energy-Fuels,-Navajo-Nation-Department-of-Justice,-and-Navajo-Nation-Environmental-Protection-Agency-Sign-Landmark-Agreement-on-Uranium-Ore-Transport-and-Abandoned-Mine-Cleanup>

5 <https://azmirror.com/2025/02/14/we-were-duped-uranium-shipments-begin-across-navajo-land/>

6 <https://investors.energyfuels.com/2025-01-29-Energy-Fuels,-Navajo-Nation-Department-of-Justice,-and-Navajo-Nation-Environmental-Protection-Agency-Sign-Landmark-Agreement-on-Uranium-Ore-Transport-and-Abandoned-Mine-Cleanup>

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9 <https://www.grandcanyontrust.org/wp-content/uploads/2025/03/02-14-2025-Havasupai-Tribe-Statement-EFRI-NavajoNation-Deal.pdf>

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# U.S. Border Wall Impacts on Mexico's El Pinacate WHS: It is Time for "In Danger" Listing

Alejandro Olivera, Center for Biological Diversity



The El Pinacate and Gran Desierto de Altar Biosphere Reserve World Heritage property ("El Pinacate") in Mexico was inscribed on the World Heritage List in 2013, in part, to protect the area's extraordinary "biodiversity and threatened species." This diversity includes numerous species of imperiled wildlife that depend on cross-border connectivity, such as imperiled Sonoran pronghorn, bighorn sheep, pygmy owl, and jaguar. El Pinacate's roughly 140-kilometer northern boundary abuts the Mexico – United States border, and the U.S. border areas have been deemed critical to El Pinacate's "integrity and ecological connectivity" and to the survival and recovery of many Mexican species.

From 2017 to 2021, the Trump administration constructed 730 kilometers of border wall along the U.S.-Mexico border.<sup>2,3</sup> This wall now stretches nearly the entire length of El Pinacate's northern boundary, leaving only a 23-kilometer gap in mountainous terrain (Fig. 1).<sup>4</sup> This imposing 9-meter-high barrier (Fig. 2) disrupts crucial wildlife migration routes in and out of this unique protected area. The wall's presence hinders the ecological connectivity and integrity of the entire ecosystem (see video: <http://t.ly/XkCu>).

Furthermore, construction of the wall involved blasting of sensitive border areas, including an Indigenous burial ground and sacred site at Organ Pipe Cactus National Monument and the Tinajas Altas Mountains within Cabeza Prieta National Wildlife Refuge (Figure 2) (see drone footage: <https://tinyurl.com/Tinajas4K>).

The Trump administration also installed high-intensity stadium lights along the wall that, if made operational, have the potential to cause severe light pollution impacting animal migration routes and wildlife. A report<sup>5</sup> details the installation of at least 1,800 currently-inoperable stadium lights across around 100 km of protected lands on the Arizona border, including Cabeza Prieta National Wildlife Refuge and Organ Pipe Cactus National Monument that abut El Pinacate. Border lights already threaten migratory birds, nocturnal pollinators, and habitat for dozens of endangered species in all four border states.

Before the planned border wall construction, and concerned about the impact of the U.S.-Mexico border wall on El Pinacate World Heritage Site, the Center for Biological Diversity, Greenpeace Mexico, and the Tohono O'odham Tribe in Sonora jointly

petitioned for the site to be listed as "in danger" in 2017.<sup>6</sup> However, it was not until 2021 that the World Heritage Committee, through Decision 44 COM 7B.114, urged the United States to halt border wall construction near El Pinacate. The Committee expressed concerns that the wall would negatively affect the site's integrity and disrupt the movement of vital wildlife populations. They further called for collaboration between the U.S. and Mexico to assess the damage and develop strategies for restoring the landscape and wildlife habitat.<sup>7</sup>

Mexico's 2023 State of Conservation Report (SOC) concluded that the border wall poses a significant threat to regional biodiversity, inevitably causing habitat loss, degradation, and



Fig. 1: El Pinacate y Gran Desierto de Altar World Heritage Property.

Map: Center for Biological Diversity



Fig. 2: Border wall along the property. Photo: Alex Olivera / Center for Biological Diversity

fragmentation; reduced access to resources; population isolation; altered species behavior; increased human activity; and changes to population social structures. The SOC explicitly stated that “the construction of a barrier that prevents the free movement of wildlife is a threat” with “significant impacts on habitat conditions.”<sup>8</sup>

The Mexican government has recognized that the primary environmental impact of the border wall is on “connectivity and the effect it will have on biodiversity ... especially in animals such as pronghorn and bighorn sheep that have a long-life history.”<sup>9</sup> Due to the border wall impacts, populations of various species—including flat-tailed horned lizards, Yuma fringe-toed lizards, Quitobaquito pupfish, Sonoyta mud turtles, lesser long-nosed and fish-eating bats, Goode’s horned lizards, mountain lions, Sonoran pronghorn, coyotes, Mexican bighorn sheep, Sonoran desert tortoises, mule deer, jaguars, and even low-flying owls—require evaluation and monitoring.<sup>10, 11</sup> Furthermore, the wall has divided water reservoirs and oases, rendering them inaccessible to fauna on the Pinacate side; specifically, Quitobaquito Spring is now unreachable from Mexico (see video: [http://t.ly/EB\\_6](http://t.ly/EB_6)).

In July 2023, as part of a legal settlement<sup>12</sup> over U.S.-Mexico border wall funding, a few small fauna passages were opened in the wall. The settlement specifies that an opening with a minimum length of 18 feet will be installed in the Cabeza Prieta National Wildlife Refuge. While these openings may assist certain animals in crossing the border wall, they are insufficient to address the widespread severance of connectivity caused by the wall across the region.

A 2024 study<sup>13</sup> investigated the impact of the U.S.-Mexico border wall on wildlife movement and habitat connectivity and showed that only 9 % of wildlife interactions with the border wall led to successful crossings. This is an 86% reduction compared to crossings through vehicle barriers that previously ex-

isted across portions of the wall site. Large animals, such as black bears, mountain lions, deer,<sup>14</sup> and wild turkeys, experienced a 100% reduction in crossings. Small wildlife passages, which facilitated 16.7 times more crossings than other areas, proved beneficial for small-to-medium-sized animals like javelinas and coyotes. The findings highlight the critical need for more frequent and larger openings to support the survival of wildlife and maintain connectivity among regional populations (Fig. 3).

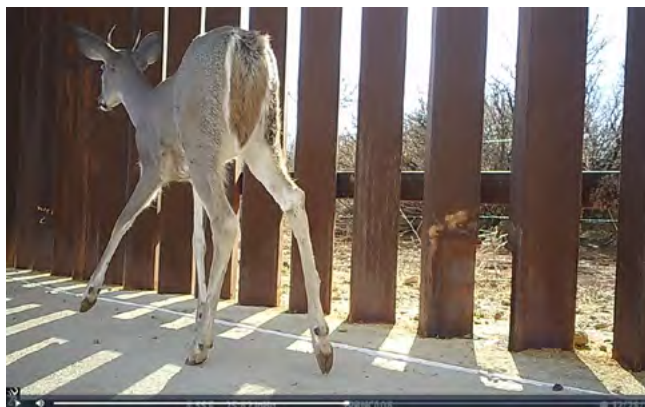


Fig. 3: Example of an investigative behavior as a white-tailed deer examines multiple interstitial spaces in the border wall. Photo: Sky Island Alliance; Wildlands Network

Mexico’s 2024 SOC report confirmed that the border wall now spans most of El Pinacate’s northern boundary. The U.S. reports the wall’s length at 109 km, while Mexico reports it as 128.7 km.

A planned reactive monitoring mission by the World Heritage Committee, intended to assess the wall’s impact on the site, has been postponed by Mexico due to logistical and security issues. The mission is awaiting rescheduling in consultation with the U.S., with the Committee requesting a new timeframe to ensure a report is prepared for the 2025 session.

During its 46th session, the Committee expressed significant concerns, as outlined in Decision 46 COM 7B.55, about the absence of an action plan to address and mitigate the wall’s impacts on the site’s OUV. This plan was originally requested in Decision 45 COM 7B.2. The Committee reiterated its call for the U.S., in cooperation with Mexico, to develop, fund, and implement this urgent action plan by February 1, 2025, and to submit it to the World Heritage Centre.

The Committee also cautioned that failure to restore ecological connectivity and protect key wildlife populations could lead to the **inclusion of El Pinacate on the List of World Heritage in Danger.**<sup>15</sup>

Finally, President Donald Trump has outlined several actions regarding the U.S.-Mexico border wall, signaling a continua-

tion and potential intensification of policies from his previous term. These include expanding the border wall to previously unfortified areas, aiming to enhance border security. Trump is expected to declare illegal immigration a national emergency to unlock military funds for border wall construction,<sup>16</sup> adding more pressure to the border wildlife.

Beyond harming wildlife, endangered species, and public lands, the U.S.-Mexico border wall is part of a broader strategy of border militarization that also affects human rights, civil liberties, Indigenous lands, local businesses, and international relations. The wall disrupts the natural migrations of people and wildlife essential for maintaining ecological and cultural diversity.

The Center for Biological Diversity strongly urges Committee Members to request a monitoring mission to evaluate the Site to assess impacts and to:

1. Continue to request a report from the United States and Mexico regarding the Site, the wall, construction progress, and its effects on El Pinacate, including particularly population studies on affected wildlife, including the Sonoran pronghorn, Mexican bighorn sheep, and Sonoran desert tortoise;
2. Call on the U.S. government to remove border security lighting affecting the Property;
3. Request that the U.S. government remove the border wall along El Pinacate to allow the wildlife connectivity; and
4. Inscribe the El Pinacate property on the List of World Heritage in Danger at the Committee's 47th Session.

## Notes

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- 2 DHS and CBP Celebrate 400 Miles of New Border Wall System Release Date: October 29, 2020. Available at: <https://www.dhs.gov/news/2020/10/29/dhs-and-cbp-celebrate-400-miles-new-border-wall-system>
- 3 Sky Island Alliance. <https://skyislandalliance.org/our-work/us-mexico-border-wall/tour-the-border/>
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- 5 a wall of lights through the Wild. Russ McSpadden, Laiken Jordahl and Curt Bradley Center for Biological Diversity, June 2023 1,800 Stadium Lights on Arizona Conservation Lands Threaten Wildlife. Available at: [https://www.biologicaldiversity.org/campaigns/border\\_wall/pdfs/border-lighting-wildlife-impacts-2023-05-06.pdf](https://www.biologicaldiversity.org/campaigns/border_wall/pdfs/border-lighting-wildlife-impacts-2023-05-06.pdf)
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- 11 El Pinacate and Gran Desierto de Altar Biosphere Reserve. 2020 Conservation Outlook Assessment. Available at: <https://worldheritageoutlook.iucn.org/es/explore-sites/wdpaid/555556046>
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- 14 See video of female deer and her fawns unable to cross through the border wall. Video by Sky Island Alliance/Wildlands Network: <https://www.wildlandsnetwork.org/news/new-study-reveals-an-86-reduction-in-wildlife-crossings-at-the-border-wall-our-experts-explain-why>
- 15 <https://whc.unesco.org/en/soc/4634>
- 16 <https://www.reuters.com/world/us/heres-what-we-know-about-trumps-planned-executive-orders-so-far-2024-12-17/>

# Canaima: A New Threat and Old Ones on the Rise

SOS Orinoco



Canaima National Park, a World Heritage Site, is one of the world's most unique and irreplaceable biodiversity sites. Le Saout et al. (2013) conducted a global assessment based on the concept of "irreplaceability," defined as the potential contribution of a portion of land to species conservation targets or, conversely, the extent to which options to achieve those targets would be lost if that land were lost. In other words, it is a measure of a site's "uniqueness."

These authors estimated the irreplaceability of each of the 173,461 protected areas that existed globally at that time, as well as for 2,059 sites proposed for protection, to ensure representation of 21,419 vertebrate species worldwide, including all amphibians, non-marine mammals, and birds, of which 4,329 are globally threatened. Their findings identified the most critical areas for biodiversity conservation. The results were striking: in the "top ten" most irreplaceable and unique areas worldwide, three were in Venezuela. The natural monuments "Tepuyes Formations" ranked first (58.41 points), followed by "Canaima National Park" (42.03 points) in second place, and "Canaima" as a World Heritage Site in third place (41.15 points). This underscores Canaima's global conservation priority (SOS 2023c).

All three top biodiversity sites share a common feature: they belong to the Guiana Shield landscape and ecosystem. Within this region, the Pantepui biogeographical province stands out as a unique area with many endemic, geographically restricted, and highly vulnerable species. These species inhabit tepuis, towering 1,200-1,500 meters above sea level, and have evolved under extreme biological isolation on some of the Earth's oldest geological formations (Huber 1987, 1988). However, this uniqueness and irreplaceability are increasingly threatened, not only by mining, fires, and deforestation, as highlighted in previous reports (SOS 2024, 2023b, 2020), but also by a more insidious and invisible threat: invasive species introduced through irresponsible tourism.

## Tourism

Official tourism data for Canaima is either unavailable or not publicly disclosed. Thus, we rely on on-the-ground sources. Tourism in the eastern sector of Canaima National Park (Gran

Sabana) increased significantly in 2024 compared to previous years but remains well below 2011–2013 levels when approximately 20,000 tourists visited per season. Camps run by indigenous communities provide basic services, including solid waste disposal, though much of this waste ends up in open-air landfills. Between December 26, 2024, and January 6, 2025, an estimated 300 tourists traveled along Troncal 10, the main road through Gran Sabana.

Gran Sabana's primary attraction is Mount Roraima (Fig. 1), most of which lies within Venezuelan territory and is accessible only by foot through Venezuela. According to its management plan (Venezuela 1991), this tepui is legally designated as a "Natural Recovery Zone," implying that human impact was already significant at that time and necessitating recovery actions, including the enforcement of carrying capacity limits. However, recent tourist seasons have seen up to 120 people simultaneously at the summit, exceeding the unofficial 50-person limit established by INPARQUES in agreement with local indigenous communities. This overuse reflects a lack of enforcement by INPARQUES and the economic incentives driving Pemón communities to disregard the limit.



Fig. 1: Roraima Tepui, Canaima National Park.

Photo: Rodolfo Gerstl

In the western sector, tourism revolves around Angel Falls (Fig. 2), the world's tallest uninterrupted waterfall. Commercial airlines offer four weekly flights to Laguna de Canaima, increasing to three per day during peak seasons. Tourists pay entry fees that, for the most part, benefit local indigenous organi-

zations. The area has nine lodges and 55 tourism enterprises, with a lodging capacity of 850 beds, reaching up to 70% occupancy in high season. National tourists with high purchasing power dominate the market, often taking river trips to Angel Falls. Additionally, private helicopters conduct up to eight daily flights over Angel Falls and Auyantepui, including summit landings. These landings pose ecological risks, including the introduction of invasive species. Another growing concern is the increasing number of tourists from Kamarata climbing Auyantepui, whose environmental impact remains unassessed. INPARQUES management is virtually absent despite a significant number of newly appointed park rangers, whose duties appear limited to collecting visitor fees.



Fig. 2: Angel Falls from the summit.

Photo: Rodolfo Gerstl

### Invasive Alien Species

The introduction of non-native species into protected areas threatens native biodiversity. Invasive species — those that become destructive to the environment — can drive native species to extinction and profoundly alter ecosystems, often irreversibly (IUCN 2018). There is compelling evidence that invasive species pose remarkable harm to native biodiversity all over the world (Bargali 2024). The degree of threat of these allochthonous species usually depends on their capacity to adapt and reproduce in these new areas, and drive native species to extinction. They can also profoundly alter the uniqueness of the ecosystems they “invade”. Such changes are generally difficult or impossible to reverse. However, this threat often goes unnoticed by the general public and by administrations with little technical training, or is “tolerated” irresponsibly by officials who are technically capable but lack decision-making, administrative capacity or sufficient professional ethics to confront erroneous guidelines given by decision-making centres. Despite the severe impact of invasive species worldwide, the IUCN’s assessments from 2014 to 2020 failed

to mention them as a threat to Canaima (IUCN 2014, 2017, 2020).

In Canaima, invasive species have proliferated over the past decade, particularly near roads, towns, tourist sites, and administrative centers, as well as on tepui summits. Alien species, potentially or actually invasive, are associated with human presence, including tourism, which is why it is often considered part or consequence of other threats. However, this becomes even more important when the affected areas are particularly fragile and there has been no official response, as is the case of the extremely unique and fragile Pantepui. The top of the tepuis form a biogeographic archipelago, encompassing both their slopes and summits. These areas, due to their biological fragility and uniqueness, are a top important value of the World Heritage Site. Researchers have repeatedly warned about this issue (Delascio and Nozawa 2010; Rodríguez et al. 2010; Nozawa et al. 2013; Safont et al. 2014; Rull et al. 2016; El Estímulo 2016; El País 2016; Rull and Vegas-Vilarrúbia 2020; Sánchez 2021; Hernández et al. 2021; SOSOrinoco 2023a). However, authorities have taken no preventive or remedial action.

### Mining

Mining in Canaima National Park continues to expand. Our monitoring indicates an increase from 122 hectares in 2000 to 1,582 hectares in 2023—a growth of over 1,300%. The problem worsened after the 2016 implementation of the Orinoco Mining Arc policy, which fueled illegal mining across southern Venezuela. Since our last report (SOSOrinoco 2024), the mining footprint inside the park grew from 1,509 to 1,582 hectares, and the buffer zone (a non-legal 10-kilometer band measured outside its official limits) expanded from 1,350 to 1,440 hectares.

Authorities have taken no enforcement actions against this illegal activity. In that report we pointed out that the expansion of the area impacted by mining had been 165 ha affecting only the buffer area, between 2022 and 2023 (Fig. 3). Within the park, we now identified 5 new mining sites and 2 expansions (see one in Fig. 4). In total there are 129 mining sites, not



Fig. 4: New mining site in Canaima National Park, sector Kukenan.

Source: Planetscope scene

**MINING FOOTPRINT IN NATIONAL PARK CANAIMA (2024)**

- New mining activity
- Mining footprint (2023)
- Mining Arc
- Canaima NP

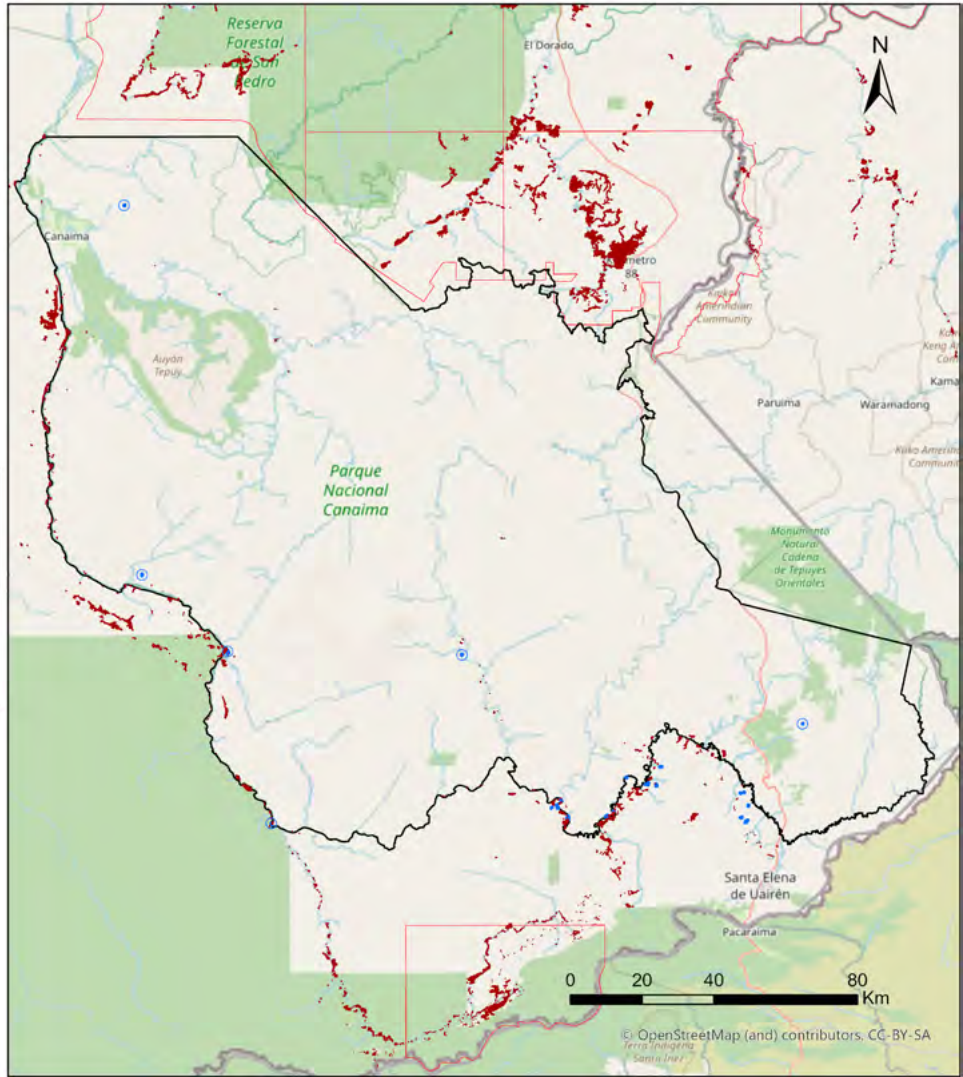


Fig. 3: Mining footprint map of Canaima National Park updated to 2024. Source: SOS Orinoco

considering mining dredge rafts which are difficult to detect. A particularly concerning new mine has been detected near Troncal 10, in the direction of Paraitepui, Gran Sabana sector, where mining had not previously been reported. In the buffer zone there are 24 new mining sites, adjacent to the southwestern boundary. They follow the pattern of small and medium-scale mining characteristic of the Santa Elena-Icabarú axis, varying in size between 0.4 and 29 hectares, mainly impacting water courses and Moriche palm swamps.

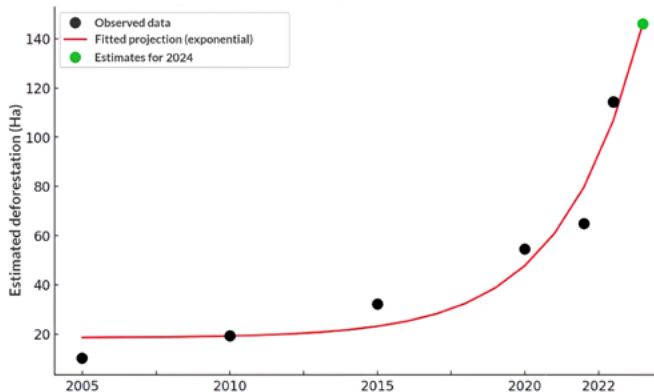


Fig. 5: Deforestation in the Canaima National Park during the period 2000-2024. Source: SOS Orinoco

**Deforestation and Wildfires**

Deforestation in Canaima is increasing, particularly along the Caroní River. Our satellite analyses show that at least 65 hectares of forest were lost between 2000 and 2022 due to mining. Additionally, an estimated 50 and 32 hectares were lost in 2023 and 2024, respectively, meaning over half of the total forest loss since 2000 has occurred after 2015, coinciding with the implementation of the Orinoco Mining Arc policy (Fig. 5). Between March and May 2024, wildfires destroyed approximately 69,400 hectares, making Canaima one of the most fire-affected protected areas in southern Venezuela. These fires, which typically occur during the December-April dry season, are intensifying. However, authorities have failed to implement effective prevention and control strategies. Well-funded programs with adequate resources are essential to combat this threat - responsibilities that fall on INPARQUES and other public entities.

**Conclusion**

Canaima’s situation continues to deteriorate. Beyond previously documented threats, inadequate tourism management and the

spread of invasive species now pose additional dangers, especially in the fragile Pantepui region. Meanwhile, mining, deforestation, and wildfires continue to escalate. Economic incentives increasingly outweigh conservation efforts, exacerbating the park's decline. Despite these alarming trends, the overdue Reactive Monitoring Mission visit has yet to be scheduled, and the Venezuelan government has taken no steps to facilitate it. Given these circumstances, UNESCO must intensify pressure on the Venezuelan authorities to assess the site firsthand and take urgent measures to halt its ongoing degradation.

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## V. Natural Properties

# Islands and Protected Areas of the Gulf of California Must Remain on the In-Danger-List

Alejandro Olivera on behalf of the Center for Biological Diversity  
Animal Welfare Institute  
Environmental Investigation Agency  
Natural Resources Defense Council



The vaquita porpoise is on the brink of extinction, with only 6–8 individuals remaining,<sup>1</sup> threatening the loss of one of the Outstanding Universal Values (OUVs) of the Islands and Protected Areas of the Gulf of California World Heritage Site (“the Site”). This crisis is driven entirely by illegal fishing practices, especially the use of gillnets, in the Upper Gulf of California.<sup>2</sup> Contributing factors include Mexico’s failure to fully enforce its laws and regulations against illegal fishing and the persistent demand for totoaba swim bladders, primarily from China and other consumer states.



Fig. 1: Vaquitas.

Photo: Todd Pusser Jr

Gillnet fishing has always been the sole cause of the vaquita's decline, yet the species could recover if Mexico enforces strict prohibitions on fishing and other activities in its habitat. Despite enacting regulations in September 2020<sup>3</sup> (the Agreement) to combat illegal fishing, Mexico has largely failed to implement these measures effectively in the Site and meet the corrective measures of the Site’s Desired State of Conservation for Removal (“DSOCR”) for the removal of the property from the List of World Heritage In Danger.

The Center for Biological Diversity, Animal Welfare Institute, Natural Resources Defense Council, and Environmental Investigation Agency have repeatedly urged the World Heritage Centre (“Centre”) and the International Union for Conservation of Nature (“IUCN”) to request that strict corrective measures and strong criteria for the Site’s DSOCR are proposed. We have been providing information regarding Mexico’s ongoing enforce-

ment failures within the In-Danger listed Site, that continue to threaten the vaquita porpoise and totoaba fish, both species of OUV.

On its 46th session, the World Heritage Committee urged Mexico (Decision 46 COM 7A.43) to prioritize implementing all corrective measures for the property and has approved the DSOCR as proposed in its January 2024 report. This includes a) the adoption of legal fishing gear that avoids harm to marine mammals, sharks, and turtles, particularly in the marine portion of the Biosphere Reserve; b) the vaquita population should show a consistent increase over five years, with healthy individuals producing calves; c) effective protection against illegal fishing must be ensured through enhanced surveillance and prosecution; d) the Vaquita Refuge and the marine reserve should be free of illegal fishing gear, with gillnets completely eradicated from use, sale, possession, manufacture, and transport, including in surrounding communities; e) international cooperation should actively combat totoaba poaching and trafficking.

The following information is relevant regarding Mexico’s ongoing failure to implement the criteria for the Site’s DSOCR, including recent evidence of illegal fishing activities in the Site.

**1. Eyewitness accounts of pangas (fishing boats) carrying gillnets entering the water, even when inspectors were present:** An eyewitness (whose identity is being withheld for their own protection) visited the boat ramp at the Malecon (boardwalk) in San Felipe, Mexico on December 3 and 4, 2024. The eyewitness observed a total of ten pangas entering the Upper Gulf from the Malecon on December 3 and four on December 4 between 6–10 am. Government officials, including representatives of the Mexican military, CONAPESCA, and PROFEPA agencies were inspecting vessels at the Malecon starting at 7 am each day and lasting approximately 90 minutes. All the inspected pangas were allowed to enter the Upper Gulf despite being laden with illegal nylon nets used for shrimp fishing. No inspectors were present when the pangas returned to the Malecon. Furthermore, according to fishermen interviewed by the eyewitness, most fishers accessed the Upper Gulf between 3–4 am.

- 2. Illegal gillnet fishing continues, both to some degree within the Zero Tolerance Area (ZTA) and significantly within the broader Vaquita Refuge.** The Sea Shepherd Conservation Society (SSCS) resumed its collaborative work with the Mexican Navy monitoring the ZTA on October 4, 2024. While this collaboration continues to have success in reducing illegal fishing in this part of vaquita habitat, SSCS has documented evidence of illegal fishing in the ZTA. On October 28, 2024, two large nets were found within the ZTA. The first contained multiple net types (for totoaba, shrimp, and chano) and was 457m in length. The second was a combination of totoaba and corvina nets and was 308m long.<sup>4</sup> According to the SSCS daily illegal fishing reports,<sup>5</sup> on eight of the 27 days monitored in October, more than 20 vessels potentially engaged in net fishing were observed in a single hour within the Vaquita Refuge with 48, 40, and 55 vessels seen on October 27, 28, and 31, respectively. On the three days of November 11, 14, and 27 multiple pangas were observed in a single hour net fishing in the ZTA, the ZTA Extension (November 9, 10, 11, 27), ZTA Buffer Zone (November 24, 25), with 16 pangas confirmed to be net fishing in the Vaquita Refuge on November 17. Throughout that month, of the 25 days monitored there were more than 20 pangas engaged in potential net fishing observed in a single hour within the Vaquita Refuge on 11 days, including three days (November 11, 25, and 27) with 87, 58, and 75 vessels respectively. In December, of the four illegal panga reports available through December 6, seven pangas were observed in a single hour net fishing in the ZTA Extension on December 3 and 4 with 23 pangas seen in a single hour potentially engaged in net fishing within the Vaquita Refuge on December 3. These data confirm, as we have noted in the past, that while efforts to combat illegal fishing in the ZTA have improved, illegal fishing continues in the ZTA and in the Vaquita Refuge while there is little evidence of enforcement.
- 3. The Commission on Environmental Cooperation (CEC) initiated an investigation regarding Mexico’s vaquita-related enforcement in the Site.** The CEC, established under the United States-Mexico-Canada (USMCA) Agreement to investigate alleged environmental enforcement failures, is currently developing a “factual record” in response to a Submission on Enforcement Matters (SEM) submitted by our organizations in August 2021. The SEM claims that Mexico is failing to effectively enforce its various federal environmental laws concerning the protection of the vaquita in the Site.
- 4. Mexico has failed to implement the CITES Compliance Action Plan (CAP).** Based on the CITES Secretariat recommendations in SC 75 Doc. 7.5,<sup>6</sup> the Standing Committee requested that Mexico “urgently address inconsistencies in the implementation of the different aspects of the Agreement” and prepare a CAP. Specifically, Mexico was directed to submit a “finalized” CAP to the Secretariat by 28 February 2024 which is to include: 1) a clear outline of the actions to be taken to “urgently progress implementation ... to effectively prevent illegal fishers and unauthorized vessels from entering the vaquita refuge and zero-tolerance areas and main-

tain them as gillnet net-free zones;” 2) a timeframe by which each action will be “fully achieved;” and 3) “milestones to enable assessment of satisfactory implementation.”<sup>8</sup> Furthermore, the content of the CAP is to focus on implementation of decisions directed to Mexico adopted at CoP19<sup>9</sup> and those recommendations contained in SC 75 Doc. 7.5 paragraphs 52(a) (i) and (ii).<sup>10</sup> As of January 2025, many of the CAP milestones have not been fully achieved.

In CITES 77th Standing Committee meeting, the Secretariat presented SC77 Doc. 33.13.2 on totoaba. In this agreed document the Secretariat made some observations to Mexico’s CAP and it is invited to undertake a third technical mission to Mexico to review and monitor the implementation of the compliance action plan and to assess the situation on the ground. The Committee also agreed to review Mexico’s progress with the implementation of its compliance action plan at 78th meeting in February 2025 and consider if any further compliance actions or measures are needed.<sup>11</sup>

Not only have the World Heritage Committee and CITES advocated for the survival of the vaquita,<sup>12</sup> but so have the International Whaling Commission,<sup>13</sup> IUCN – SSC Cetacean Specialist Group<sup>14</sup> and the International Committee for the Recovery of the Vaquita.<sup>15</sup> These international organizations have repeatedly advised Mexico — sometimes for decades — on the necessary actions to protect and recover the vaquita: gillnets must be completely removed from its habitat.



Fig. 2: A Vaquita killed by gillnets.

Photo: Center for Biological Diversity

While Mexico has reduced illegal fishing within the small “Zero Tolerance Area,” illegal fishing outside of this area remains rampant, and vessels laden with illegal gillnets continue to enter the Upper Gulf. Mexico has largely failed to implement Decision 46 COM 7A.43. And despite Mexico’s continued efforts, the vaquita population has not grown and only 6 to 8 animals were observed during a 2024 survey.<sup>16</sup> Mexico is continuing to fail to stop the illegal take and trade of totoaba which is the leading threat to the vaquita.

Continued evidence of blatant illegal fishing within the vaquita habitat further amplifies the urgent need for Mexico to fully implement the Agreement and Decision 46 COM 7A.43.

Moreover, while maintaining a net free zone in the vaquita habitat is a priority that has not yet been achieved,<sup>17</sup> the comprehensive provisions of the Agreement require much more. These additional provisions include equipping all vessels (large and small) with vessel monitoring systems, prohibiting night-time fishing and inspecting all vessels at specified embarkation/disembarkation points, and prohibiting the possession, sale, transport, and manufacturing of gillnets.<sup>18</sup>

## Actions Needed

Mexico needs a strong enforcement of its own laws. Stopping illegal fishing and achieving a gillnet free Upper Gulf of California would broadly benefit the biological and ecological integrity of the Site. Despite evidence of recent progress in combatting illegal fishing in the ZTA and Vaquita Refuge, the sole threat to the vaquita – entanglement in illegal gillnets set to catch totoaba and other species in the Upper Gulf – remains.

We urge the World Heritage Committee to ensure that strict corrective measures are adopted for the Site and, similarly, that stronger criteria be approved for the DSOCR of the Site. In concert with these proposed amendments, we strongly encourage the Committee to direct Mexico to:

- Prevent fishers and unauthorized vessels from entering the ZTA and Vaquita Refuge, as already required by law.
- Eliminate illegal and derelict fishing gear in the vaquita habitat, including the Vaquita Refuge and the ZTA, in coordination with relevant stakeholders, fishing communities and cooperatives.
- Strengthen law enforcement effectiveness through vastly increased surveillance and inspection, including strengthening inter-institutional cooperation in this field both within and outside the ZTA.
- Secure the necessary legislative changes to increase the penalties for illegal traffic, capture, possession, import and export of wildlife species, parts and products, considered threatened, endangered or specially protected and/or regulated under Mexican national law, or by international treaties adopted by the State Party of Mexico; and strengthen criminal prosecution procedures.
- Fully implement and fund all aspects of the Agreement.
- Ensure the large-scale availability and use of existing alternative fishing gear systems which do not cause entanglement of vaquita and other protected species by providing appropriate incentives, permits, training and other measures; continue to develop and test alternative fishing gear systems; and promote sustainable fisheries based on environmentally friendly fishing gear throughout the entire GPA.

## Notes

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- 2 Rojas-Bracho, L., Taylor, B., Booth, C., Thomas, L., Jaramillo-Legorreta, A., Nieto-García, E., Cárdenas-Hinojosa, Barlow, J., Mesnick, S.L., Gerrodette, T., Olson, P., Henry, A., Rizo, H., Hidalgo-Pla, E., and Bonilla-Garzón. 2022. More vaquita porpoises survive than expected. *Endangered Species Research*. 48: 225–234. <https://doi.org/10.3354/esr01197>. Available at: <https://www.int-res.com/articles/esr2022/48/n048p225.pdf>; See also, Vaquita (“The only known threat to the vaquita is getting caught in fishing gear, especially gillnets.”). Available at: <https://www.fisheries.noaa.gov/species/vaquita>.
- 3 See, AGREEMENT that regulates gear, systems, methods, techniques and schedules for carrying out fishing activities with smaller and larger vessels in Mexican Marine Zones in the Northern Gulf of California and establishes landing sites, as well as the use of monitoring systems for such vessels. Available (in Spanish) at: [https://www.dof.gob.mx/nota\\_detalle.php?codigo=5601153&fecha=24/09/2020#gsc.tab=0](https://www.dof.gob.mx/nota_detalle.php?codigo=5601153&fecha=24/09/2020#gsc.tab=0); *Diario Oficial de Federación (DOF)* (Jan. 8, 1975). Acuerdo que establece veda para la especie Totoaba, *Cynoscion MacDonaldi*, en aguas del Golfo de California, desde la desembocadura del Río Colorado hasta el Río Fuerte, Sinaloa en la costa oriental, y del Río Colorado a Bahía Concepción, Baja California, en la costa occidental. Available at: [http://www.dof.gob.mx/nota\\_detalle.php?codigo=4786520&fecha=01/08/1975](http://www.dof.gob.mx/nota_detalle.php?codigo=4786520&fecha=01/08/1975) (“1975 Totoaba Ban”).
- 4 See, <https://seashepherd.org/2024/10/28/two-giant-nets-pulled-in-a-day-to-protect-the-vaquita/>
- 5 The Animal Welfare Institute requested and was granted access to the reports as offered on the SSCS vaquita webpage (<https://seashepherd.org/vaquita/>).
- 6 See, [https://cites.org/sites/default/files/documents/SC75/agenda/E-SC75-07-05\\_0.pdf](https://cites.org/sites/default/files/documents/SC75/agenda/E-SC75-07-05_0.pdf)
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# UNESCO Must Protect World Heritage Site from Gas Pollution in the Aquarium of the World

Defensa Ambiental del Noroeste



The **Islands and Protected Areas of the Gulf of California** is one of the most biodiverse marine regions on the planet, home to around 8,000 animal species<sup>1</sup>, including six of the seven sea turtle species and 39% of the world's cetaceans<sup>2</sup>. This ecologically valuable area was dubbed "the Aquarium of the World" by ocean explorer Jacques-Yves Cousteau. In 2005, the World Heritage Committee designated it a World Heritage Site due to its natural beauty, ecological significance, and vital habitats for biodiversity conservation<sup>3</sup>. Since 2019, it has been included on the List of World Heritage in Danger due to the imminent extinction of the vaquita (*Phocoena sinus*), a critically endangered porpoise endemic to the region and primarily threatened by illegal fishing practices.

The coastal communities of the Gulf of California (GC) rely heavily on economic activities such as fishing, aquaculture, and tourism, providing employment to thousands of people<sup>4</sup>. The region's indigenous peoples engage in fishing, produce traditional crafts, and practice ceremonies and rituals<sup>5</sup>. The GC contributes over half of Mexico's total fish catch, with its fleet responsible for 57% of shrimp, 72% of tuna, and nearly 100% of sardine production<sup>6</sup>. Furthermore, tourism, particularly whale watching and diving, generates significant revenue, attracting over 4.5 million tourists annually<sup>7</sup>.

## Expansion of LNG Projects in the Gulf of California

Since the 2010s, the United States have significantly increased its liquefied natural gas (LNG) production, becoming the world's largest exporter in 2023, and its exports are expected to double by the end of this decade<sup>8</sup>. The Permian Basin, located in Texas and New Mexico, is the primary source of this resource and is increasingly seen as a climate bomb since all the gas extracted there comes from hydraulic fracturing, or fracking<sup>9</sup>. Meanwhile, the liquefaction terminals, where the gas is converted into liquid form for export, are situated on the East Coast<sup>10</sup>.

In recent years, the GC has become a key epicenter of the global LNG industry, with a series of projects that promise to transform the region's energy outlook. One of the largest projects is the Terminal GNL de Sonora, known as **Saguaro En-**

**ergía**, located in Puerto Libertad, state of Sonora, which the project proponent affirms will liquefy 28.2 million metric tons of natural gas annually<sup>11</sup>. This project is linked to the **Sierra Madre Pipeline (Frontera-Puerto Libertad)**, which will span over 800 km, connecting the Permian Basin in the United States with the GC to export gas via maritime transport<sup>12</sup>.



Fig. 1: The Negishi LNG Terminal, Japan, is an example of large-scale LNG infrastructure. It helps visualize the type of industrial development these projects would involve in the Gulf of California. Its capacity is also significantly smaller than that of proposed terminals like Vista Pacífico LNG or Saguaro Energía

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Further south, in Guaymas, the **AMIGO Terminal**<sup>13</sup> is under design, with a view to becoming a key player in this growing LNG system with an initial capacity of 4.2 million metric tons per year<sup>14</sup>. AMIGO plans to supply Asian markets, utilizing existing pipeline infrastructure and exporting the LNG through maritime transport.

Even further south, in Topolobampo, in the state of Sinaloa, the **Vista Pacífico LNG** project, which has submitted its Environmental Impact Assessment (EIA) report for evaluation, consists of a floating liquefaction terminal and a pipeline, named **Corredor Norte**, that will connect the gas to the offshore platform for export<sup>15</sup>. Similarly, in Mazatlán, there is another project for the construction of a liquefaction plant, further consolidating the presence of LNG infrastructure in the region<sup>16</sup>.

These projects not only reflect the boom of the US LNG industry in the GC but also represent an expansion that would turn

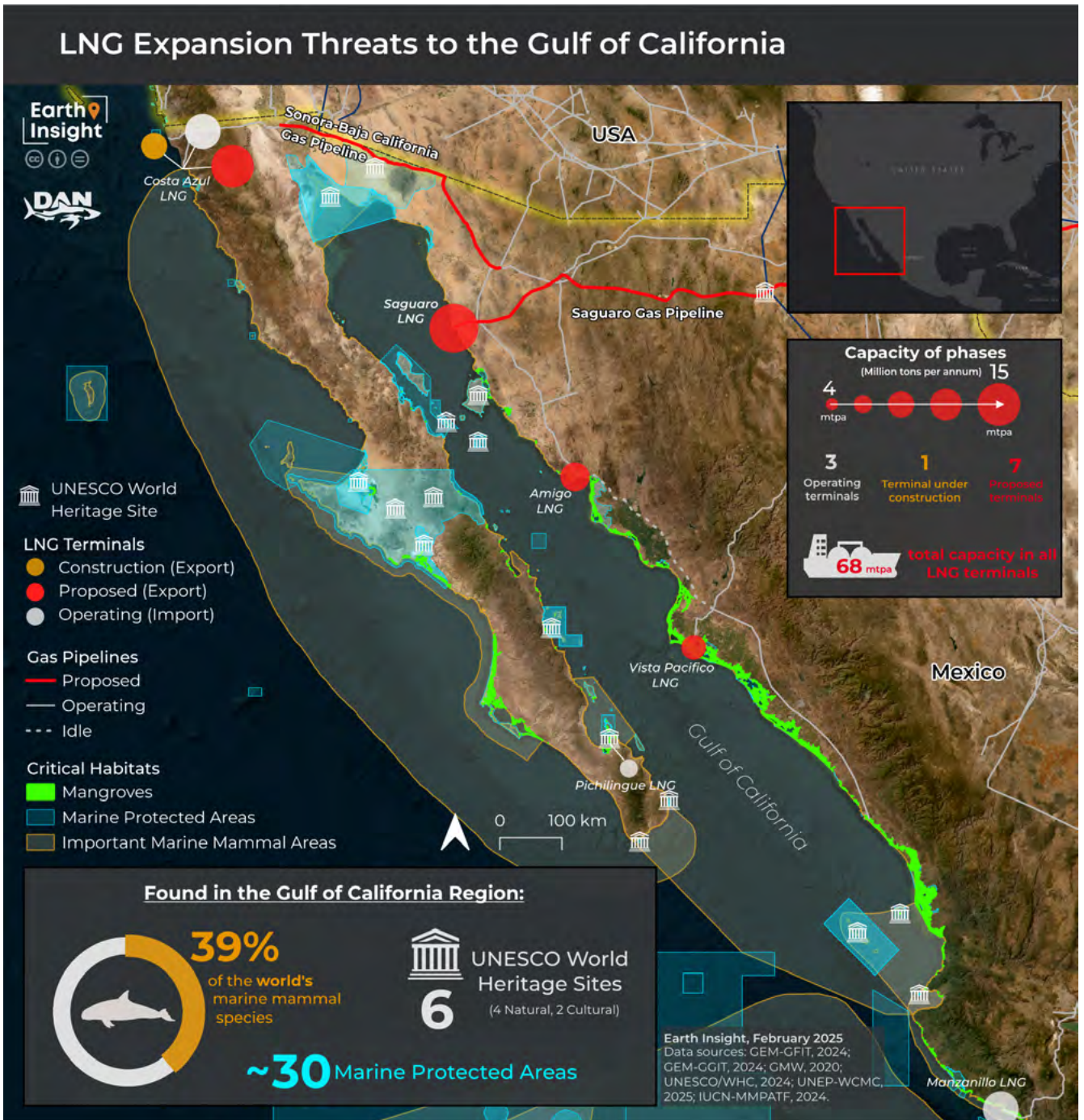


Fig. 2: LNG Expansion threats to the Gulf of California.

Map: DAN / EarthInsight

the region into a global LNG export hub, with significant economic, environmental, and social implications. To date, none of the proposed projects have been built; all remain in the permitting phase, with the exception of Saguario, which had begun construction but was halted due to a court order<sup>17</sup>.

Moreover, there are serious information gaps affecting some of the LNG proposals. In the case of Saguario Energía, the project, originally authorized for regasification, underwent a significant

modification to liquefaction operations without the submission of a new EIA report. Vista Pacifico LNG submitted an EIA report; however, key data – including maps and geographic coordinates – were redacted from the publicly available version<sup>18</sup>. AMIGO has not yet submitted its EIA report. Furthermore, the information currently accessible regarding the navigation routes of LNG carriers within the World Heritage site remains scarce and insufficiently detailed, raising concerns about potential impacts on this sensitive area.



Fig. 3: A typical LNG tanker. Standard vessels of this kind are often over 270 m long and around 45 m wide, while the largest can reach up to 345 m in length and 55 m in width, highlighting the massive scale of maritime traffic associated with LNG export terminals.

Photo: Garry Chapple / Pixabay

## Threats of the LNG Industry to the Outstanding Universal Values of the Gulf of California

The expansion of the LNG industry in the GC poses significant threats to the Outstanding Universal Value (OUV) of the World Heritage site. Liquefaction processes and maritime activities introduce chemical pollutants and invasive species, degrade water quality, and disrupt marine biodiversity, including endangered species like the vaquita<sup>19</sup>. The resulting underwater noise and increased ship traffic interfere with key behaviors of marine mammals and raise collision risks.<sup>20</sup> Despite these pressures and the Gulf's existing vulnerabilities to climate change, Mexico faces institutional and resource limitations in enforcing environmental protection<sup>21</sup>.

The site's inscription on the List of World Heritage in Danger underscores the urgent need for effective corrective measures and international oversight.<sup>22</sup>

## UNESCO's vital Role in Protecting the Gulf of California

We respectfully urge the World Heritage Centre to request all relevant planning documents and authorizations related to current and proposed LNG projects in the GC prior to the adoption of any decisions that may be difficult to reverse, to help safeguard the site's integrity<sup>23</sup>.

We also encourage the World Heritage Committee to provide expert support for these tasks and recommend that Mexico conduct a comprehensive Strategic Environmental Assessment of LNG projects in the GC<sup>24</sup>. This assessment should fully map the risks and potentially irreversible impacts related to these

projects. Based on the results, UNESCO should consider recommending phasing out production and export of LNG, particularly in World Heritage properties and surrounding areas vulnerable to pollution; to refuse approval for new or expanded LNG projects, to revoke granted authorizations and to withhold support for fossil fuel developments.

As a UNESCO World Heritage site, the GC should be off-limits to LNG projects, which clearly conflict with UNESCO's policies on Climate Change and Sustainable Development, as well as the Convention's obligation for States to take all possible measures to anticipate, avoid, and minimize harm using the best available knowledge and in alignment with global environmental and heritage protection standards<sup>25</sup>. **The development of fossil fuel infrastructure in such ecologically sensitive and internationally protected areas undermines the very principles of the Convention.**

Additionally, and as part of this comprehensive approach, considering the 2006 Report on climate change impacts, which highlights the importance of regional and transboundary mitigation strategies, we urge the Committee to ensure that state of conservation reports and draft decisions reflect the Convention's obligations, recommending concrete actions that State Parties—particularly Mexico and the United States—should take to protect World Heritage sites<sup>26</sup>.

Like the cases of Australia's Great Barrier Reef and Germany's Wadden Sea – where major fossil fuel projects are advancing with no regard for World Heritage values – the proposed LNG developments in the GC represent a serious threat to its OUV<sup>27</sup>. These precedents must serve as a warning, reinforcing the need for strict adherence to UNESCO's obligations and **the application of the precautionary principle.**

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# Galápagos Islands Meet Criteria for World Heritage In-Danger Status

Alejandro Olivera, Center for Biological Diversity



World-renowned for its biodiversity and extraordinary endemism, Ecuador's Galápagos Islands have long been recognized for their remarkable natural heritage. The Galápagos National Park was established in 1959,<sup>1</sup> to commemorate the first centenary of Charles Darwin's *On the Origin of Species*, inspired by his observations in the islands, which led to the development of his theory of evolution by natural selection. The site was inscribed on the World Heritage List in 1978. In 1998, Ecuador expanded the property to create a broader marine protected area, establishing the Galápagos Marine Reserve. In 2001, the World Heritage Committee extended the site to include the Galápagos Marine Reserve, recognizing its unique ecosystems and biodiversity.

The Galápagos Islands World Heritage property (The Galapagos) covers one of the largest marine protected areas globally. The property is recognized for several Outstanding Universal Values (OUVs), including marine biodiversity (criterion vii), geological interest (criterion viii), evolutionary significance (criterion ix), and species endemism (criterion x).

Despite its extraordinary heritage, Ecuador's management of The Galápagos has raised significant concerns that have intensified in recent years. In 2007, the property was inscribed on

the World Heritage List In Danger due to a variety of threats, as noted in a report by the World Heritage Centre/IUCN 2007 mission. Although the property was removed from the "In Danger" list in 2010, the Committee also called for ongoing efforts to strengthen conservation measures.



Fig. 2: A Rockhopper Penguin on Fernandina Island, Galapagos. Photo: Jenny E. Ross

More than 15 years after the initial In-Danger listing, the Galápagos Islands continue to face serious conservation challenges. These issues were highlighted during the 2021 World Heritage Committee session, which raised concerns over excess tourism and illegal fishing activities by foreign vessels. In 2023, the Committee once again urged Ecuador to address these concerns by limiting tourism growth and enhancing international cooperation to curb illegal, unregulated, and unreported (IUU) fishing in the area. However, the threats of IUU fishing, tourism, and pollution among others continue to threaten the Site's OUVs.

## Threat of Illegal, Unreported, and Unregulated (IUU) Fishing

IUU fishing remains a significant threat to the property's OUV. On a single day in 2020, the Ecuadorian Navy reported a fleet of 342 foreign fishing vessels, mostly Chinese-flagged, operating just outside the Galápagos' Exclusive

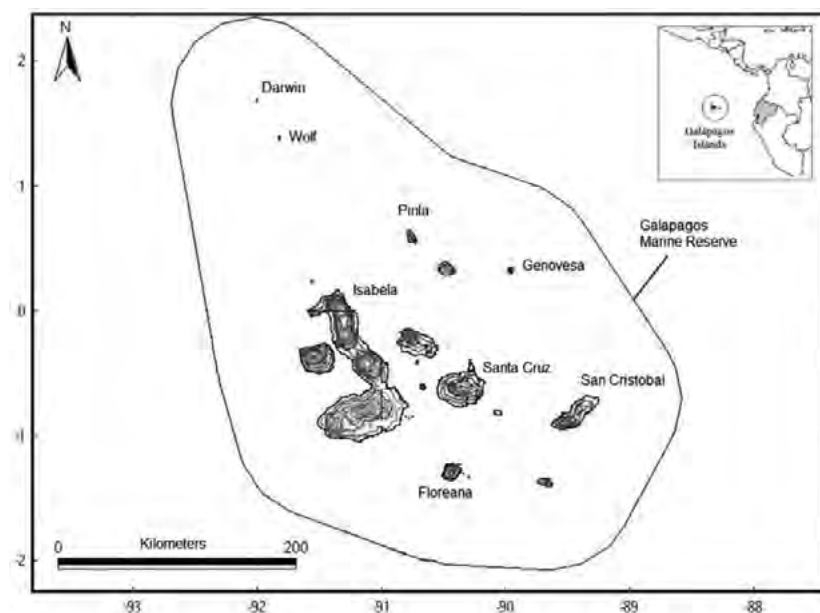


Fig. 1: The Galapagos Marine Reserve.

Map: Páez-Rosas et al. 2018

Economic Zone (EEZ). Many of these vessels used illegal methods, including marine radar evasion and industrial fishing techniques, to evade detection and deplete nearby fish populations. In 2022, a Global Fishing Watch report revealed that 615 industrial-scale vessels, 95% of them from China, fished in the high seas near The Galápagos, some of them exhibiting irregularities in tracking data, indicating potential illegal activity.

The massive Chinese distant-water fishing fleet continues to operate near the Galapagos EEZ. Oceana's analysis of fishing vessel activities between January 2021, and August 2023, found that 510 Chinese-flagged fishing vessels, making up nearly 75% of the fleet in the area, appeared to fish within 200 nautical miles of the Galápagos border. These vessels had 53 instances of going dark for nearly 27,000 hours and nearly all had potential transshipment events. One squid jigger stayed at sea for almost two years with 25 potential encounters. Most vessels (94%) were squid jiggers, accounting for 134,000 hours of fishing, nearly 69% of China's distant-water squid fishing fleet.

While not technically illegal if the vessels remain outside the EEZ, their presence raises significant concerns about overfishing of migratory species, like sharks and tuna, that travel in and out of the protected site and the potential for illegal incursions, especially at night or during periods of relaxed monitoring. These large-scale fishing operations can also have high levels of by-catch, harming endangered species like sea turtles and marine mammals.

### Tourism and Its Impacts

While the Ecuadorian government has increased in 2024 the entrance fees for The Galapagos, to USD 30 for nationals and USD 200 for foreigners, the trend in tourist arrivals has not changed significantly. Total arrivals for the first half of 2024 show a 14% decrease compared to the same period in 2023, which registered an extraordinary influx after the post-pandemic reopening. However, when comparing the 2024 data to the same period in 2022, an increase of 9% is observed, indicating a positive trend in tourism reactivation. In contrast, arrivals of national tourists show significant growth of 34%, increasing from 45,000 tourists in 2019 to 60,000 in 2024. International tourism is expected to recover to pre-pandemic levels in 2024, with an estimated growth of 2% compared to 2019, subject to recovery in Asia and the current economic and geopolitical situation.

### Pollution

In 2024, the Galápagos Islands faced significant challenges related to pollution, particularly concerning plastic waste, impacting the unique biodiversity of the archipelago. Plastic pollution is a growing threat to the Galápagos archipelago. Marine plastics are becoming an increasingly serious issue for endemic spe-

cies. A study by the Darwin Foundation analyzed 1,442 plastic samples from various locations across the islands, revealing the presence of 11,267 individual organisms, 25% of which were found colonizing the plastic debris.

A 2024 report revealed that over the past five years, more than 95% of coastal plastic pollution in the Galápagos originates outside the Galápagos Marine Reserve. The primary sources are continental Central and South America, as well as international fishing fleets. Oceanic currents transport plastic waste from these regions to the Galápagos, with significant contributions from Peru, Ecuador, and foreign vessels.

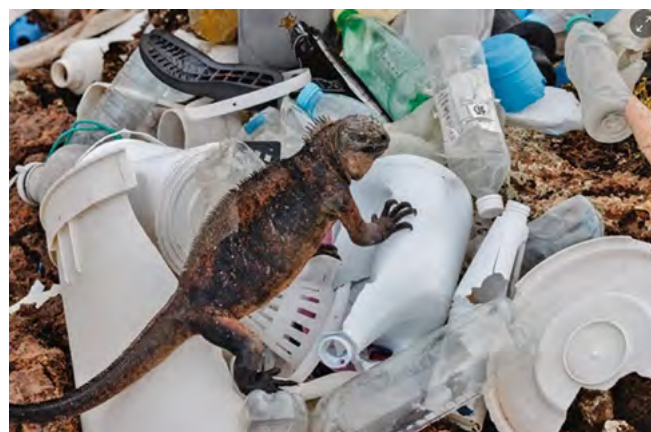


Fig. 3: A marine iguana rests on a mound of plastic litter on a reef, in Santa Cruz, in the Galápagos islands.

Photo: Joshua Vela Fonseca / The Guardian

At least 52 species in the Galápagos have been impacted by plastic pollution, including iconic species like the Galápagos giant tortoise and marine iguana. Microplastics are prevalent in the environment, with high concentrations found in seawater, sediments, and on beaches. In response, extensive clean-up efforts have removed over 80 tonnes of plastic waste from the islands' beaches since 2017. However, the cost of managing and cleaning up plastic waste remains substantial, with annual expenses estimated at over \$1.5 million.

### Other considerations

A record-breaking debt-for-nature swap deal to protect the Galapagos Islands is facing scrutiny over its transparency. Concerns include a lack of clarity on how the funds will be used and who will benefit. The 2024 deal involves China forgiving \$8.6 billion of Ecuador's debt in exchange for the South American country committing to environmental conservation efforts in the Galapagos. However, critics argue that details about the specific projects and their beneficiaries are missing, raising concerns about accountability and potential misuse of funds.

On March 3, 2024, the La Cumbre volcano on Fernandina Island in the Galápagos erupted. A large fissure opened at the southern summit of the shield volcano, sending fast-moving lava streams cascading down its steep slopes toward the coast. The eruption poses a significant threat to endemic species such

as marine iguanas, flightless cormorants, and Galápagos penguins. Additionally, the lava may jeopardize the endangered Fernandina giant tortoise, once thought to be extinct. Efforts are underway to locate more of these tortoises, following the discovery of a single survivor in 2019, named “Fernanda.” Fernanda has been living at the Charles Darwin Station’s breeding center since her discovery. Unfortunately, a 2022 expedition yielded only traces of droppings, and no additional tortoises were found. A new search mission is scheduled for this year.

Invasive species pose another significant threat to the Galápagos Islands, endangering the unique species that make the islands famous. At least 1,579 alien species have been recorded in the Galápagos, 1,476 of which have successfully established themselves. These invasions jeopardize the islands’ ecological balance, particularly the endemic species that contribute to the Site’s OUVs. In 2023, the islands faced a new biosecurity threat when avian flu (H5N1) was confirmed among seabirds, with three deaths recorded in September. The potential spread of the virus to other species, such as the iconic Galápagos finches, raises concerns about the vulnerability of small populations to diseases that could drive them to extinction.

The Galápagos Islands are also currently facing a severe drought that is significantly impacting farming and threatening the archipelago’s unique biodiversity. It is also endangering the habitats of many endemic species. The full extent of the drought’s impact on species such as Darwin’s finches and iconic giant tortoises requires further investigation.

## Conclusion

The Galápagos Islands face numerous threats that jeopardize their status as a World Heritage site. Considering these ongoing concerns regarding tourism, IUU fishing, invasive species, droughts, and pollution, the World Heritage Committee must consider re-listing the property as “World Heritage in Danger.” Such a designation would highlight the severity of the challenges and prioritize efforts to safeguard the islands’ unique biodiversity. The Committee must also call on China to collaborate with Ecuador in addressing illegal fishing practices and their impacts on this globally significant ecosystem.

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# The Pantanal Crisis: Time for an 'In Danger' Designation

Alejandro Olivera, Center for Biological Diversity

The Pantanal Conservation Area [hereafter “the Pantanal”], the world's largest tropical wetland, is under severe threat from human-caused fires and climate-change-driven droughts, leading to significant ecological and cultural impacts. In 2023, the World Heritage Centre noted<sup>1</sup> the natural role of fire in the ecosystem but emphasized the unprecedented scale of the 2020 fires, which burned 26% of the biome, threatening its Outstanding Universal Value (OUV). The Committee urged Brazil (Decision 45 COM 7B.1) to enhance fire management and assess damage to the Pantanal's OUV. Despite these measures, the region suffered its worst drought in 70 years in 2024,<sup>2</sup> worsened by climate change and El Niño.<sup>3,4</sup> Now, the Pantanal is once again in crisis from continued drought and new wildfires. This situation could be even more devastating than the one experienced four years ago.<sup>5</sup> Without immediate and sustained efforts, the Pantanal faces an uncertain future, with potentially irreversible damage to its environment and the species that depend on it.<sup>6</sup>

## Drought

The 2024, drought led record-low water levels, significantly impacting the ecosystem and local communities.<sup>7</sup> In October 2024, rivers in the Amazon basin reached record-low levels due to a severe drought affecting vast regions of South America. Months of reduced rainfall have intensified fires, parched crops, disrupted transportation networks, and interrupted hydroelectric power generation across Brazil, Bolivia, Colombia, Ecuador, Peru, and Venezuela.<sup>8</sup>

On October 4, 2024, river gauge data from the Brazilian Geologic Service revealed that the Solimões River had dropped to 254 centimeters below the gauge's zero mark, setting a record low (Fig. 1). On the same day, rivers near the cities of Porto Velho, Jirau-Justante, Fonte Boa, Itapéua, Manacapuru, Rio Acre, Beruri, and Humaitá also reached record lows. Additionally, water height data collected by satellite altimeters and analyzed by NASA scientists indicated unusually low levels at several Brazilian lakes and reservoirs, including Lake Tefe, Lake Mamia, Lake Mamori, Lake Ariaú, Lake Faro, and Lake Erepecu.<sup>9</sup>

The drought is partly due to the lingering effects of El Niño, a climate pattern that persisted through the latter half of 2023



Fig. 1: This pair of Landsat images illustrates the shrinking Solimões River near Tabatinga, a Brazilian city in western Amazonas near the border with Peru and Colombia. The image on the right was captured by the Operational Land Imager-2 (OLI-2) on September 21, 2024. The other image (left) shows the same area on September 21, 2021, when water levels were closer to normal.

and the first half of 2024. This phenomenon, characterized by an unusually warm layer of water in the equatorial Pacific, typically alters rainfall patterns, reducing precipitation in the Amazon, especially during the dry season months of July, August, and September. Brazil's National Center for Monitoring and Early Warning of Natural Disasters (CEMADEN) also noted that an area of unusual warmth in the North Atlantic may have influenced rainfall patterns and contributed to the drought.<sup>10</sup>

More recently, at an October 2024 meeting organized by Brazil's National Center for Monitoring and Alerts of Natural Disasters (Cemaden), a research unit of the Ministry of Science, Technology and Innovation (MCTI), it was stated that the quarterly forecast indicates a worsening drought trend (below-average rainfall or absence of rain) affecting several regions of Brazil. The most impacted areas are the Amazon, Pantanal, and Midwest regions, where river basins are experiencing record low levels.<sup>11</sup>

## Burned Area

In part due to the drought, wildfires intensified in 2024, with the number of fires increasing by 1,500% in the first half of the year compared to the same period in 2023.<sup>12</sup> These fires have devastated vast areas of the wetland, threatening its biodiversity and ecological balance.<sup>13</sup>

NASA has reported intense fires burning across several South American countries blanketed large areas with smoke throughout August and early September 2024. In Brazil and Bolivia, fire activity reached levels not seen since 2010, driven by a prolonged drought. From approximately 1 million miles (1.6 million kilometers) away, NASA’s EPIC (Earth Polychromatic Imaging Camera) on the DSCOVR (Deep Space Climate Observatory) satellite captured this view of smoke billowing from the blazes on September 3, 2024 (Fig. 2).<sup>14</sup>



Fig. 2: Intense fires burning in several South American countries draped large swaths of smoke across the continent throughout August and early September 2024. Picture was 1 million miles (1.6 million kilometers) away. In Brazil and Bolivia, fire activity reached levels not seen since 2010 as a prolonged drought parched landscapes in both countries. Image taken from NASA.

The Pantanal region has been particularly devastated. Early and intense fires began spreading across the wetlands in late May and persist now. According to Brazil’s National Institute for Space Research (INPE), June 2024 saw a record number of fire detections in the biome, and the fires have continued to burn at high levels since then.<sup>15</sup> According to data from the Environmental Satellite Applications Laboratory of the Federal University of Rio de Janeiro (Lasa-UFRJ)<sup>16</sup> from January 1 to November 14, 2024, an estimated 3.1 million hectares have burned in the Pantanal, accounting for 21% of the wetland’s total area,<sup>17</sup>

setting the second worst fire year recorded for the Pantanal (Fig. 3).

### Wildlife Mortality

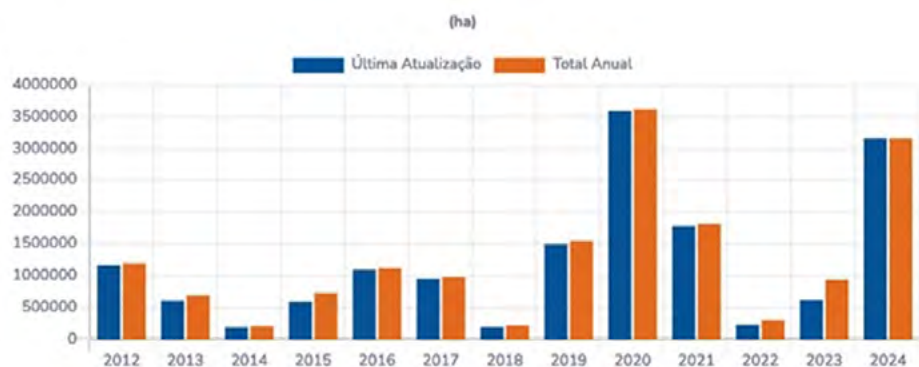
Wildlife is once again paying a heavy price as catastrophic fires erupt in the Pantanal.<sup>18</sup> Between June 28 and September 3, 2024, Brazil’s Ministry of Environment reported that 601 animals<sup>19</sup> have already been rescued from flames in the Pantanal, with photos showing jaguars and giant anteaters suffering severe burns (Fig. 4). However, there is a fear that the toll could surpass that of the fires that devastated the region in 2020, which killed approximately 17 million animals and burned nearly one-third of the Pantanal in Brazil.<sup>20</sup>



Fig. 4: Evidence of animals affected by fires in the Pantanal. Photo: Diego Baravelli /GRAD

The flames have even caught jaguars, animals typically agile enough to escape most dangers. Since the fires began, three jaguars have been found dead, while four others have been rescued and treated for burns, according to conservationists in the region.<sup>21</sup>

Fig. 3: Surface (ha) burned in the Brazilian Pantanal. The 2024 bars include near-real-time alerts and therefore have a margin of error of around 10%. 2024 is updated to November 14, 2024. Source: Federal University of Rio de Janeiro



Jaguars are listed as vulnerable in Brazil, which is home to about half of the world's jaguar population. This year, yet again, the fires have reached the Encontro das Águas State Park, a reserve that hosts the world's highest density of jaguars (four to eight animals per 40 square miles). According to Lasa-UFRJ, about one one-third of the park has burned to date, and experts fear that the death toll for jaguars and many other animals may rise.<sup>22</sup>

### Human Loss: Fires on Indigenous Lands and Protected Areas

The rising frequency of fires poses a grave threat to the world's largest tropical wetland, endangering its wildlife, the livelihoods, and the culture of the people who live there. While the Pantanal fires primarily ravage the ecosystem, their impact on humans is significant, though often less directly documented than wildlife casualties. In August, for instance, Edson Genovez, a 32-year-old farm worker, sustained burns on 90% of his body while attempting to control the flames on the farm where he worked in the Pantanal. Tragically, he passed away a few days later.<sup>23</sup>

The impacts of the fires do not recognize borders, affecting equally protected areas and indigenous territories within the largest tropical wetland in the world.

In the northern Pantanal, for example, it is estimated that 96% of the Taiamã Ecological Station<sup>24</sup> will have been burned by fires by the end of 2024. Created to promote the development of scientific activities related to conservation, this conservation

unit is in an area that is home to one of the greatest diversities of fauna in the world. Meanwhile, the Kadiwéu indigenous land,<sup>25</sup> the largest in the Pantanal, and the Perigara indigenous land burnt, respectively, more than 87% and 78% of their area this year.<sup>26</sup>

### Deforestation

In addition to extreme droughts, the Pantanal continues to be severely threatened by deforestation due to intensified agricultural activities. In the surrounding Cerrado, deforestation is driven by monoculture expansion (soy, corn, cotton, eucalyptus), while in the floodplain, it is linked to cattle ranching and infrastructure expansion.

According to MapBiomas' 2023 Annual Deforestation Report,<sup>27</sup> the Pantanal had the largest average area of deforestation events among all biomes, with a 59.2% increase from 2022. A total of 49,673 hectares of native vegetation were cleared, with the highest average deforestation rate for the third consecutive year. Forest and savanna formations made up 73% of the deforestation, with nearly all occurring in private areas.

The municipality of Corumbá encompasses 60% of the Pantanal and accounted for half of the deforestation in the biome last year, mainly due to agriculture (Fig. 5). It was also the fifth highest deforesting municipality in Brazil in 2023. Over half (52%) of the deforestation in Mato Grosso do Sul occurred in the Pantanal, which represents less than a third of the state's territory.<sup>28</sup>

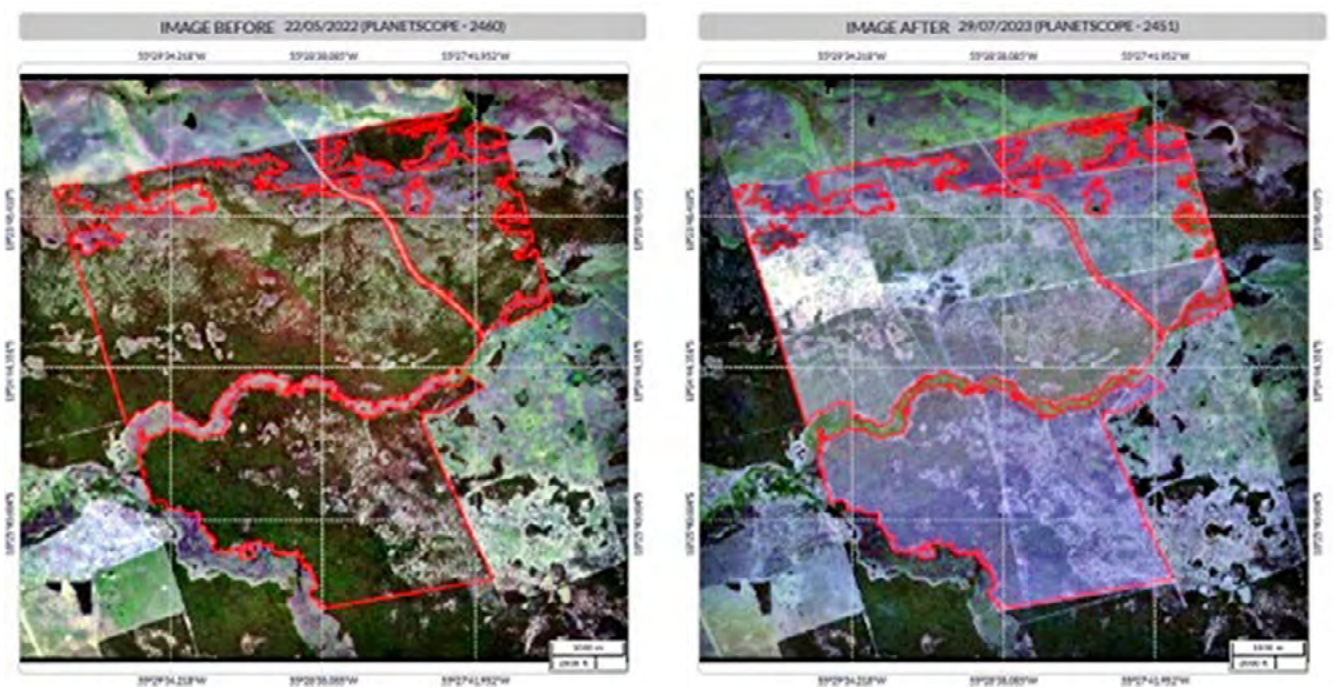


Fig. 5: Deforestation in the Pantanal Due to Agriculture. The left image was taken on May 22, 2022, and the right image on July 29, 2023.

Source: MapBiomas. 2023 Annual Deforestation Report. <https://plataforma.alerta.mapbiomas.org/alerta/934272>

## The Pantanal may disappear

In July, when an estimated 1.5 million hectares had already been burned in the Pantanal this year, Brazil's Minister of Agriculture and Livestock, Carlos Fávaro, warned that the country would lose the Pantanal if steps were not taken to restore the biome.<sup>29</sup> More recently, in September, Environment Minister Marina Silva backed the warning. She said Brazil could lose the Pantanal by the end of the century if environmental trends such as low rainfall and drought are not reversed.<sup>30</sup>

Brazil is drying up, and the country has lost 15% of its surface water. According to MapBiomas, among all the Brazilian biomes, the Pantanal is the biome that has dried the most. The annual water surface (at least 6 months with water) in 2023 was 382 thousand hectares – 61% below the historical average. There was a reduction in the flooded area and the time the water remained. Last year, only 2.6% of the biome was covered by water.<sup>31</sup> This alarming rate of degradation threatens its existence, risking the loss of its status as the largest tropical wetland on Earth and its vital role in sequestering large amounts of carbon, which has significant implications for humanity.

## Request

The Pantanal urgently demands the adoption of measures to stop the destruction it is undergoing, largely caused by climate and land-use change, exacerbated by human action. The World Heritage Convention cannot fulfill its objectives if the ecosystems it aims to protect are severely damaged. Therefore, we urgently request that the Committee, the World Heritage Centre, and IUCN take the following actions:

- Propose a Reactive Monitoring Mission, in coordination with any similar mission under the Ramsar Convention, to visit the property, assess the nature and extent of the threats, and recommend measures to mitigate the risks to the conservation of the Pantanal.
- Urge the State of Brazil to adhere to its obligations under the Convention and implement policies and regulations to address the threats facing the Pantanal site.
- To propose the Property to be included in the List of World Heritage in Danger.

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# State Party Plans and Committee Delays Impact the Integrity of Mosi-oa-Tunya / Victoria Falls

Anonymous author

For the fourth year in a row we have to highlight a complete lack of action in addressing unsuitable tourism developments which have been constructed, and continue to be planned, within the southern (Zimbabwean) side of the Victoria Falls/Mosi-oa-Tunya World Heritage Site Highly Ecologically Sensitive Zone (HESZ), or 'red/no new construction zone', as defined in the UNESCO-agreed Joint Management Integrated Plan (JIMP). This area has been part of the intensively protected environment of the Falls since the early 1900s. It should therefore be a significant embarrassment to all involved that these new developments have occurred while the site is supposedly protected under the guardianship of the World Heritage Listing.

Despite our highlighting of the construction of the Baines Restaurant during 2022, and our identification of the site as within the HESZ – while the Zimbabwe National Parks Authority and the developer themselves made the false claim that the site was outside of the HESZ – nothing was done to prevent the construction and opening of this Restaurant in mid-2023, and it continues to operate to this day. Several other developments also continue to threaten the Site, none of which were disclosed in the 2024 State of Conservation Report submitted by the joint State Parties (World Heritage Watch Report, 2024).

This lack of action follows the controversial development of the Mosi-oa-Tunya Resort on the northern, Zambian, side of the Site during 2020–2 and which resulted in a Reactive Monitoring Mission to the Site in early 2022 and highly critical report (World Heritage Committee, 2023). The development has been open and operating as the Radisson Blu Mosi-oa-Tunya Resort since December 2022, while the Committee continue to attempt to catch-up by requesting redress on many issues of concern relating to the development (and which State Parties continue to appear to ignore). This pattern of unsuitable tourism developments within and surrounding the Site is nothing new, with the State Parties repeatedly failing to notify the Committee of new devel-

opments since the Site's inscription (Keep Victoria Falls Wild, 2023; 2024).

Meanwhile a group of local residents continue to attempt to bring legal clarity to the boundary of the World Heritage Site HESZ, at great personal and financial cost. Their case has been continually delayed through the courts and two years later still awaits conclusion, while those involved have been intimidated and threatened.

## New Park Plan Confirms 'Red Zone' (July 2024)

A new ten-year Zambezi/Victoria Falls National Park General Management Plan (2024-2034) was approved by the Zimbabwe Government in April 2024 (ZPWMA, April 2024; Victoria Falls Bits and Blogs, June 2024). The Plan presents a new map showing the WHS boundary and management zonation. The

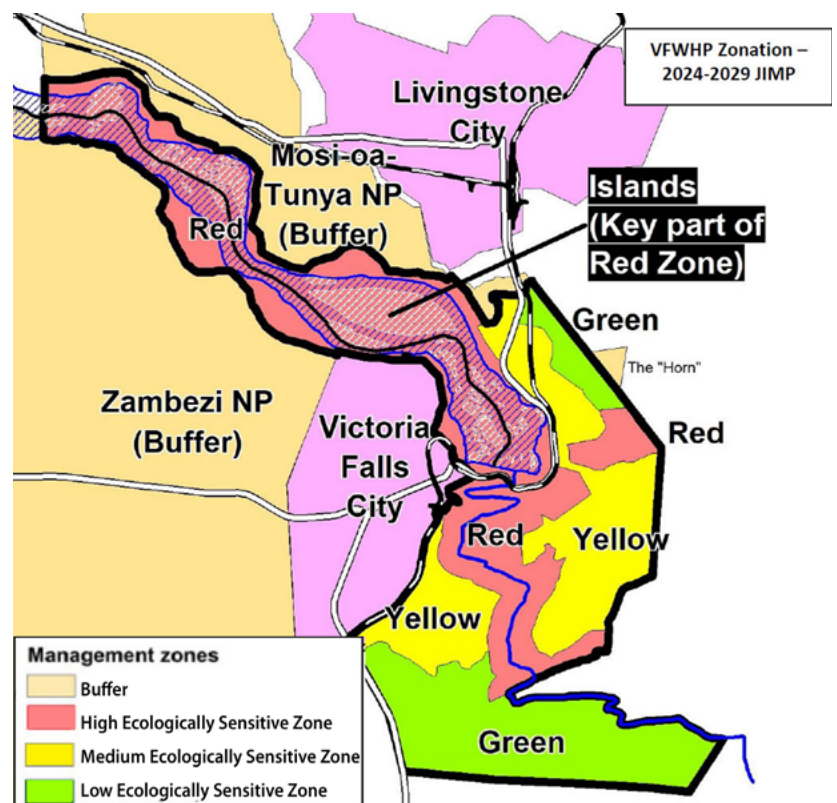


Fig. 1: Management zones for Victoria Falls World Heritage Site.

Map: ZPWMA, 2024, p.22)

map confirms the upstream riverside fringe as being within the HESZ, in line with the previously agreed JIMP documents.

Now that all parties agree that the area of the Baines development is in fact within the HESZ 'no new development' zone, it leaves the obvious question as to what is to be done about the recent construction of the Baines Riverside Restaurant (opened in mid-2023) and associated Zambezi Drive 'Rock Pool' bar (also established during 2023), both located along the riverine fringe immediately upstream the Falls, and the proposed Riverside Tree Lodge and Kandahar Camp developments (located in the upstream section of the WHS) where concession agreements have been again been approved by Parks in areas supposedly protected under the HESZ. As these development concessions have been awarded in contravention of the agreed protections for the Site we believe the lease agreements must be immediately terminated, all trace of recent developments removed and the areas returned to their previous natural state. Anything short of this will be a mockery of National Park regulations, legal protections and World Heritage Site status.

It also raises question marks over longer standing developments within the HESZ, including the Victoria Falls River Lodge and Old Drift Lodge (opened in 2012 and 2018 respectively), both of which were constructed within the Zambezi National Park since this area was first identified as being within the WHS HESZ in the 2007 JIMP. The Victoria Falls River Lodge in particular has seen extensive subsequent expansion. These developments need to be reviewed against their original EIA approvals and concession agreements immediately terminated if they are found to have exceeded or breached these terms. No further expansion or development should be allowed, current lease periods should not be renewed and the areas affected returned to their previously natural state.

There is also the issue of the recent redevelopment of the upstream National Park Riverside Lodges and expanded Wild Horizons Lookout Cafe, again within what is now confirmed as the HESZ, apparently in breach of Park Regulation preventing construction in permanent materials (brick and cement).

### New Council Plan

In October 2024, following stakeholder consultations held in April (VFCC, April 2024), Victoria Falls City Council (VFCC) released details of the proposed new development 'masterplan' for the future expansion and growth of the urban settlement (VFBnB, December 2024). In November the Draft Plan and supporting documents and maps were made available to download online on the Council's website (VFCC, November 2024).

The Draft Plan presents maps proposing to significantly expand the area controlled under the Council from just 22 square km to over 244 square km. The proposal identifies some 12 square km of land currently protected within the Zambezi National



Fig. 2: Proposed expanded Victoria Falls City Council controlled area.

Map: Amended from VFCC, 2024, p.14

Park (ZNP) to be de-gazetted and transferred to the Council for development to allow the future expansion of the town to the west along the Kazungula road corridor. The maps apparently also indicate Council ambitions to control the entire area of the Victoria Falls National Park (VFNP), which is included within the proposed extended Council controlled area, presumably also to be degazetted, with obvious and direct implications for the future management of the World Heritage Site. Despite the Council and National Park management planning processes taking place over the same period, there appears to have been no joint consultation on the plans.

It should be noted that due to previously announced Government plans to develop the Masuwe 'Special Economic Zone,' including an international standard 10,000-seat cricket stadium, four-star hotel with 5,000 seat conference facility, medical facilities, a golf estate and a shopping mall effectively prevent the growth of the town southwards along the Victoria Falls road and rail corridor (VFBnB, May 2024). The Masuwe development also has potential impacts on the southern section of the World Heritage Site, from which it is separated by the road and rail transport corridor, especially in relation to impacts on the Masuwe river which flows through the Site.

The Masuwe SEZ needs to be reviewed within the context of the VFCC and National Park Plans, and consideration given to the obvious alternative of allowing the future expansion and growth of the city southwards along the Victoria Falls-Bula-

wayo road and rail transport corridor, instead of the proposed annexation of a significant area of the Zambezi National Park and expansion along the Kazungula road corridor.

### Batoka Gorge Hydro-electric Scheme

The proposed Batoka Gorge HES presents a significant risk to the unique ecology of the gorge downstream of the Falls. At the 45th Session the State Parties successfully lobbied for the terms of reference for the EIA review to be presented to UNESCO be amended to only consider the geological impacts of the development (UNESCO, 2023).

We believe insufficient biological surveying has been conducted of the gorges downstream of the Falls and that in particular this section of the river is of significant ecological interest due to the species divergence of several small fish (Southern Waters, 2019). The study of these species offers a unique key to understanding the historical development of the Falls and ancient palaeo-evolutionary history of the Zambezi river (Moore, Cotterill and Eckardt, 2012; Key, Cotterill and Moore, 2015). This is an ongoing field of research which will be totally lost through the ecological impacts of the HES project, with significant impacts on our unfolding understanding of its geological history. Any review of the Batoka Gorge HES therefore needs to include ecological aspects as an essential element and function of its geological history.

### Katombora Barrage

The resurrection of the Batoka Gorge HES also raises the spectre of the upstream Katombora Barrage project, 60 km upstream of Victoria Falls (IUCN, 1996). The scheme, which is not itself energy generating, will create a reservoir with a proposed surface area of 7,733 km<sup>2</sup> at a full supply level of 940 meters and a live storage of six km<sup>3</sup> and is aimed at regulating the flow of water downstream and through the Batoka and subsequent Hydro-electric schemes (The World Bank, 2010). The scheme will have a significant impact on the annual variation in flow over the Falls, decreasing peak season flow and increasing flow during low-water periods. For this reason the scheme is likely to be seen as welcome by the State Parties and tourism sector in extending the currently limited tourism season at the Falls.

It is essential that full disclosure of the impacts of this project are considered as part of any review of the Batoka scheme.

### New ZimPark's Director-General (Zimbabwe)

In January 2025 Professor Edson Gandiwa was announced as the new Director-General of the Zimbabwe National Parks and Wildlife Authority.

### Summary

The threats to the Victoria Falls World Heritage Site, from tourism development pressures to large scale river management

schemes, are increasing. Urgent action is needed by the World Heritage Committee if the integrity of this Site is to be saved for future generations.

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# An Incinerator on a World Heritage Site?

Anne A. Collier Morriss

The Jurassic coast is breathtakingly beautiful. It offers an abundance of beautiful natural attractions, beaches, idyllic coves and dramatic rock formations and landslides are constantly changing the coastline and landscape.

“The Dorset and East Devon Coast has an outstanding combination of globally significant geological and geomorphological features, comprising eight sections along 155 km of largely undeveloped coast. The property’s geology displays approximately 185 million years of the Earth’s history, including a number of internationally important fossil localities. The property also contains a range of outstanding examples of coastal geomorphological features, landforms and processes, and is renowned for its contribution to earth science investigations for over 300 years, helping to foster major contributions to many aspects of geology, palaeontology and geomorphology. This coast is considered by geologists and geomorphologists to be one of the most significant teaching and research sites in the world.” “The cliff exposures along the Dorset and East Devon coast provide an almost continuous sequence of rock formations spanning the Mesozoic Era, or some 185 million years of the earth’s history. The area’s important fossil sites and classic coastal geomorphologic features have contributed to the study of earth sciences for over 300 years.” (Statement of Outstanding Universal Value, <https://whc.unesco.org/en/list/1029>)

The Jurassic Coast stretches about 96 miles (155 km) from Exmouth in East Devon to Studland Bay in Dorset and covers 185 million years of world history, from Trias to Jurassic and the cretaceous period. It was the first region in England to be classified as an area of outstanding natural beauty and was inscribed on the UNESCO World Heritage List in December 2001.

## The Proposed Portland Incinerator

A company called Powerfuel Portland Ltd. was formed in 2019 by two brothers, the Langhams, neither of whom are local to Weymouth nor Portland, for the purpose of building a huge “ERF”, otherwise known as a waste incinerator, on the north-east coast of the Isle of Portland. The chosen site is on land owned by Portland Port, which is also owned by the Langhams, who are those pushing for this scheme. About 2.3 hectares in size, it is situated right by the sea on Balaclava Bay. To the West,

it borders directly onto the steep slope of the Verne Citadel and onto land designated internationally, nationally and locally as being of special ecological importance. The removal of so much ancient stone anchored directly into the seabed would cause irreparable damage and add to continuing climate change on and around the isle, all along the Jurassic coast.

The facility itself is enormous, 201 m long, 54 m wide, 47 m high, with a stack of 90 m high and 250 m plume (average). It will vent not only directly onto rare and precious limestone grasslands, the heavy metals exiting the chimney and other polluting substances would also do serious damage to the important and unique rock formations along the coastline.



Fig. 1: Aerial view of the Isle of Portland with a computer animation of the planned incinerator and a moored cruise ship. Photo ©: Anne A. Collier Morriss

The Isle of Portland itself is a dead end, far removed from any waste treatment centres, the nearest of which is at Wimborne. Portland can only be reached by a single road across a causeway which runs through further areas of great ecological importance for flora, fauna and geological features, including Portland Harbour, itself a Sensitive Marine Area. This road is prone to flooding during rainy seasons, which means emergency vehicles would not be able to reach the plant in case of fire or other potential disasters. There is also no plan in place for the safe removal of waste and ash; these would both need to be very carefully dealt with to avoid them ending up in the water and the waste ending up along the miles-long long shoreline. The plans also do not state there would be a system in place to monitor the burner, 24 hours a day, seven days a week.

There is also no statement about contingency plans in case of fire or other disasters. According to the (UK) National Fire Chiefs Council, there are over 300 incinerator fires a year in England (Scotland and Wales will no longer allow incinerators to be built), causing tremendous amounts of pollution. A critical feature of the chosen site is its position in the lee of a steep hill, which would make this the only incinerator in the world backed by solid rock, causing further issues with the stack's polluting smoke "bouncing" off that rock. This means that the emissions from the chimney stack, as well as the stack itself, will exit at 90 metres above sea level and will be visible for many miles around the Jurassic Coast, spoiling many Jurassic Coast views.

Portland's unique weather conditions, location and being completely surrounded by the sea mean eddying and turbulence caused by the steep cliffs of the Isle will result in conditions that are not discussed by the model predictions claimed by this "company." Because records are kept regarding the capture of smoke coming out of the stacks of cruise ships that visit this coast, this phenomenon is well documented. All of the pollutants that would be produced by an incinerator are extremely damaging to the environment, to include the coastal beds that house precious fossils and other geological features. Portland is also prone to extreme flooding, which impacts the ability to get on and off the isle and carries with it debris that pollutes and impedes access to large parts of the WHS.

Meanwhile, the two companies which propose to fund the building of an incinerator on Portland are not British, they are Japanese and Dutch, which means they are not going to be local to iron out the issues, and there is no word of just who would run such a big facility which requires specialist knowledge of how they work. There has also been no mention of where the workers necessary to run such an incinerator are going to be found. "The development location means the stack in particular (and the continuous plume), will be widely visible in the landscape, and might in the future deter visitors to Portland due to a less natural visual offer, perceived reduction in air quality and/or traffic-related impacts, such as increased congestion." Dorset Wildlife Trust

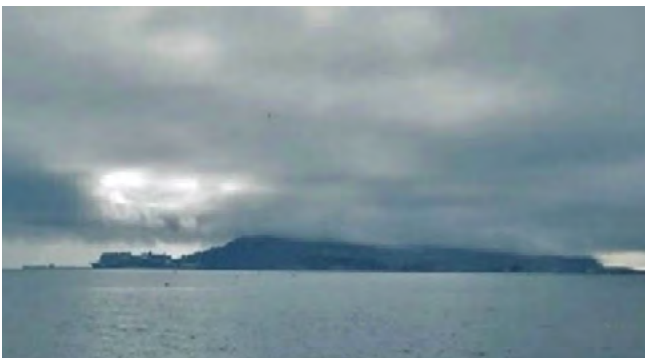


Fig. 2: The Isle of Portland is often enshrouded for days by low-hanging clouds which prevent polluting and hazardous smoke stacks from escaping. Photo: unknown

There is no stated source for the enormous amounts of waste needed to make fuel, and the company insists there be no restrictions on those sources, they can come from anywhere in the world, meaning incredible pollution just to bring the waste to the coast. The entire Jurassic Coast does not produce enough waste to run one plant, which means there would have to be hundreds of huge trucks seven days a week, all year long, going to and from with something that is referred to as "world waste" meaning much more pollution going into the unique geology, doing irreparable damage to these natural structures.

All of this will impact climate change, which in turn will impact the geology of the Jurassic Coast, not just Portland. Many thousands of tourists flock to this part of the WHS every year, but with the pollution in the water and the issues with access because of an industrial site of this magnitude being so obvious and so dirty, that is likely to be impacted, meaning a loss of visitors seeing this magnificent site and a loss to the community of over £209 million (US\$ 250,8 million) per year, some of which goes to climate change projects like the Jurassic Coast's Studland Bay project that has saved the sea horse population found there.

### What about pollutants in the chimney emissions?

Some of the pollutants in the emissions would need to be kept within the levels set out in the EU Industrial Emissions Directive (adopted into UK regulations). These levels have been agreed as industrially 'acceptable' but are in no way without harms to ecological health. Typically, levels of acid gas emissions and micro-particle emissions from waste incinerators are high; these include but are not limited to chromium, cadmium and mercury. In addition, the proposed plant would emit about 577 tonnes of carbon dioxide every day. This all adds up to incinerators producing climate changing airborne and water borne heavy metals and other pollutants. The fumes emitted from the stack would be a visual disturbance for miles around, and the metals can do great damage to the geological formations of the Jurassic Coastline.

### The Fleet Lagoon

Behind Chesil Beach lies a large saline lake known as the Fleet Lagoon, one of the few remaining undisturbed brackish lagoons left in the world. The lagoon is home to the mute swan colony at Abbotsbury, the only place in the world where it is possible to walk through a nesting colony, and one of Dorset's most popular tourist attractions for its natural and dramatic views. Designated a Site of Special Scientific Interest (SSSI), the Fleet Lagoon is also an important natural wildlife habitat for many species and an excellent spot to see little egrets, brent geese and common greenshanks. This Chesil-based lagoon has a very delicate ecosystem; more pollution, more heavy metals, coming from an incinerator and heavy industrial traffic would

mean the end of its health and endanger the border of the wall of stone along its length.

### What is the business model for such a plant?

Waste incineration plants are highly profitable. Waste authorities pay high fees to have their refuse removed, and the electricity thus generated is usually sold to the National Grid, generating further income (though the Powerfuel incinerator is supposedly aimed more at providing shore power to moored ships, but that is simply an “idea”). Metals extracted in the process are also sold, as is the ‘Incinerator Bottom Ash,’ but this process is very dirty and difficult to control as far as what ends up in the atmosphere. Occasionally, the plant can also sell heat it produces but often this is too difficult. The underground pipes to carry the heat to recipients would be particularly difficult to install successfully around the site Powerfuel has chosen. Who exactly would buy the heat is unsure, especially if the cruise companies realize their ships would have to dock where the incinerator would be built. The most recent information is that Powerfuel has identified no customer for the heat their plant would produce.

### The Climate Issue

The UK has adopted the International Framework Convention on Climate Change and the Paris Agreement which are international law as much as the World Heritage Convention is. The WH Convention requires the governments of members do “all they can,” in order to protect their WH Sites. Incinerators con-



Fig. 3: View of the Abbotsbury Fleet Lagoon, separated from the ocean by the Chesil beach. The Isle of Portland is in the background.  
Photo: Anne A. Collier Morris

tribute to climate change by sending out enormous amounts of CO<sub>2</sub> into the atmosphere, thereby boosting climate change and with its detrimental effect on the World Heritage Site, not only does that go against the Paris Agreement, but it also is a direct attack on the WH Site.

The emissions from the waste incinerator are bad for the climate, which is bad for World Heritage sites. Specifically, this incinerator and the road congestion caused by various activities it requires to take in the waste it would burn, then turning that around and going off of Portland to remove the ash created, means greater amounts of pollution in the form of heavy metals and other particulates much of which would go into the air and fall into the sea and onto the land, meaning the long stone covered beach known as Chesil Beach, a world famous part of this World Heritage Site would be under threat from those pollutants. Those stones are a unique feature to this site but are not immune from harm via chemicals and other waste, nor are the other stone features found all along the coast immune.

# The Wadden Sea at Risk: Destructive Extractivism under a UNESCO World Heritage Site

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The Wadden Sea World Heritage is suffering from unprecedented levels of infrastructure development and exploitation for large-scale energy projects, salt and sediment extraction in addition to existing pressures from e.g. shipping, fishing and pollution. The demand for fossil oil and gas is a key driver for this dramatic increase in project development.

The three countries responsible for the protection of the Wadden Sea repeatedly state that they are avoiding negative impacts on a World Heritage Site (WHS) or its Outstanding Universal Value (OUV). However, neither the German nor the Dutch EIA laws require an assessment of the impact of industrial activities, even though they are urgently needed. Serious and irreversible damage may occur, which is why mining activities in or near the property should be phased out as soon as possible. Any seabed subsidence in the Wadden Sea will increase the overall sediment deficit caused by sea-level rise. This is also the case if compensated by sedimentation: the sediment is lost from on a regional basis and would be lacking elsewhere in the Wadden Sea.

## United trilateral response by the environmental NGOs

A coalition of NGOs from Denmark, Germany and the Netherlands has been closely monitoring progress in the property. While we appreciate that the Parties jointly submitted a State of Conservation Report in February 2025, the NGOs had too



Fig. 1: Aerial view of the Mittelplate oil platform, inside the World Heritage Site.  
Photo: © Aufwind Luftbilder via Adobe Stock

little time to comment, and their input was largely ignored. In March 2025, NGOs therefore sent a joint letter of alert to the World Heritage Centre. The following projects and issues are of particular concern:

## Fossil Project “Mittelplate” (DE)

Harbour Energy currently operates the Mittelplate oil platform in a special fossil enclave in southern Schleswig-Holstein under a permit that runs until 2041 (see Fig. 2). We welcome the agreement between the regional government and the operator to withdraw its application for an expansion of oil production in May 2024,<sup>1</sup> but we criticise that it is not open to public scrutiny and that the platform can continue operating until 2041. The platform is more than 35 years old, increasing the risk of an accident. The consequences of an oil spill would be catastrophic for the ecosystem: Hundreds of thousands of waders and other water birds could be contaminated by the oil and



Fig. 2: Overview of current fossil fuel projects in the German and Dutch Wadden Sea.  
Map: Deutsche Umwelthilfe

lose their food source and livelihood in the Wadden Sea.<sup>2</sup> We call for a quick end of fossil fuel extraction in the property. The subsequent dismantling of the platform, though necessary, will be another massive intervention in the fragile ecosystem, on a scale like the original construction of the platform. Germany must ensure that the operator sets aside sufficient funds for the costly dismantling of the Mittelplate platform in a nature-compatible way.

### Fossil Project “GEMS” (NL-DE)

The Dutch company ONE-Dyas plans a massive industrial project northwest of the island of Borkum, consisting of the exploitation of multiple gas fields with multiple gas platforms. In April 2023, a court overturned the Dutch permission for the “GEMS” gas exploitation project (see Fig. 3). The case in the Netherlands is currently in the second instance. In August 2024, two years after One-Dyas submitted its application, the German mining authority (LBEG) approved the project. DUH and its partners have filed a lawsuit against this permit, which is still pending. The environmental impacts are severe and include the destruction of a reef adjacent to the WHS, continuous discharge of highly polluted production water, widespread subsidence of the seabed, increased risk of earthquakes with the threat of destruction of the freshwater lens under Borkum, disruption of fish migration and nitrogen emissions.<sup>3</sup>



Fig. 3: The Island of Borkum surrounded by the Wadden Sea World Heritage Site. Photo: © Gerckens via Adobe Stock

The construction noise exceeds the German legal noise limits and extends into the Borkum Riffgrund and Borkum Riff nature reserves. The noise can damage the hearing of harbour porpoises, prevent them from hunting and feeding, which can be fatal.<sup>4</sup> The platform’s accident probability of 1:10 is exceptionally high and has never been addressed by any authority of Germany or the Netherlands.<sup>5</sup> The World Heritage Committee decision of 2024 requests State Parties “that the project is not approved if it may cause negative impacts on the OUV of the property”.<sup>6</sup> In the latest State of Conservation Report, Germany simply repeats the mining authority’s assertion that “the licensing authority rules out any relevant adverse effects on the Wadden Sea National Park”, even though most of the environmental impacts that could affect the Wadden Sea, such as massive

noise pollution and chemical discharges into the sea, were not part of the German assessment.<sup>7</sup> The very short Dutch report also merely repeats the government’s assertion, even though the environmental impacts are still under judicial review.

### Fossil Project “Ternaard” (NL)

The fossil fuel company NAM is planning to extract gas near Ternaard in the Dutch Wadden Sea, with likely negative impacts not just including pollution and habitat loss, but also seabed subsidence, which is incompatible with actual sea level rise. We demand that the decision by the Dutch Parliament from 12.03.2024 to reform Dutch mining law to restrict mining activities (fossil gas, as well as salt) is implemented to stop the project going forward. While we welcome this decision by the Dutch parliament, we are concerned that the project may still go ahead, and call for a definitive cancellation.

At the end of 2024, the Dutch government announced its political ‘intention’ to prevent new fossil fuel extraction from ‘Ternaard’ and announced its strategy to achieve this by including it, along with other sensitive issues, in its negotiations with Shell and ExxonMobil (shareholders of NAM). A few days later, the government’s intentions were strongly backed by Parliament, which voted 95% in favour of stopping ‘Ternaard’. This support and the government’s intention were especially significant as they are based on the recognition that Wadden Sea is a UNESCO WHS as well as the independent Mining Inspectorate’s advice to the government that a new and additional fossil fuel mining project could not be considered ‘safe’ given the most recent scientific reports on sea level rise there. Until now, NGO’s have not been informed about the progress of the negotiations with Shell and ExxonMobil. This is a significant ‘U turn’ from the government’s intentions three years ago, motivated by the unique UNESCO World Heritage status and a large coalition of local communities, regional authorities and civil society over the past years.

### Fossil Projects: LNG-Terminals (DE, NL)

There are currently three sites in operation or under construction in the Wadden Sea or its estuaries for the import of fossil Liquefied Natural Gas (LNG): Eemshaven, Wilhelmshaven (2 Floating Storage and Regasification Units [FSRUs] & 1 planned onshore terminal) and Brunsbüttel (1 FSRU & 1 planned onshore terminal). These result in increased pollution from oils, NOx, SO2, particulate matter, and methane, as well as damage to fish stocks and disruption from increased shipping and construction. The FSRU in Wilhelmshaven uses chlorine to clean its seawater pipes, which is particularly damaging. Additionally, seawater is used to regasify the gas, which is then returned to the sea at a warmer temperature. This affects lower trophic species composition and fish behaviour. The extraction of seawater entrains fish and other organisms into the hull of the vessel, ultimately leading to their death. Not only has the Wadden

Sea ecosystem been damaged by the construction of the current FSRUs (deepening of harbour facilities, construction of jetties, prolonged noise-intensive pile driving, maintenance dredging and laying of pipelines), but their operation and the future onshore infrastructure will cause additional damage.<sup>8</sup>

### Selection of other harmful projects

- Renewable energy is critical to tackle the climate crisis, but the expansion of offshore wind in the North Sea is going to impact the property, especially seabird populations and migrating birds, harbour porpoises and overall underwater noise levels due to service and construction vessel traffic.<sup>9</sup>
- Salt mining continues to be a threat in the Netherlands, but new government regulation may lead to a halt.
- The deepening of estuaries and shipping channels for large ships to reach ports is leading to ever-increasing dredging and dumping volumes. Hamburg dumps large amounts of polluted dredging material at “Neuer Lüchtergrund” close to the Wadden Sea and also at a site called “Tonne E3” close to Helgoland.
- Fisheries across almost the entire Dutch and German part of the property, notably for shrimp and mussels, continues to have a severe impact on the target species, on fish, the ocean floor and carbon emissions.<sup>10</sup>
- Potential routes for new electricity cables to connect offshore wind parks to onshore grids or hydrogen pipelines face complex ecological challenges and currently lack bilateral cooperation as is present in the Dutch PAWOZ project.

### Conclusion

The cumulative pressure on the Wadden Sea property is too high and risk for its World Heritage Status. We therefore call upon the World Heritage Committee to recommend at its 47<sup>th</sup> session to reconfirm its earlier decisions and in particular to:

- *Urge* the State Parties to implement Decision 45 COM 7B.23 and 46 COM 7B.51, notably to stop extractive activities such as oil, gas and salt in the vicinity or underneath of the property in particular the GEMS, Ternaard, Mittelplate and Ballastplaat projects;
- Request the State Parties to reject any future proposals for extractive activities inside or in close proximity to the property;
- *Request* the State parties to authorise other project proposals only if adequate assessments demonstrate no adverse impact on the OUV;
- *Remind* State Parties that the joint Strategic Environmental Assessment must consider the cumulative impact of all pressures on the property, assess individual projects on a case-by-case basis, and provide clear advice on red lines and improvements;
- *Request* the Netherlands and Germany to carry out the missing assessment of the GEMS project on the OUV;
- *Request* Germany to oblige Harbour Energy to put in place financial safeguards to ensure that the Mittelplate's oil



Fig. 4: Wildlife in the Wadden Sea.

Photo: © Hans-Ulrich Rösner / WWF

platform is dismantled without damage to the property, and to commit to full transparency in this process, including the publication of the agreement between the regional government and the operator;

- *Urge* the State Party of Germany to immediately stop the LNG projects in Wilhelmshaven and Brunsbüttel, and to stop the use of biocides at the Wilhelmshaven terminal;
- *Urge* Germany not to dump harbour sludge or other polluted sediment within or close to the Wadden Sea;
- *Call* upon the State Parties to scope and explore corridors for cables and pipelines that are necessary for the energy transition preferably underneath existing shipping lanes and and minimize the environmental impact as much as possible;
- *Urges* The Netherlands and Germany to embrace new diplomatic and bilateral cooperation as a way to minimize damage to the property from new electricity or hydrogen connection between offshore windfarms and the on-shore grid
- *Call* on Germany to nominate the enclaves originally foreseen for fossil fuel drilling or extraction for inclusion in the property as soon as possible.

### Notes

- 1 [https://www.schleswig-holstein.de/DE/landesregierung/ministerien-behoerden/V/Presse/PI/2024/05/240507\\_Wintershall\\_Dea.html?n=2309ee6f-8d32-4a05-8272-354fb9fd297d](https://www.schleswig-holstein.de/DE/landesregierung/ministerien-behoerden/V/Presse/PI/2024/05/240507_Wintershall_Dea.html?n=2309ee6f-8d32-4a05-8272-354fb9fd297d); <https://www.duh.de/presse/pressemitteilungen/pressemitteilung/fossile-plaene-von-wintershall-dea-gestoppt-deutsche-umwelthilfe-begruesst-absage-neuer-oel-bohrungen-im/>
- 2 <https://www.klimareporter.de/deutschland/das-russland-argument-sticht-im-wattenmeer-nicht>
- 3 <http://bi-saubere-luft-ostfriesland.de/09-12-2022-einwand-zur-richtbohrungen-n05-a-in-den-deutschen-sektor-der-nordsee-einschliesslich-der-erd-gasfoerderung-im-deutschen-hoheitsgebiet-der-one-dyas-b-v/>; [https://www.duh.de/fileadmin/user\\_upload/download/Pressemitteilungen/Energie/Thema\\_Gas/221209\\_DUH\\_Einwendung\\_Borkum\\_Richtbohrungen\\_final.pdf](https://www.duh.de/fileadmin/user_upload/download/Pressemitteilungen/Energie/Thema_Gas/221209_DUH_Einwendung_Borkum_Richtbohrungen_final.pdf)
- 4 <https://www.ifaw.org/de/journal/die-larmbelastung-der-meere-und-ihre-todlichen-auswirkungen-auf-meereslebewesen>
- 5 [https://www.duh.de/fileadmin/user\\_upload/download/Pressemitteilungen/Energie/Thema\\_Gas/Anlage-09\\_Marin-2022\\_Platform-Collision-Risk-Study-for-N05-A.pdf](https://www.duh.de/fileadmin/user_upload/download/Pressemitteilungen/Energie/Thema_Gas/Anlage-09_Marin-2022_Platform-Collision-Risk-Study-for-N05-A.pdf)
- 6 WHC/24/46.COM/17, p. 165
- 7 German Mining Permit (Planfeststellungsbeschluss), p. 53
- 8 <https://www.duh.de/Ing/>; <https://energy-terminal.de/de/terminals>
- 9 <https://www.government.nl/documents/diplomatic-statements/2023/04/24/ostend-declaration-on-the-north-sea-as-europes-green-power-plant>; <https://www.nabu.de/natur-und-landschaft/meere/offshore-windparks/33162.html>; <https://www.nabu.de/imperia/md/content/nabude/energie/wind/230822-ampelstudie-english-summary-nabu.pdf>
- 10 <https://qsr.waddensea-worldheritage.org/reports/fisheries>, [www.wwf.de/watt/fischerei](http://www.wwf.de/watt/fischerei)

# Threats Endanger the OUV of Doñana National Park, a World Heritage Site

Teresa Gil Gil and Juanjo Carmona, WWF Spain



On 15 December 1994, at the 18th session of the Unesco World Heritage Committee, held in Phuket (Thailand), the Doñana National Park was inscribed as a World Heritage Site on the basis of criteria VII, IX and X.

This 30th anniversary is an opportunity to reflect on the current state of Doñana, the important challenges it faces and the status of the values that made it worthy its inclusion on the World Heritage List.

Doñana is in a poor state of conservation, as official biodiversity and water monitoring programmes shows and its ecological processes system is altered. Even when there are few weeks of rain that gave some hope, it is a mirage. An overall assessment shows that the aquatic ecosystems characteristic of Doñana are not functional from an ecological point of view and that there is an alarming loss of biodiversity and ecosystem services that should be reversed

## Water

Doñana was declared a World Heritage Site because it is an 'exceptional wetland', but since its declaration, Unesco has been concerned about water management. The Phuket session warned of the threats to the integrity of the site from water management projects in the surrounding area and requested a report by 1998 on this issue.

Thirty years later, water management remains a key issue for Doñana and the problems have not only not been solved but have worsened, as WWF Spain has shown from official data.

WWF has presented two reports in 2024 that demonstrate the poor state of the marshes, lagoons, streams and aquifer: "Science to Save Doñana"<sup>1</sup> and "The Water that Nourishes Doñana"<sup>2</sup>.

The report "The Water that Nourishes Doñana" points out that at least 106 hm<sup>3</sup> of water is extracted from the aquifer each year, compared to an estimated 97 hm<sup>3</sup> of water available as average recharge. This means that the real rate of exploitation of the aquifer is 109%, and that more groundwater is pumped from the Almonte-Marismas aquifer than is recharged. This high level of overexploitation is causing significant drops in the water table and in the discharge to the streams which must enter and feed the Marisma.

The serious problem of the aquifer has been confirmed another year by the Doñana Hydrographic Confederation in its Report on the "State of the Aquifers in the Doñana Surroundings" (hy-

1 <https://www.wwf.es/766360/cinco-evidencias-cientificas-del-colapso-ecologico-de-Donana>

2 <https://www.wwf.es/767680/La-sobreexplotacion-del-acuifero-de-Donana-sobrepasa-ampliamente-los-limites-viables-para-su-recuperacion>

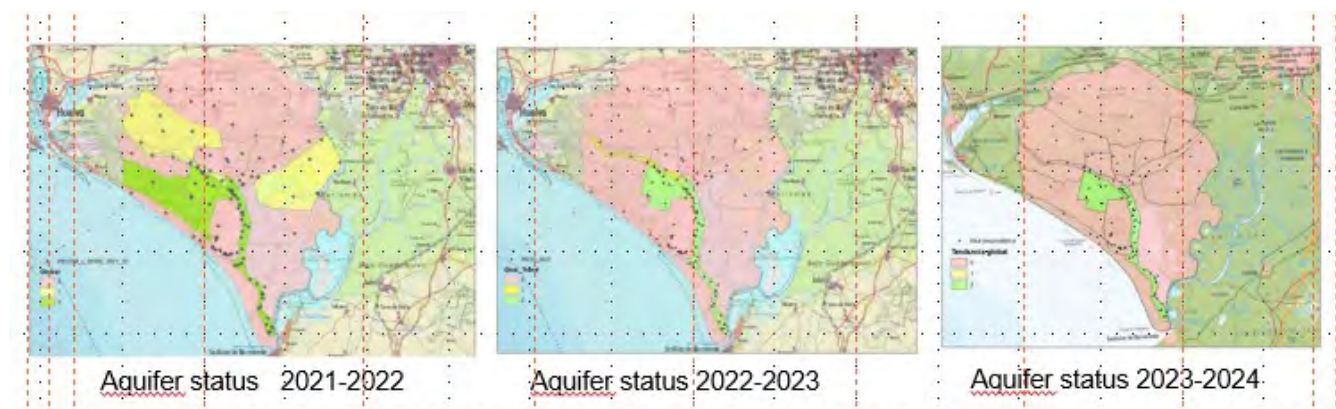


Fig. 1: Evolution of the Status of the aquifer.

Source: Water Authority Guadalquivir River Basin, Reports 2022, 2023, 2024

drological year 2023-2024). Of the 16 sectors into which the CHG subdivides the aquifer, 14 are in poor condition and have significant downward trends according to the administration's long-term indicators (we have gone from a total of 7 out of 16 sectors with statistically significant declines in 2012/2013 to 14 in the last two hydrological years).

The Hydrographic Confederation itself recognises in its report that the current degree of the aquifer and the mode of exploitation of groundwater resources compromises its good condition and the conservation of dependent terrestrial ecosystems and species.

The CHG report shows that Doñana's capacity for recovery is decreasing due to the continuous degradation suffered by this aquifer. Four and a half years after the declaration of overexploitation of the aquifer, there is still no extraction plan, nor have sufficient precautionary measures been taken to prevent the aquifer from getting progressively worse. It is urgent for Spain to approve and implement an effective water extraction plan to ensure the recovery of the aquifer.

### The marshland

The Doñana marshes underwent an intense process of transformation in the 20th century that is having serious consequences today. The decrease in rainfall, the reduction in the flow of water from the streams, the poor state of the aquifer, the rise in temperatures, the pressures of irrigated agriculture and the lack of restoration actions that are known to be essential, such as the recovery of the Guadiamar basin, have meant that the marshes do not have adequate flooding, either spatially or temporally.

This is having consequences for both wintering birds and breeding birds the values for which Doñana was named a World Heritage Site.

Waterfowl breeding in Doñana is in decline and in recent years the natural area of the Odiel marshes – also in Huelva – has overtaken it as the most important breeding area in Andalusia. According to the latest data from the Doñana Biological Station, “72 % of the species that breed in Doñana have a negative population trend if the last two decades are taken as a reference. This figure rises to 79% if the trend is calculated for the last ten years”.

### The lagoons

Throughout its history, one of the most important ecosystems in Doñana has been its lagoons, both temporary and permanent. The presence of these, together with other habitats such as the marshes, led Unesco to state that ‘the heterogeneity of environments makes it one of the most important centres of biodiversity in Europe.

However, the lagoons are suffering from the poor state of the aquifer, which, together with the rise in temperature and the decrease in rainfall, has led to the practical disappearance of the temporary lagoons that existed in Doñana.

In addition, the permanent lagoons have become temporary, as the Doñana Biological Station<sup>3</sup> states, after they have dried up for three consecutive summers, something never seen before in the history of this protected area.

### Migratory birds

According to Unesco, ‘Doñana and in particular its marshes are recognised as a wetland of international importance for numerous species of waterfowl, breeding and wintering birds, and is a bottleneck on the migratory route between Western Europe and West Africa, with concentrations of some 500,000 wintering birds per year’.

The figures of recent years are far from these 500,000 wintering birds. In 2022 the January census showed a total of 80,880 birds, in 2023 206,859 birds and in 2024 only 43,989 birds. In the case of the latter census, the situation of the Greylag Goose (*Anser anser*), an emblematic species in Doñana, stands out, as it has registered the lowest figure in its history with 4,337 specimens. Despite this figure, the Andalusian Regional Government has allowed hunting of these birds in the Doñana area.

In December 2024, the Doñana Biological Station denounced that the poor state of the natural area negatively affects waterbirds all over Europe<sup>4</sup>.

The study by the Biological Station analyses the situation of 15 species of migratory waterfowl (ducks and geese). According to data from aerial and ground surveys carried out, the research reveals that 9 of the 15 species analysed have experienced declines in the last 40 years associated with the loss of flooded areas in the marshes of the Doñana National Park. This transformation has significantly altered the wintering bird community.

Furthermore, the study demonstrates that anthropogenic ecosystems such as rice fields or fish farms fail to compensate the effects that the degradation of the natural marshes of Doñana has on waterbirds.

<sup>3</sup> <https://digital.csic.es/handle/10261/378444>

<sup>4</sup> <https://www.ebd.csic.es/divulgacion/noticias/el-mal-estado-de-donana-afecta-de-forma-negativa-las-aves-acuaticas-de-toda>

## Illegal irrigation in Doñana continues to exceed 1000 hectares

This 2024-2025 season 1180,2 hectares are still being irrigated illegally or without irrigation rights and around 6 hm<sup>3</sup> of water is being extracted in excess of the maximum volume that would guarantee the recovery of the aquifer. Water continues to be extracted illegally from the aquifer, which further increases the problems of overexploitation and water quality in the water bodies on which Doñana depends.



Fig. 2: Doñana National Park surrounded by green houses for red berries production. Photo: WWF Spain

Faced with this problem, the regional government is not adequately implementing the “Special Management Plan of the Irrigation Zones located to the North of the Forest Crown of Doñana (PEOCFD)”. WWF has carried out an evaluation of this plan in the 10th anniversary last December 2024. At this date, of the 62 short-term measures (to be implemented in the first 5 years of the plan) and medium-term measures (to be implemented in the first 10 years of the plan), only 23% of them have been implemented, 54% are only partially implemented and 23% are still paralysed.

There is a serious delay in the implementation of priority measures such as the elimination of illegal irrigation outside irrigable agricultural land, the restoration of forest estates illegally transformed into agriculture, the implementation of ecological corridors or the closure of unregulated underground water catchments.

This is mainly due to the lack of political will and the continuous attempts by the Junta de Andalucía to grant amnesty to illegal irrigators, through the proposed amendments to the law in the Andalusian Parliament.

## Conclusion and petitions

In its last resolution issued in Riyadh in 2023, UNESCO warned that if actions to reverse the poor state of the Doñana aquifer (Almonte-Marismas) were not implemented quickly and effectively, this World Heritage Site could be inscribed on the List of World Heritage in Danger.

Doñana is at the most critical moment in its history, increasingly weak and besieged by threats aggravated by climate change. WWF is certain that the current threats to Doñana will seriously affect the conservation status of the Doñana OUV.

WWF has called on UNESCO World Heritage Centre to remain extremely vigilant and bearing in mind the scientific and technical reports and data on Doñana, request that, in accordance with point 10 of Decision 45 COM 7B.97, the Doñana National Park World Heritage Site will be inscribed on the List of World Heritage in Danger in the coming 47<sup>th</sup> session the World Heritage Committee, in order to establish the necessary measures and programmes to enable the recovery of the universal values of this area that are under severe threat. Among them, and as a matter of urgency, it is essential that Spain approves an effective water extraction plan to ensure the recovery of the aquifer.

# Western Caucasus: An Overview for the Beginning of 2025

Anonymous authors

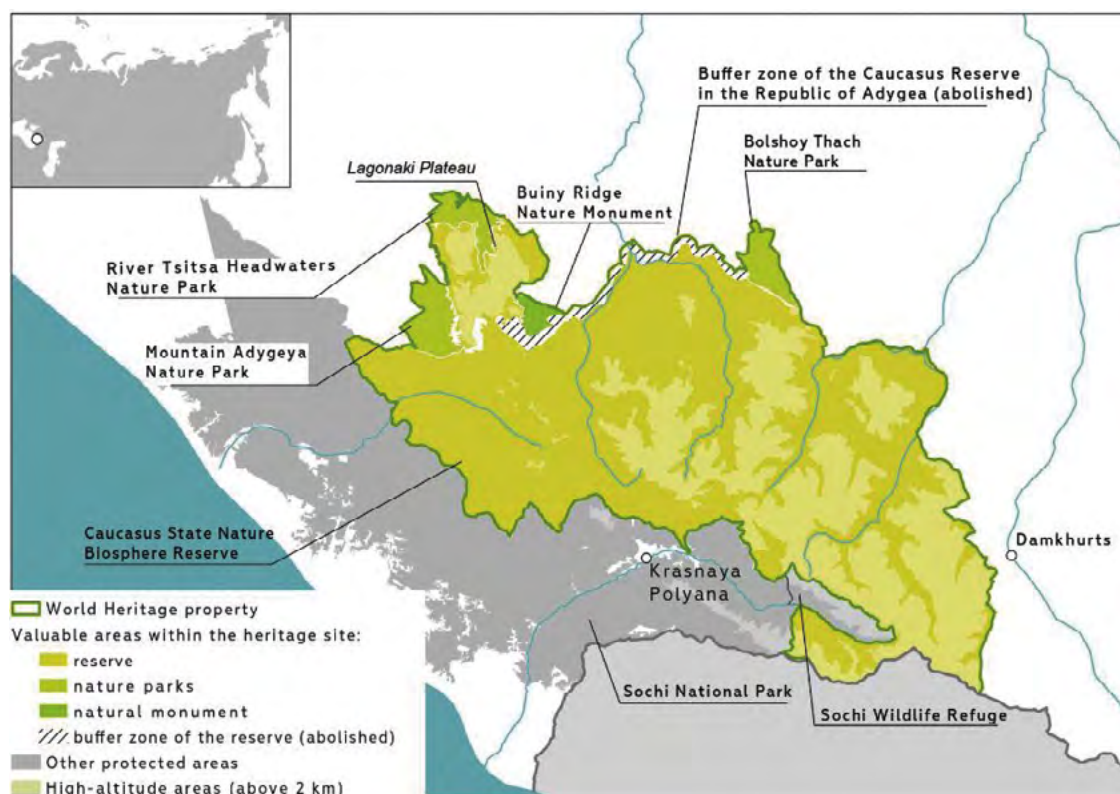


Fig. 1: The Western Caucasus State Nature Biosphere Reserve and adjacent protected areas.

Map: The authors

The whole set of problems that have existed for several years continues to be relevant for the Western Caucasus:

- Proposed railway and highways across the Caucasus Reserve
- The ongoing development of resorts in Sochi National Park
- Construction of a ski resort on the Lagonaki plateau
- Withdrawal of land plots from the Bolshoy Thach Nature Park
- Downgrading of the protected status of natural monuments
- The abolished buffer zone of the Caucasus reserve in Adygea

Let's consider how the situation evolved in 2024.

## Proposed railway and highways across the Caucasus Reserve

The road from Arkhyz resort to Krasnaya Polyana resort can be divided into two segments: Arkhyz – Damkhurts and Damkhurts – Krasnaya Polyana. The second segment should pass through the territory of the reserve.

On 20 June 2024, it was reported in the media that a project for a road from the Damkhurts village to the village of Krasnaya Polyana had been developed. The road, with a total length of 59.4 km with two lanes and three tunnels with a total length of 14.3 km, is estimated to cost about 173.9 bln RUB.<sup>2</sup>

The Arkhyz-Damkhurts-road section is currently under construction.

1 The names of the authors is known to World Heritage Watch.

2 <https://www.interfax.ru/russia/967366>



Fig.s 2 and 3: In the summer of 2024, the construction of glamping and other infrastructure continued on the sites logged in 2023.

Photos: The authors

## Ongoing development of resorts in Sochi National Park

### Construction of a ski resort on the Lagonaki plateau

In 2024, preparatory work for the construction of the resort was underway (outside of the property boundary). Trees were cut for the construction of a water pipeline and a high-voltage line. The activists recorded the destruction of Red Book lichens and other violations during the felling. The Prosecutor's Office and the Federal Service for Supervision in Nature Management confirmed the violations.<sup>3</sup>

### Withdrawal of land plots from the Bolshoy Thach Nature Park

The Ministry of Natural Resources reported that the draft decision of the Cabinet of Ministers of the Republic of Adygea, changing the boundaries and exclusion of land plots from the boundaries of the Bolshoy Thach Nature Park, was not submitted to the Ministry of Natural Resources of Russia for approval. Thus, the boundary changes have not been approved through the necessary procedure and can be considered illegal.

In the autumn of 2024, activists visited the area excluded from the boundaries of the Nature Park and recorded the presence and movement of motorbikes (enduros).<sup>4</sup> Most of the motorcyclists were on the ascent to the Bolshoy Thach Mountain. Motorbike travelling on mountain slopes and hiking trails has led to significant degradation of soil and vegetation cover and damage to root systems of shrubs and trees found along all tracks.

The systematic roar of motorised vehicles has led to the destruction of nesting sites of the Eurasian griffon vulture (*Gyps fulvus*), included in the Red Book of Russia and the IUCN Red List.<sup>5</sup> According to the report of the Non-State Nature Conservation Centre "Kavkaz" dated 16 July 2024, the colony of the

Eurasian griffon vulture on Bolshoy Thach Mountain has ceased to exist. In their opinion, the main factor of concern in recent years has been the noise from motorbikes and quad bikes: 'On weekends, dozens of vehicles climb with a roar to the crest of the Thach and even to the summit itself, passing within 1.5 km from the former colony'.<sup>6</sup>

However, now the Department of Environmental Protection and Natural Resources of the Republic of Adygea can respond to the activists' appeals that the trail, along which motorcyclists climb to the top of Bolshoy Tkhach Mountain, is not part of the nature park. Therefore, the employees of the nature park have no grounds for conducting raids (inspections) on this territory.

The death of a Persian leopard in the Bolshoy Thach Nature Park was announced at the end of August<sup>7</sup>. The leopard was bred under the Program for the Restoration (Reintroduction) of the Persian Leopard in the Caucasus and was to be released into the wild on July 15. During the release, the leopard was shot and killed. Information about this was not publicized, but over time, it appeared in the conservation community. On December 16, the General Prosecutor's Office of the Russian Federation reported that verification measures on the fact of the death of the animal in the Ministry of Natural Resources of Russia continue, thus confirming the existence of the incident. Scientists assume that the cause of the tragedy was non-compliance with the release technology and, first of all, the presence at the event of a large number of people - officials, journalists, 'VIP' guests - and the absence of expert scientists.

A joint World Heritage Centre / IUCN Reactive Monitoring Mission visited the Western Caucasus in September 2024. We look forward to the publication of the mission report and the subsequent decisions of the World Heritage Committee.

<sup>3</sup> <https://t.me/greenserpent/22942>

<sup>4</sup> <https://t.me/lagonakilive/2082>

<sup>5</sup> <https://www.iucnredlist.org/species/22695219/157719127>

<sup>6</sup> [https://vk.com/wall319058562\\_3694](https://vk.com/wall319058562_3694)

<sup>7</sup> <https://zapovedcouncil.ru/o-sudbe-peredneaziatskogo-leoparda-terek-napravil-zapros-glave-minprirody-rossii-ekspertnyj-sovet-po-zapovednomu-delu/>

# Threats to the Western Tien-Shan World Heritage Property in Kazakhstan

Eugene Simonov, Rivers without Boundaries  
Eugene Egidarev, V.I. Il'ichev Pacific Oceanological Institute



The transboundary site “Western Tien-Shan” (WTSWH) was inscribed on the UNESCO World Heritage List in 2016<sup>1</sup>. It features diverse landscapes, home to exceptionally rich biodiversity, most of which is confined to forested valleys of rivers belonging to the Syr-Darya River Basin. The Aksu-Zhabagly, Karatau and Sairam-Ugam National Nature Park (Republic of Kazakhstan), Sary-Chelek, Besh-Aral, Padysha-Ata (Kyrgyz Republic), and Chatkal State Biosphere Reserve (Republic of Uzbekistan), nominated by the three countries, are the most representative and best preserved natural areas of the Western Tian Shan Mountains. In 2023, Rivers without Boundaries (RwB) highlighted threats to the WTSWH ecosystems from hydropower development and mining in Kyrgyzstan<sup>2</sup>.

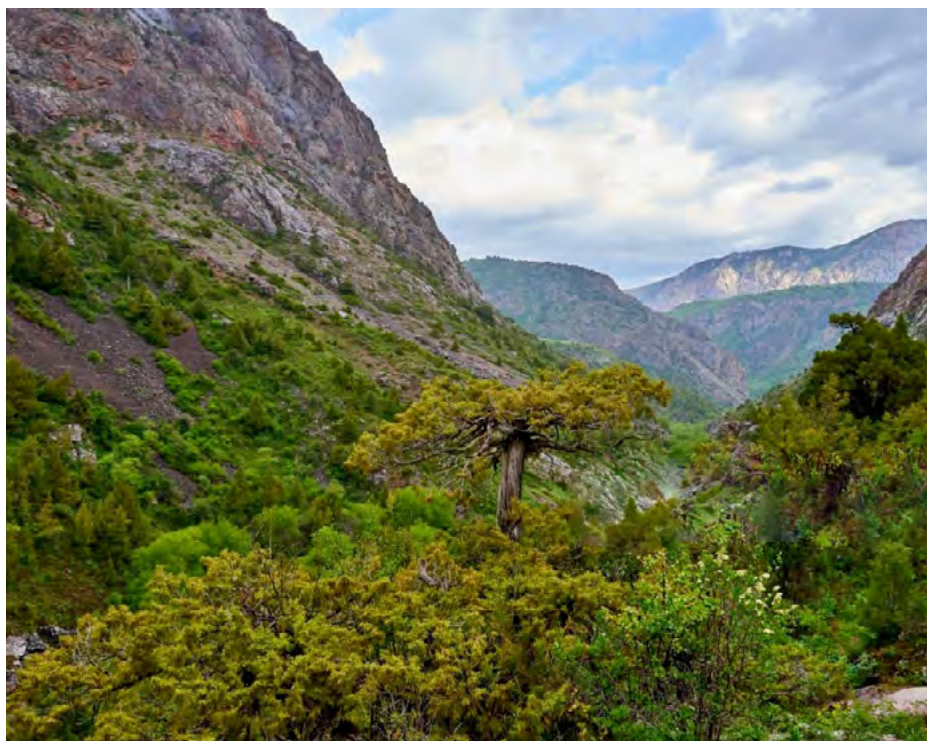


Fig 1: The Ugam River Gorge in the Western Tien-Shan World Heritage property.

Photo: Yerbolat Shadrakhov

When, in September 2024, the RwB delegation attempted to attend meetings with the UNESCO/IUCN Reactive Monitoring Mission, we failed in Kyrgyzstan and Uzbekistan. However, the Kazakhstan National Committee for UNESCO kindly invited us to a meeting in Shymkent on September 22, 2024, where we

were the only NGO representatives. There, we got first-hand information on what is being proposed as new borders for the World Heritage property and how the dam and reservoir construction in the heart of the Sairam-Ugam National Park is justified. This greatly helped our study of hydropower development impacts on the WTSWH. Results for Kazakhstan’s part of the property are summarized below.

## Biodiversity values linked to rivers

There are 1,635 species of plants, 60 species of mammals, and more than 200 species of birds in Sairam-Ugam National Park. There are 60 plant species listed in the Red Book of Kazakhstan.

Much of the endemic flora, including wild ancestors of cultivated fruit trees, is also confined to lower elevations within river valleys.

Until 2024, in the waters of the Ugam and other rivers, almost all endemic fish fauna<sup>3</sup> of the West Tian Shan was still well preserved, and new species, such as endemic sculpin, *Cottus nudus*, have been recently described<sup>4</sup>. Unfortunately, there is no fish population monitoring/research in the Sairam-Ugam National Park or other adjacent protected areas.

Zoologist Elena Chalikova<sup>5</sup> identified floodplain / riverine forests along the Ugam River as one of the most important habitats for native bird species in the basin. Significant transformation and impoverishment of avifauna composition happened due to tourism development

in the National Park (corresponding with improved accessibility to all sites). Before this, the population of the Kazakh part of the Ugam basin was limited to 300 people.

### Shrinking Boundary

The problems of the WTSWH property started on the day of the inscription on the World Heritage List in 2016 when the Committee enthusiastically neglected recommendations of the IUCN that this nomination should be deferred as the property does not meet integrity and protection management requirements. IUCN warned that “a number of the components of the protected areas in Kazakhstan do not have boundaries which are based on ecological principles, or which follow natural features such as contours or watercourses: for example, Karatau SNR and parts of Sairam-Ugam SNNP”.

From 2018 to 2023, the World Heritage Committee has expressed three times its growing concern over uncoordinated changes to the boundaries and zoning of the World Heritage site, particularly within the boundaries of the Sairam-Ugam National Park, where the core zone has been significantly reduced. The maps supplied with the nomination dossier had multiple mistakes, drastically contradicting the boundaries’ text description and misrepresenting the locations of several components. A Kazakhstan expert presenting the issue at the meeting in Shymkent recognized all mistakes of the past and proposed to rectify those by a two to three-fold reduction of the World Heritage property area within Sairam-Ugam National Park.

This proposal reduces the World Heritage area to core zones identified in the current zoning plan of the national park, which is frequently changed to give way to projects of various developers (lately to a hydropower cascade project). Such “core zones” are a collection of disconnected contours that hardly help to ensure preservation of a large landscape and ecosystem processes. Such a transformation of size and integrity of the property contradicts the Operational Guidelines as noted by the IUCN in 2016<sup>6</sup>.

### Planned Hydropower / Water Infrastructure and the Flaws of the HIA

A project proposed by a subsidiary of South Oil Company in 2021 envisions the development of a cascade of 2–5 hydropower dams on the Ugam River and a 210 km long water-supply pipeline to populated areas. The total hydropower capacity

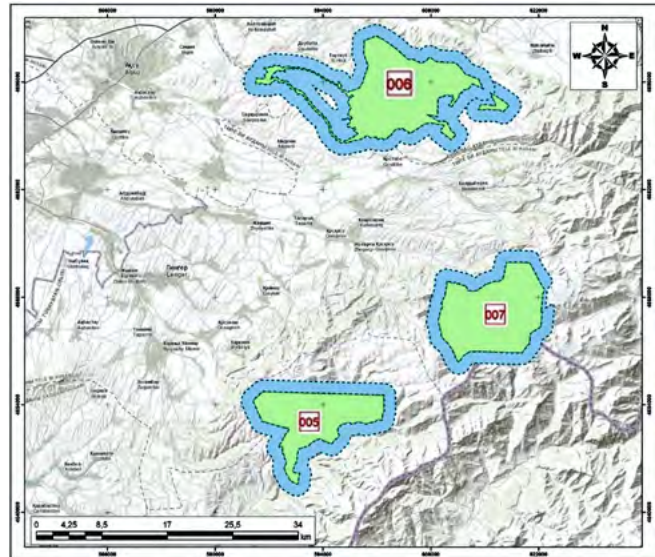


Fig. 3: Flaws in the 2016 World Heritage maps. Three clusters of Sairam-Ugam National Park wrongly shown on maps attached to the 2016 Nomination Dossier: 005 Boraldaitau Area, 006 Irsu-Daubabin Area, and 007 Sairam-Ugam Area. Green colour = World Heritage Property, Blue – buffer zones.

Source: Presentation at Shymkent meeting on 22 September 2024

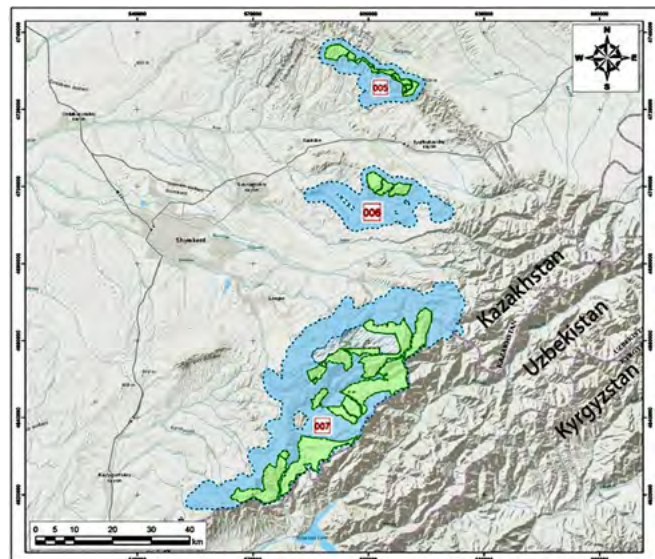


Fig. 4: Flaws in the 2024 World Heritage zoning proposal. “Corrected” boundaries and buffer zones of the component parts in Sairam-Ugam Nature Park presented at the 2024 Shymkent meeting. While outer boundaries of buffer zones now coincide with the boundaries of actual protected clusters as described in the Nomination Dossier, the green areas representing actual World Heritage property shrunk 2–3-fold and became chaotically fragmented (reflecting poor zoning plan).

Source: Presentation at Shymkent meeting on 22 September 2024

WTSWH Clusters of Sairam-Ugam National Park	Original World Heritage area (2016 Dossier) ha	Original Buffer zone area (2016 Dossier) ha	New proposed World Heritage area 2024, ha	New proposed Buffer Zone 2024, ha
Boraldaitau	26,971	4,9	4,467	18,658
Irsu-Daubabin	45,509 (or 14,343)	8,200 (or 22,448)	3,697	14,343
Sairam-Ugam	76,573	13,9	45,117	100,951
<b>Total</b>	<b>149,053 (118,000)</b>	<b>27,000 (41,000)</b>	<b>53,300</b>	<b>134,000</b>

Fig. 2: Area of Sairam-Ugam NP clusters at the time of nomination and as proposed in 2024 by Kazakhstan experts..

Sources: Nomination Dossier’, presentations at Shymkent meeting with the Reactive-monitoring mission, September 2024.

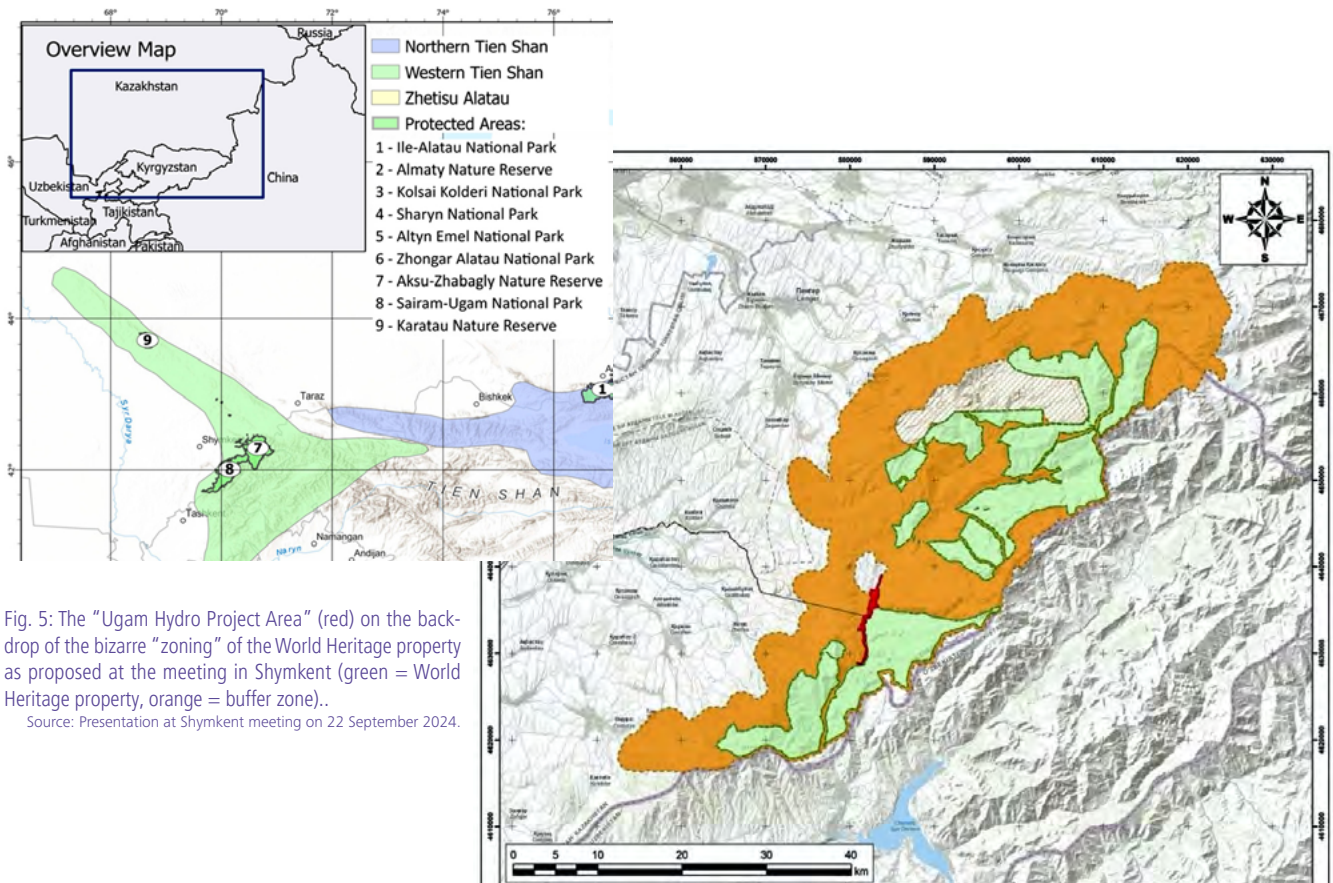


Fig. 5: The “Ugam Hydro Project Area” (red) on the backdrop of the bizarre “zoning” of the World Heritage property as proposed at the meeting in Shymkent (green = World Heritage property, orange = buffer zone)..

Source: Presentation at Shymkent meeting on 22 September 2024.

will be 72–165 MW, the largest reservoir volume will be 30 million m<sup>3</sup>, and the water supply will be 3.5 m<sup>3</sup>/sec. South Oil Co. revealed that in May 2023, it secured an EPC contract with “Power China Corp”.<sup>8</sup> At the 2024 meeting in Shymkent, it was announced that the current design contains two reservoirs.

The project needs 850,9 ha of the National Park’s land for construction. In 2022, the “Terra-GIS” consulting company was contracted by a subsidiary of South Oil Co. to design adjustments to the National Park zoning plan to remove core zones from areas slated for hydropower construction. It is important to note that such adjustments, as well as hydropower construction inside a national park, contradict the laws of Kazakhstan.

In the case of construction, the central element of the national park ecosystem – **the Ugam River and its valley** – will be degraded by hydropower. The planned water supply will reduce flow in downstream stretches of the river. Sculpins and other endemic fish will lose their habitat and migration paths, while exotic species will invade the reservoirs.

The Heritage Impact Assessment (HIA) presented in Shymkent was commissioned by the project proponents and lacked a coherent connection with the project’s overall EIA. It also fully neglected landscape connectivity, preservation of ecosystem functions, and aquatic biodiversity. Indicators selected for the HIA had little relevance to impacts potentially caused by water

infrastructure projects (e.g., the HIA assessed Argali Sheep not even inhabiting the Ugam River basin, so the project had no impact on this “indicator species”). This HIA presentation was an example of a blatant misuse of the new “Guidance and Toolkit for Impact Assessments in a World Heritage Context”<sup>9</sup>.

The central question of any assessment should be **analyzing alternatives to the destruction of the Sairam-Ugam National Park**. It should have been done independently of companies and agencies having a vested interest in the project. The HIA presentation did not even mention this aspect.

On June 26, 2024, the Government of Kazakhstan issued a Decree<sup>10</sup> on conducting direct negotiations for a private-public partnership for the project with the project-proposing company. On January 14, 2025, the Investment Promotion Council of Kazakhstan, at a meeting, approved a project to build a water pipeline with a cascade of hydroelectric power plants on the Ugam River in the Turkistan Region with a “total investment” of around 190 billion tenge (US\$ 360 million)<sup>11</sup>. “The goal of the project is to provide quality drinking water to nearly 1 million residents of the Turkistan Region. The project is also aimed at covering the electricity deficit in the region... and the overall quality of life of the local population.” The Kazakhstan state budget will be used to pay a private company for the destruction of the World Heritage property and its exploitation for state-subsidized hydropower production.

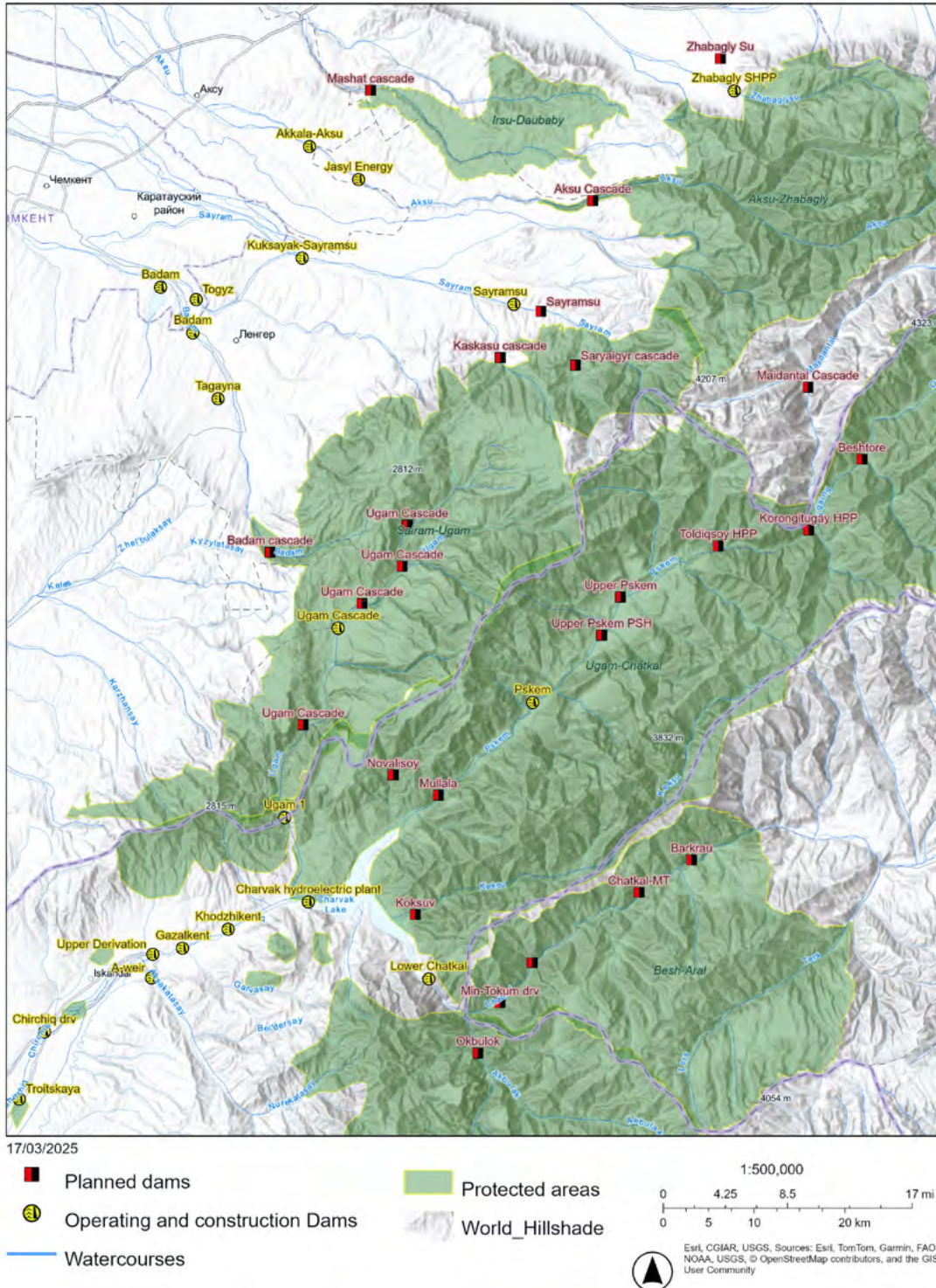


Fig. 6: Existing and planned hydropower projects in the vicinity of the WTSWH. Source: Rivers without Boundaries. Online interactive GIS map available at: <https://arcg.is/0fdFgP0>

### Other Hydropower Projects Threatening the “Western Tien-Shan” in Kazakhstan.

Kazakhstan actively utilizes the remaining free-flowing rivers for small, inefficient hydropower projects. The renewable energy auctions scheme offering generous “green tariffs” encouraged the development of more than 40 small hydropower projects in 2017-2024. International donors, such as USAID, EBRD, and ADB have assisted in establishing and functioning. Decisions on

“renewable” power plant siting are made without considering biodiversity impacts or ecosystem services provided to the population. Kyrgyzstan and Uzbekistan are similarly pursuing hydro-power development.

Many such dams and cascades are being built or planned on rivers flowing from the West Tien Shan World Heritage property – Sairamsu, Badam, Zhabagly, Aksu, Mashat and other rivers –, and may have a direct negative impact on aquatic biodiversity,



Fig.s 7 and 8: A newly built 4.5 MW hydropower cascade on the Ugam River in Uzbekistan immediately below its border with Kazakhstan effectively blocks migration of native fish to the World Heritage property. Source: Office of the State President of Uzbekistan

landscape integrity, and recreational values of the ecosystems included in the WTSWH<sup>12</sup>.

## Conclusion

Information on recent developments related to the WTSWH property is not available to the public. The Report of the joint World Heritage Centre / IUCN Reactive Monitoring mission from September 16 to 25, 2024, has not been disclosed as of March 15, 2025. Three countries prepared and submitted a State of Conservation Report, but only a one-and-a-half page Executive Summary was disclosed on the UNESCO website<sup>13</sup>. It says that the State Parties have prepared a joint boundary clarification proposal, but it is not publicly available.

*“As regards other current conservation issues regarding the Western Tien-Shan serial transnational World Heritage property, the State Parties report that there are no such issues to be addressed”.* This makes us fear that, under excuse of “mistakes at the time of nomination”, the State Parties may insist on exclusion from the property of all areas where they are now planning development of hydropower, tourist resorts, state residences, roads, and windfarms. If such treatment of a World Heritage property recently inscribed on the List is not decisively halted using all legal and diplomatic tools available under the Convention, then this Convention is dead as a tool for long-term nature conservation.

As RWB has reported, active industrial encroachment on this property is underway in Kyrgyzstan, where gold mining has already destroyed two kilometers of the Chatkal River valley in the Besh-Aral Nature Reserve, and additional mines, roads and dams are being planned<sup>14</sup>. In 2024, Uzbekistan Hydro Company built a cascade of small hydropower dams on the lower Ugam River, which will constrain fish migration upstream of the World Heritage property in Kazakhstan, but Uzbekistan has not undertaken a Heritage Impact Assessment<sup>15</sup>.

Given the imminent grave threats to the Western Tien Shan World Heritage Property in all three countries, we recommend

**inscribing this property on the List of the World Heritage in Danger and developing a binding remediation plan as soon as possible.**

This case also presents a strong argument why the World Heritage Committee should avoid making politically motivated decisions on specific properties, especially rushing their listing, when it contradicts fact-based recommendations of the UNESCO advisory bodies.

## Notes

- <https://whc.unesco.org/en/list/1490>
- <https://www.researchgate.net/publication/381293835>
- According to our interviews with ichthyologists from Kazakhstan and Uzbekistan endemic fish fauna in Ugam River contains species belonging to genera Triplophysa, Cottus, Glyptosternon, Schizothorax, etc.
- Sideleva V. G. A Review of Sculpins (COTTOIDEI) of Middle Asia with a Revalidation of the Species *Cottus jaxartensis* and Description of a New Species *Cottus nudus* sp. nova //Journal of Ichthyology. 2021. T. 61. №. 3. C. 327-338. doi.org/10.1134/S0032945221030115
- Changes in the structure of bird populations under the influence of anthropogenic activities factors in the valley of the Ugam River (Western Tian Shan) [https://trudyzool.kz/wp-content/uploads/2023/03/4\\_chalikova.pdf](https://trudyzool.kz/wp-content/uploads/2023/03/4_chalikova.pdf)
- Advisory Body Evaluation 2016 <https://whc.unesco.org/document/152792>
- <https://whc.unesco.org/uploads/nominations/1490.pdf>
- <https://south-oil.com/too-sauts-ojl-i-kompaniya-powerchina-podpisa-li-epc-kontrakt-po-realizatsii-proekta-stroitelstva-ges/>
- <https://whc.unesco.org/en/guidance-toolkit-impact-assessments/>
- <https://adilet.zan.kz/rus/docs/P2400000500adilet.zan.kz/rus/docs/P2400000500>
- <https://astanatimes.com/2025/01/investment-headquarters-meeting-approves-new-industrial-projects/>
- See Rivers without Boundaries' web GIS "Dams and Biodiversity in the Mountains of Central Asia. <https://rivers.help/map>
- <https://whc.unesco.org/document/218582>
- Imminent threats to the Western Tien-Shan in Kyrgyzstan, Uzbekistan and Kazakhstan. World Heritage Watch Report-2024 <https://www.researchgate.net/publication/381293835>
- <https://president.uz/en/lists/view/7749>

# The Survival of Tigrovaya Balka is Still in Question

Eugene Simonov, Rivers without Boundaries International Coalition



Fig. 1: Tigrovaya Balka Nature Reserve. Photo: Ministry of Foreign Affairs of Tajikistan

## The main problem of the “Tugay Forests of Tigrovaya Balka Nature reserve”

As I described in detail in the 2024 World Heritage Watch Report<sup>1</sup>, the main problem of the Tigrovaya Balka property is that the Vakhsh Hydropower Cascade has eliminated natural floods, which have shaped and sustained tugay ecosystems in floodplains<sup>2</sup>. The cascade, especially the Nurek HPP reservoir, also captures most sediments and decreases turbidity/sediment transport by 7-11 times. This radically altered riverbeds and conditions for fish spawning and migration<sup>3</sup>. A drastic change in the sedimentation regime reduces the influx of new material (sand, loam, silt) onto the floodplain, which may lead to a deepening of the riverbed and a lowering of groundwater levels on which tugay vegetation depends. The lack of floods coupled with adjacent land use intensifies desertification and salinization, which, ultimately, will lead to the replacement of tugay vegetation by desert<sup>4</sup>.

The Tajik Academy of Sciences first recommended designing “artificial floods” to save the tugay ecosystem in 1975. However, despite multiple official decisions, such an environmental flow regime was never created and implemented. Planning documents on water management and hydropower development in Tajikistan do not incorporate safeguards that could en-

sure the preservation of Tigrovaya Balka. The obvious reason for that is the reluctance of Tajik Government to set limitations and conditions on hydropower development and operating regimes.

The 2023 nomination dossier<sup>5</sup>, a product of political compromise, presented as the OUV such elements of the Tigrova Balka as tugay vegetation of floodplain and terrestrial fauna, downplaying the importance of its holistic freshwater ecosystem that shapes all biodiversity components of the floodplains. It is crucial to bring back to UNESCO consideration fluvial ecosystem processes and the endemic freshwater fauna as intrinsic parts of “Tigrovaya Balka” property values.

In 2024, four NGOs appealed to the World Bank to assess the status of fish known from Lower Vakhsh in the framework of the Environmental Strategic Impact Assessment (ESIA) of the Rogun Hydropower Plant (HPP): the Large Amu-Darya Shovelnose sturgeon (*Pseudoscaphirhynchus kaufmanni* - CR), the Small Amu-Darya Shovelnose sturgeon (*Pseudoscaphirhynchus hermanni* -CR), the Pike asp (*Aspiolucius esocinus* -VU), the Aral barbel (*Luciobarbus brachycephalus* -EN), and the Sharpray (*Capoetobrama kuschakewitschi* -EN), which are also listed in the 2017 Red Book of Tajikistan<sup>6</sup>. The first three species are known to be dependent on high sediment load and variable flows, both altered in regulated Vakhsh River<sup>7</sup>. Those species are by far the most immediately endangered part of the bio-



Fig. 2: A Greater Amu Darya Shovelnose.

Photo: Alexei Chernyak / iNaturalist

diversity in Tigrovaya Balka due to the fish's quick reaction to the alteration of key riverine processes on which all other elements of floodplain ecosystem depend: periodic flooding and sediment transfer.

Construction of the Rogun HPP reservoir with an active volume of 10 km<sup>3</sup> will further reduce any floods on the Vakhsh River (mentioned in the project documentation as an additional advantage of the Rogun HPP for downstream economies). The giant reservoir will perpetuate and exacerbate the current flow regime for the rest of its dam's lifetime of 105 years, which will result in the full degradation of the tugay. Local engineering countermeasures (e.g., periodic dredging of oxbows), implemented in 2009-2023 by WWF and other actors, are only temporary and partial solutions for watering the tugay ecosystem, which do not solve problems of salinization, tugay poplar propagation, etc.<sup>8,9</sup>

The warming climate also provokes competition for water with a difficult choice between increasing water supply for irrigation, using water to fill new the Rogun Reservoir (which requires 1.2 km<sup>3</sup> annually over 16 years of filling), and/or sustaining environmental flows in the Tigrovaya Balka Nature Reserve. Thus, competition for water in the Vakhsh basin will increase, likely exacerbating existing threats: low groundwater levels, salinization, lack of floods, concentrated pollution from farm effluents, increase in water temperatures, etc.

### The World Bank's initial response

The World Bank financing of a new large reservoir opens the last opportunity to design and implement artificial floods, and that task was included in the 2022 Terms of Reference for "Updated ESIA"<sup>10</sup>. However, for unclear reasons, it was not included in the draft environmental instruments of the World Bank's "Sustainable Financing for Rogun Hydropower Project" in 2024.

NGOs urged UNESCO and the World Bank to analyse the need for floods/environmental flows below the Vakhsh Hydropower Cascade, and design mitigation measures. They stated that unless artificial floods (environmental flows) are designed and implemented as a part of the Rogun HPP Project, the new dam will guarantee the demise of the Tigrovaya Balka tugay forests.

Responding to the CSOs, the World Bank Management on May 3, 2024, refused to take into consideration potential impacts on the World Heritage property: "Since the Government of Tajikistan has reiterated its commitment to respect existing international water sharing arrangements<sup>11</sup>, the 2023 ESIA update drew the same conclusions as the 2014 ESIA, namely that there are not expected to be significant changes in flow patterns downstream of Nurek HPP as the result of Rogun HPP (including annual allocations and seasonal shifts). Therefore, Rogun HPP's operations are not expected to cause any further

impacts on Tigrovaya Balka. Consequently, the to extend the Rogun HPP project's Area of Influence (AOI) in the ESIA to include Tigrovaya Balka Nature Reserve and further to the Amu Darya Delta is beyond the scope of the Rogun HPP project. ... we would like to note that Environmental and social commitment Plan is not expected to include specific requirements for water flows from the Nurek dam."<sup>12</sup>.

The fact that Tajikistan has an obligation to conduct a Heritage Impact Assessment was fully neglected, along with the World Bank's previous promise to assess the feasibility of "artificial floods".



Fig. 3: The old Khalka-Kul' Lake framed by tugay vegetation of Asiatic poplar. Photo: Alexey Butorin / UNESCO

### Belated commitment to extend the geographic scope

However, CSOs continued to request attention to the necessity of safeguarding biodiversity and communities downstream, and within five months, the World Bank's stance has been modified. The October 28 letter from the World Bank Director for Central Asia says: "The ESIA that is currently being finalized acknowledges that this scope was too limited, and has expanded the Area of Influence (AOI) to include the downstream sections of the Vakhsh and Amu Darya rivers. It is critical to note that the mitigation measures have been designed to effectively minimize impacts when the reservoir is being progressively filled, and our assessment remains that no appreciable adverse impacts on downstream users are expected, including during those years"<sup>13</sup>. Further, the letter denies any presence of shovelnose sturgeons as the "research indicates that the ecosystem is not viable for the species" and promises that the Biodiversity Management Plan "will include a no-net loss plan for the juniper woodland" while the CSOs were asking about measures to safeguard floodplain ecosystems.

Therefore, the NGOs were promised that while the AOI of the ESIA would be extended the World Bank knew a priori that future assessments would not reveal any serious impacts downstream. Later, we learned how this paradoxical result may be

guaranteed. The AOI extension was envisioned only for a Cumulative Impact Assessment (CIA) for the finalization of which the Rogun Project hired an individual consultant who in 2014 led the whole Rogun ESIA and, therefore, during that consultancy, has developed a clear, predetermined position on downstream impacts<sup>14</sup>. This person single-handedly prepared the Cumulative Impact Assessment (CIA), which in mid-April 2025 was yet to be disclosed for consultation and will be the only section of the ESIA dealing with the assessment of downstream impacts.

Not waiting for results of the CIA and six other important assessments, on December 17, 2024, the World Bank Board approved a 350-million grant to finance the Rogun HPP's completion. However, the development of a detailed ESIA and Biodiversity Management Plan is considered a prerequisite to the disbursement of funds by the World Bank.



Fig. 4: Without flooding, local landscapes can support only desert vegetation.  
Photo: Alexei Butorin / UNESCO

## Request to the inspection panel for investigation

In February 2025, local citizens from Turkmenistan and Uzbekistan concerned with the downstream impacts of the Vakhsh Hydropower Cascade invited Rivers without Boundaries to represent them in a complaint submitted to the World Bank Inspection Panel<sup>15</sup>.

Among other things, the complaint details the need to “*Safe-guard floodplain tugay ecosystems (including the Tigrovaya Balka World Heritage) and other critically important biodiversity in the areas downstream from the Vakhsh Hydropower cascade by providing artificial floods: special environmental flow regime with binding agreement to ensure its implementation. 16 Reassess the impact of reduced inflow into the Amu-Darya Delta during the reservoir filling period and its consequences for flora and fauna, and make sure the damage is prevented*”.

The Complaint has been registered by the Panel<sup>17</sup>, which by the end of June 2025 must decide whether to recommend to the World Bank Board the detailed investigation of compliance of the Rogun HPP Project to the environmental and social policies of the bank.



Fig. 5: Inside a Tugay Forest.

Photo source: Tajik Ministry of Foreign Affairs

## Further steps

Whatever the outcome of the Panel's work, it cannot substitute the due processes under the mechanisms of the World Heritage Convention. In 2024, the CSOs urged UNESCO and Advisory Bodies to communicate their concerns to the Tajik Government and request specific information on its intention to resolve the issue. In 2025, the CSOs will address the World Heritage Committee members and parties to the convention who participate in financing the Rogun Hydro to act and ensure that effective measures are designed to safeguard environmental flows sufficient to save the Tigrovaya Balka from degradation and critically endangered freshwater species from extinction.

## Notes

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- 11 The existing "water sharing arrangements" between countries date back to the end of XX century and do not include firm limits on seasonal redistribution of flow by reservoirs. So, this statement of the World Bank is counterfactual.
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# Tourism and Protection of Regional Protected Areas Within the Golden Mountains of Altai

Anonymous authors

The World Heritage site consists of several territories. Some territories are managed at the federal level (Altai State Natural Biosphere Reserve, Katunsky State Natural Biosphere Reserve) and some are managed by regional management structures. However, the management of regional PAs is not perfect, especially in terms of protection and tourism.

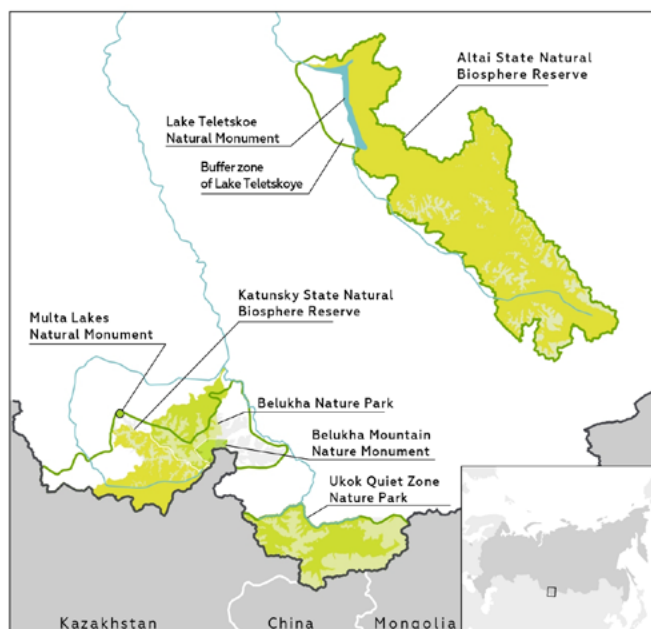


Fig. 1: Components of the Golden Mountains of Altai WH property. Map: Authors

## Ukok Quiet Zone Nature Park

In the summer of 2023, a visit to the nature park was conducted to gain an understanding of the effectiveness of conservation measures in the area.

The 2024 State of Conservation Report by the State Party states that “tourism is not very popular” in the Nature Park. We cannot agree with this. On the Internet, you can find at least 10 tourist companies offering tours to the Ukok Plateau for the summer of 2025. The peculiarity of these tours is that tourists are driven around the territory of the Nature Park in cross-country (off-road) vehicles. In addition to organised tours, the plateau is visited by individual travelers in cars and by residents from nearby settlements who come to the plateau to fish. In addition to cars, some tourists use quad bikes for traveling (Fig. 2, 3).



Fig. 2.

Photo: Authors



Fig. 3

Photo: Authors

As a result, extensive areas of soil and subsoil damaged by vehicles have been observed on the territory of the protected area (Fig. 4, 5). Such damage causes significant harm to the ecosystem by disturbing the structure and hydrological regime of the soil, as well as changing surface runoff in some areas. In the very cold climate where the ground is frozen for most of the year, the vegetation on the thin topsoil will take decades to recover.

During our stay in the Nature Park, we could not find any inspectors, including a staff member who could charge a fee to visit the park.



Fig. 4: Photo: Authors



Fig. 5: Photo: Authors



Fig. 6: The park's territory is polluted with rubbish – with rubbish and campfires located closer to the lakes. The information boards on the territory of the Park are in poor condition. Photo: Authors

The lack of control by park staff increases the threat of poaching and disturbance of rare and endangered species. For example, during our four-day stay in the park, we did not see a single bar-headed goose (*Anser indicus*; Red Data Book of the Russian Federation, IUCN Red List), although the Ukok Plateau is the main habitat of this species in the Altai.



Fig. 7: On the territory of the Nature Park there are buildings placed in the water protection zone of Gusinoe Lake (southern shore of the lake), which negatively affects the condition of water bodies. Fig. 6: The park's territory is polluted with rubbish – with rubbish and campfires located closer to the lakes. The information boards on the territory of the Park are in poor condition. Photo: Authors

It is practically impossible to find official information about the possibility of visiting the Nature Park, existing tourist camps, routes, checkpoints, etc. on the Internet.

It is necessary to stop uncontrolled tourist activities, off-road vehicles, and tourist parking in unequipped places on the Park's territory. Conducting tours directly by the Park authorities will allow more careful control of the territory and observance of the rules of visiting. It is necessary to check and relocate structures located in the water protection zone of water bodies, dispose of waste stored in the territory of the protected area, and repair or install new information boards.

### Belukha Mountain Nature Monument and Belukha Nature Park

As rightly noted in the 2024 State of Conservation Report by the State Party, "The territory of the Park has significant recreational potential; Lake Kucherlinskoe and Lake Akkem, which is located at the foot of Mount Belukha, remain the most visited routes."

Hiking, horseback riding, and helicopter tours are popular in these places. The large number of tourists provokes pollution with rubbish and faeces. And if the volunteers clean up the rubbish at the end of the season, faecal pollution is a big problem. For example, there are practically no toilets in the tourist camp next to Akkem Lake, where all tourists stay, and those that do



2022-06-10, Sentinel-2 L2A



2024-07-04, Sentinel-2 L2A

Fig. 8

exist are in extremely poor condition, forcing tourists to use bushes. Uncontrolled mass tourism also causes degradation of the soil, and vegetation cover.

The recreational facility at Lake Darashkol, mentioned in the WHW Report 2020, is still in operation, but we cannot say how often it is used.

### Lake Teletskoye

The 2024 State of Conservation Report by the State Party indicates that the possibility of including half of Lake Teletskoye in the “protective” zone of the Altai Reserve is being considered. However, the future of the so-called “buffer zone of Lake

Teletskoye” – which, according to the nomination, falls within the boundaries of the inscribed World Heritage site but has not had any protection status for 23 years – is still unclear.

In addition, it is alarming that the 2024 Report confirms that the license for the Maly Kalychak deposit is valid and does not deny the possibility of development of this deposit. Furthermore, the tourist infrastructure near Lake Teletskoye continues to develop and affect previously untouched natural areas (Fig. 8).

We hope that our concerns will be reflected in the decision of the World Heritage Committee at its 47<sup>th</sup> Session.

# Lake Baikal: Many Questions, Unsatisfactory Answers

Eugene Simonov, Rivers without Boundaries Coalition



Fig. 1: Grasslands at Lake Baikal are quite limited and valuable for biodiversity.

Photo source: <https://www.ecohubmap.com/hot-spot/pollution-of-lake-baikal/13ojkle5mww67>

The RwB would like to comment on selected paragraphs of the 2025 SoC Report submitted by the State Party of Russian Federation (RF)<sup>1</sup> in the light of recent developments at the Lake Baikal World Heritage property (LB). A 50-pages SoC report contains many interesting facts and statements but does not genuinely address most important questions raised in the 2024 Committee Decision<sup>2</sup> or in the Report of the 2023 UNESCO/IUCN Mission<sup>3</sup>. As with previous reports, absence of the Russian language original, coupled with an imperfect translation makes it very difficult to understand some conclusions and propositions.

## The Law on Protection of Lake Baikal (LPLB) under attack

The report contains no new facts on the development of the amendments to the LPLB but promise to send after “completion” (likely means “adoption”) commentary to each paragraph of the amendments. Previously (e.g. in 2023–4), RF provided draft amendments beforehand, which is more in line with the Committee decisions.

Meanwhile, the amendments to the LPLB were again proposed for the second (and the final third) hearing in the State Duma in late February 2025<sup>4</sup>. It is aimed at weakening Lake Baikal’s protection, and repeats most clauses of previous drafts which

evoked the Committee’s “concern at the weakening of the legal protection of the property at a time when the property’s ecological condition continues to deteriorate, which could place the property in potential danger in accordance with Paragraph 180(b) i) and iv) of the Operational Guidelines” (2024 Decision).

The amendment prepared for the 2<sup>nd</sup> and 3<sup>rd</sup> hearings propose a more extensive weakening of the LPLB by the following changes in land-use regulation within the World Heritage property:

Replacing special regimes of legal regulation in the Baikal natural territory, established in accordance with Article 5 of the LPLB by much weaker general legal norms applicable throughout Russia.

Allowing privatization of land plots (only by Russian citizens) and clearing of woody vegetation of land plots in settlements, while expansion of municipal lands of each settlement is not restricted by the law and there are multiple examples of their illegal encroachment into adjacent natural areas.

Permitting “sanitary cutting” of forests to fight pests and diseases (for a starter proposed on 8,000 ha of allegedly “dead” forest stands). The authorization of clear cutting of dead stands, combined with the high demand for coniferous wood both locally and from China, will create a motivation to make forest stands dead (mostly through arson) or declare them dead (through forgery in forest pathology surveys).

Till 2030 to exclude from the “forest fund” land plots (listed in annexes) earmarked for construction and reconstruction of priority roads, wastewater treatment facilities, engineering structures to confront geological hazards, and water infrastructure to control erosion and flood damage on all sizeable tributaries of the Lake Baikal. At least the lists of rivers and roads in the annexes seem to be grossly excessive and having a potential to cause significant damage to the OUV.

Removal of woody vegetation for the construction of various facilities inside Special Economic Zones (SEZ), if the EIA for each project is approved (e.g. in Baikal Harbor SEZ this could affect up to 3,500 hectares of natural ecosystems). Since it is also proposed that the expansion of Special Economic Zones will be decided by the Russian Government, this is setting no limits to future encroachment. Proposals to expand the SEZ are voiced almost annually.

There are many other less significant, but potentially problematic clauses, such as a requirement for those who “remove woody vegetation” to compensate it by planting<sup>5</sup> trees for one tree cut, which, likely, will spur the afforestation of remaining grasslands (the most biodiverse and scarce terrestrial ecosystems of the World Heritage property). A detailed critique of the draft bill has been supplied to the IUCN and UNESCO.

This time this draft legislation has the highest chances to be approved during the spring parliamentary session, as the Head of the Buryatia Republic has assured, and the “approval signature” of the President of the RF on an “appeal to help local people” that included only less harmful half of the amendments listed in the bill<sup>5</sup>, but this is being used by the proponents of the bill to push it through. However, granting the approval, the President prescribed to discuss amendments with expert community, while prominent figures in the Russian Academy of Sciences largely oppose most clauses in the proposed legislation and expressed this publicly in late February 2025 at a meeting with its proponents. Their written critique is still pending<sup>6</sup>.

## Rapid Developments at Special Economic Zones (SEZ)

In its SOC Report the RF clearly indicated its unwillingness to undertake Strategic Environmental Assessments, and has not shown any desire to present UNESCO for review by IUCN draft EIA reports with Heritage Impact Assessments of individual tourist resorts. Information presented in the SoC on SEZs is out of date (largely covers 2015–2021), while in 2024 at least four tourist resort projects of the Baikal Harbor SEZ (located entirely within the World Heritage) have announced the start of EIAs

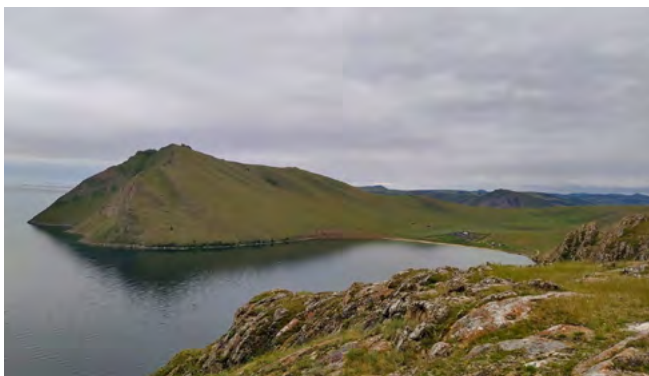


Fig. 2: Bezymannaya Bay, Lake Baikal.

Photo source: [https://www.tripadvisor.com/Hotel\\_Review-g298527-d8029316-Reviews-Tourist\\_Base\\_in\\_Bezymannaya\\_Bay-Irkutsk\\_Irkutsk\\_Oblast\\_Siberian\\_District.html#/media/8029316/497789032/p?albumid=107&type=0&category=107](https://www.tripadvisor.com/Hotel_Review-g298527-d8029316-Reviews-Tourist_Base_in_Bezymannaya_Bay-Irkutsk_Irkutsk_Oblast_Siberian_District.html#/media/8029316/497789032/p?albumid=107&type=0&category=107)

and disclosed some project documentation<sup>7</sup>. The most problematic project is proposed by “Cosmos Hotel Baikal” LLC at Bezymannaya Bay. The total project area is 381.9 ha characterized as “95% undisturbed”, and more than a dozen types of various tourist facilities are planned at that location with a total of 360 luxury bedrooms. The EIA documentation is very superficial, likely, not based on rigorous surveys.



Fig. 3: Computer animation of the planned hotel at the Bezymannaya Bay.

Source: <https://invest-buryatia.ru/cosmos>

According to media reports on March 11–12 2025, the “Mount Bychya” ski resort finally secured an investment of 46 billion roubles (USD 500 million), and an unnamed investor is developing detailed project documentation for this largest still pristine part of the SEZ<sup>8</sup>. The creation of such facilities will inevitably further degrade the OUV of Lake Baikal.

## Lakeshore Provinces on the Offensive

As legislative changes are pending at national level, the lakeshore provinces improvise solutions.

A Resolution of the Government of the Republic of Buryatia No. 747 dated 24.12.2024 “On Procedure for the Use of Green Plantings (tree and shrub vegetation) within the Boundaries of the SEZ “Baikal Harbour”” sets a largely alien national law, but a compelling way of circumventing current barriers to clearing of land for tourism development<sup>9</sup>.

The Government of the Irkutsk Province has filed a request to the Constitutional Court to check the compliance with the Constitution of the 1986 Resolution of the Council of Ministers of the RSFSR “On the Establishment of the Pribaikalsky National Park” in hope to extract from the Park 112,000 hectares of agricultural land, largely occupied by grasslands of high biodiversity value<sup>10</sup>.

As the national authorities are more and more hesitant to enforce regulations protecting the World Heritage, but are not daring to weaken them completely, various local stakeholders are testing other means to get control over exploitation of natural resources of the property.

## Water Resources Management

The Lake water level regulation by Irkutsk Hydro has been debated at the 46<sup>th</sup> Committee Meeting in India in 2024. Amendments to the draft decision made by the Committee have proven to be quite fruitful. The voice of UNESCO was heard and followed, but the devil is hiding in the detail...

The RF abstained from its initial intention to enact a “permanent resolution” on the lake level. On November 22, 2024 the Ministry of Natural Resources and Ecology of the Russian Federation (MNR) put up for public consultations a draft Resolution of the RF Government “On maximum and minimum values of the water level in Lake Baikal in 2025–2027”<sup>11</sup>. Largely it was a copy of the previous “temporary” regulation, which at the time evoked most serious criticism from UNESCO.

The “Explanatory Note” accompanying this Draft Resolution rightly pointed out that “*The Committee reminded the State Party of the need to refrain from adopting any legislative amendments that would increase water level fluctuations by more than 1 meter, due to the potential negative impact on the Site and its OUV*”. Russian and international CSOs immediately declared that the adoption of this new “temporary regulation” would still be a direct violation of the decision of the 46<sup>th</sup> Session, as it will increase allowable water level fluctuations in Lake Baikal to 2.31 meters instead of the 1 meter prescribed by the 2001 (permanent) Regulation “*On maximum and minimum values of the water level in Lake Baikal*”, which is currently still in effect.



Fig. 4: The rich pasturelands of the Selenga Delta are inundated by groundwater and there is limited space left for grazing livestock in many villages of the Kabansky district. This is reminiscent of the 1970s, when the lake first reached record levels, and local farmers had to slaughter entire herds of cattle. *Photo: RWB*

Widening this amplitude was proposed “only under extreme water regime conditions”, but arbitrary interpretation of the concept of “conditions of extreme water inflow” and the absence of reliable procedures to manage Lake Baikal level fluctuations have already led to significant environmental damage to the Lake Baikal World Heritage site – in particular, in 2021, when the level was raised to 457.23 m, which led to significant erosion and flooding of the lakeshores<sup>12</sup>. The proposed draft resolution allows for the recurrence of the same or significantly greater damage and does not contain mechanisms to prevent it.

As of mid-March 2025, the Russian Government has not yet adopted any regulations on the Lake Baikal water level, but the new country’s SoC Report declares an intention to enact the temporary regulation which was disclosed. Most likely it may happen if the Committee does not reiterate in its 2025 decision the same clause on the subject as in 2024.

The decision of the 46<sup>th</sup> Session of the Committee clearly requested the RF to submit for consideration by the IUCN “**a study and legislative proposals on all water management rules**”. So far, to the best of our knowledge, only an R&D on the Baikal water level has been submitted to UNESCO. The key water management documents required for IUCN’s consideration, such as the draft Regulations for Water Resources Use of the Irkutsk Reservoirs (RWRU), have not been submitted to date. Without the draft RWRU, it is hardly possible to assess and plan mitigation measures for the impacts on the OUVs of the UNESCO World Heritage Site. The RF’s SoC Report says that “*It is expected that the review of the results of the R&D BWL by IUCN experts will be completed by the end of 2026.*” Regrettably the SoC report says nothing about submitting the draft RWRU to UNESCO.

The Rivers without Boundaries Coalition considers a comprehensive review by IUCN the most important chance to mitigate the inappropriate dangerous water management practices in Lake Baikal.

We hope that the World Heritage Committee at its 47<sup>th</sup> Session will again urge the State Party to refrain from adopting any legislative amendments that would increase water level fluctuations by more than 1 meter, and, most importantly to remind the State Party to submit for IUCN’s review the draft Regulations for Water Resources Use of the Irkutsk Reservoir.

## Notes

- 1 State of conservation report by the State Party <https://whc.unesco.org/document/219190>
- 2 46COM 7B.52 - Lake Baikal (Russian Federation) (N 754) 2024 <https://whc.unesco.org/en/decisions/8578>
- 3 Report of the World Heritage Centre/IUCN Monitoring Mission to Lake Baikal (Russian Federation), 12-16 December 2023 <https://whc.unesco.org/document/207572>
- 4 <https://sozd.duma.gov.ru/bill/387575-8>
- 5 <https://buryatiya.com/more/24992>
- 6 <https://www.rbc.ru/society/01/03/2025/67c1b9fa9a79473dd4dabe91>
- 7 see municipal website <http://pribajkal.ru/documents/969/>
- 8 [https://tadviser.com/index.php/Company:Mount\\_Bychia\\_%28ski\\_resort%29](https://tadviser.com/index.php/Company:Mount_Bychia_%28ski_resort%29)
- 9 <https://ipbd.ru/doc/0300202412250009/>
- 10 <https://www.vedomosti.ru/society/articles/2025/02/19/1092977-problemi-pribaikalskom-parke>
- 11 <https://regulation.gov.ru/Regulation/Npa/PublicView?npaID=152682>
- 12 See p.26 of the RF’s 2022 SoC Report <https://whc.unesco.org/document/191672> and detailed submission by the RWB: Water Level Manipulation Severely Affects Lake Baikal. World Heritage Watch Report 2022 <https://www.researchgate.net/publication/364976397>

# Gold Mining as a Threat to Central Sikhote-Alin

Anonymous authors



Fig.1: The location of the Glukhoye subsoil plot, the Sikhote-Alin Reserve and the Central Sikhote-Alin World Heritage property.

Maps: <https://www.naturalworldheritagesites.org/sites/central-sikhote-alin>, Authors, Authors

On 15 August 2024, an official letter from the Ministry of Natural Resources of the Russian Federation to Vostok Invest LLC was published on the Internet (<https://t.me/greenserpent/21748>). As this letter made clear, Vostok Invest LLC requested the Ministry of Natural Resources of the Russian Federation to provide forest areas for use for the erection of capital constructions and blasting works for the purpose of exploration and mining of minerals at the subsoil plot 'Glukhoye'. The Ministry did not object to this activity.

The Glukhoye subsoil plot is located in the buffer zone of the Sikhote-Alin State Natural Biosphere Reserve in close proximity to the reserve (the shortest distance to the reserve boundary is 125 metres). The location of the subsoil plot in relation to the boundaries of the reserve and buffer zone is shown in Fig. 1.

Sikhote-Alin State Natural Biosphere Reserve is part of the World Heritage site "Central Sikhote-Alin". The 2024 State of Conservation report by the State Party confirms that a geological exploration license has been issued and is valid.

The Glukhoye subsoil area is located on the right bank of the Kolumbe River, in the headwaters of its right tributaries. Kolumbe River flows through the territory of the Sikhote-Alin Reserve on the western slope of the Sikhote-Alin range and is the main waterway in its northern part.

It should be noted that geological exploration works have already been carried out at the mentioned site in 2018-2019. The ditches left after the said works are visible on publicly available space images and clearly visible on the ground (Fig.2).

The project documentation for the geological survey provides for the following works: surface mining (bulldozer trenches),



Fig.2: Ditches left after previous geological exploration.

Photo: Authors

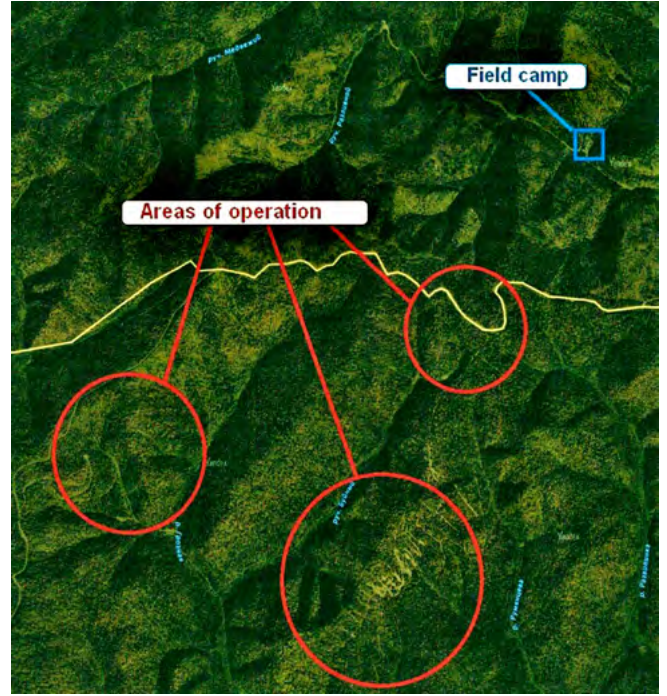


Fig.3: Areas proposed to be developed within the subsoil plot.

Map: Authors

drilling of boreholes (up to 410 metres deep), and associated construction. Bulldozers will be used, and the ditches will be 3.5 metres wide. After testing, the ditches will be backfilled.

During ditching and backfilling, the mass of soil will inevitably flow through watercourses and into the Kolumbe River, which is the main waterway of the Sikhote-Alin Reserve on the western slope of the Sikhote-Alin Ridge. Thus, these works will, in any case, cause damage to the natural complexes of the Reserve.

In addition, two of the three areas to be developed have not been previously affected by geological exploration (Fig.3). According to space images, these areas are completely covered with forest. Consequently, clear cutting of the forest will be required.

This area is also an ecological corridor between two specially protected natural areas (Sikhote-Alin State Reserve and Udegeyskaya Legenda National Park, see Fig. 1), important habitats for the Amur tiger. Geological exploration works, associated logging, road construction, constant noise pollution, and permanent presence of people will lead to disruption of the functioning of this corridor and, consequently, disturbance of the Amur tiger habitat.

The Reserve's area is inscribed on the World Heritage List as part of the Central Sikhote-Alin World Heritage property on the basis of criterion "iv". The Statement of OUV emphasizes that the area represents the "richest and most unusual temperate forests in the world". The area is home to species specific to the subtropics and northern taiga at the same time. The territory is crucial for the survival of rare species, including the Amur tiger and the Blakiston's fish-owl.

Mechanical pollution of small watercourses leads to changes in the hydroregime, possible localised drainage of territories adjacent to watercourses, and changes in vegetation. Pollution of the Kolumbe River, the main waterway of the western slope of the Sikhote-Alin ridge, will affect floodplain ecosystems, change vegetation, and may also harm the Blakiston's fish-owl population. Works on the migration path of Amur tigers may negatively affect the status of the group.

#### Geological works are due to start in February 2025.

According to the Operational Guidelines, paragraph 180, the criteria for inscription of a property on the List of World Heritage in Danger are:

##### a) ascertained danger:

- Human encroachment on boundaries or in upstream areas which threaten the integrity of the property.

##### b) potential danger:

- Planned resettlement or development projects within the property or so situated that the impacts threaten the property.

Thus, the decision to start prospecting, exploration, or ore mining at the Glukhoe subsoil plot in the buffer zone of the Sikhote-Alin Nature Reserve may be the basis for considering the inscription of the property on the List of World Heritage in Danger.

We consider that these works threaten the OUV of the World Heritage property and should be reflected in the decision of the World Heritage Committee.

# World Heritage Without Boundaries – two Incomplete Statements of OUV in Sichuan

Martin Lenk, World Heritage Watch



Geographic information of World Heritage (WH) properties must be accessible and adequate. “Maps should be made available to the local population and general public”<sup>1</sup>. For three Chinese sites, size information and maps are missing from the UNESCO website. This makes it impossible to evaluate whether the protected heritage site is well-managed, as it is unclear which territory the property includes.

In the case of “Mount Qingcheng and the Dujiangyan Irrigation System,” the problem has existed since its inscription in 2000, although the need for action seems to have been recognized. The protected areas forming the natural heritage site “Sichuan Giant Panda Sanctuaries – Wolong, Mt Siguniang and Jiayin Mountains,” inscribed in 2006, seem to have been incorporated into the Giant Panda National Park, newly created in 2018, which, however, has a completely different boundary. The implications may be severe as parts of the inscribed property remain outside the park’s protection zones.

It is in the best interest of state parties, heritage properties, and all stakeholders to resolve boundary issues swiftly after they occur, in order to facilitate adequate management and ensure the safeguarding of the Outstanding Universal Value of all sites.

## Publicly accessible boundaries and maps

Each inscribed World Heritage site is referred to as a ‘property,’ making ‘property’ the official English term for any object on the WH list. One key parameter of each property is its size, measured in hectares. The UNESCO website also uses the term ‘property’<sup>2</sup> when indicating the territorial size of a listed World Heritage site, which highlights the significance of spatial information. Understanding the boundaries – what lies inside and

what remains outside - is crucial for any inscribed component part.

Only precise information about the boundaries of a World Heritage site allows for an accurate assessment of management adequacy. Proper management is one of the three pillars of the Statement of Outstanding Universal Value (OUV). At the moment of inscription, the criteria are defined and authenticity is recognized. Over time, one could argue that the management and protection pillar becomes the most crucial part of the OUV.

For any site with unclear boundaries, management may be considered incomplete, leading to uncertainty about whether the OUV is truly maintained or at risk. If neither size nor boundaries are available, the Statement of OUV remains incomplete.

## Several Chinese properties have severe boundary issues

Of China’s 59 World Heritage sites as of early 2025, no size is indicated for three sites on the World Heritage Center’s website (see Fig. 1) nor are maps available at the respective folders of the website. Moreover, this issue is not a new problem that has occurred recently. Two of the properties were inscribed a quarter of a century ago or earlier.

Besides the above-mentioned properties, other boundary issues make it difficult to conduct and evaluate management activities. “Sichuan Giant Panda Sanctuaries – Wolong, Mt Siguniang and Jiayin Mountains” (SGPS) was inscribed as a conglomeration of various protected areas. In 2018, these and other protected areas were restructured and combined into the Giant Panda National Park. While this may make sense from a man-

Fig. 1: Chinese World Heritage sites without maps and indication of the property’s size

Dossier	Name	Year	Website
705	Ancient Building Complex in the Wudang Mountains	1994	<a href="https://whc.unesco.org/en/list/705">https://whc.unesco.org/en/list/705</a>
1001	Mount Qingcheng and the Dujiangyan Irrigation System	2000	<a href="https://whc.unesco.org/en/list/1001">https://whc.unesco.org/en/list/1001</a>
1083bis	Three Parallel Rivers of Yunnan Protected Areas	2003	<a href="https://whc.unesco.org/en/list/1083">https://whc.unesco.org/en/list/1083</a>

agement perspective, it resulted in a significant boundary-mismatch between the new national park and the inscribed site, with far-reaching consequences. Substantial portions of the inscribed UNESCO World Heritage site seem to be no longer protected within the Giant Panda National Park.

But China is not the only state party facing a challenge to clarify matter related to boundaries. In the current WH property table provided on the UNESCO website, area information for 119 properties in over 50 countries is missing ("0" or blank)<sup>3</sup> (Fig. 2 and 3). Some of those properties have maps.

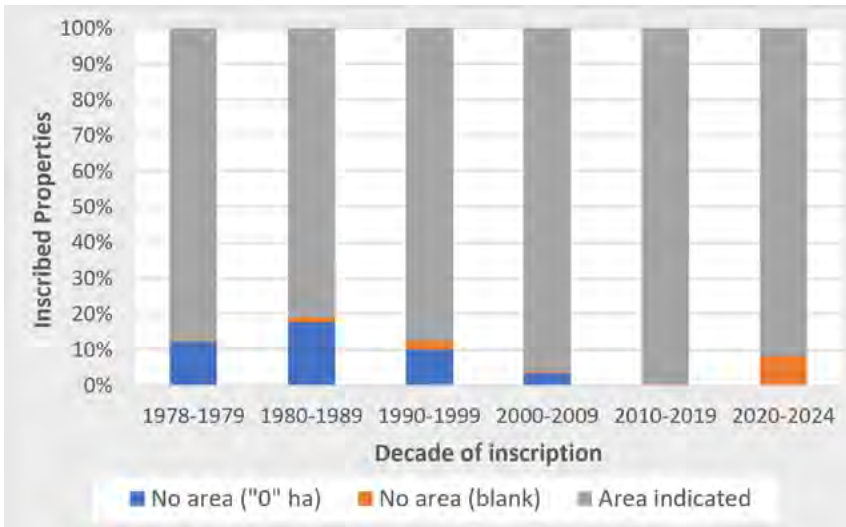


Fig. 2: Share of inscribed properties without area information provided.

Source: excel table from the UNESCO Website



Fig. 3: State Parties with at least one site of missing area information on the UNESCO Website.

Map source: downloaded excel table

### Mount Qingcheng and the Dujiangyan Irrigation System

Located in Sichuan province, this property consists of an unknown number of component parts. Studying the documents, one can guess approximately about their whereabouts. The UNESCO website provides neither maps nor the size of the property.

The 2012 "Periodic Reporting" document<sup>4</sup> does not report many management shortcomings, except for "The boundaries

of the World Heritage property are known by the management authority but are **not** known by local residents / communities / landowners." (answer 4.1.4., page 3). In section 6.1. page 9 of the same report, "Summary of actions that will require formal consideration by the World Heritage Committee" the size of the property was addressed without further comments: "Reason for update: Property (ha) 17,891, Buffer zone (ha)36,858, Total (ha)54,749".

The property was nominated as a mixed site but inscribed in 2000 as a cultural site only. It can be assumed that too little has been done in the past 25 years to rectify the consequences. The 54,749 hectares still reflects the original nomination, including the natural component part.

The 2023 "Periodic Reporting" document<sup>5</sup> informs on page 43 that "the boundaries are known by both the management authority and local communities / landowners". In addition, "the buffer zones of the World Heritage property are known and recognized by both the management authority and local communities/landowners". On page 56, the need to clarify geographic information is urged:

#### "Geographic information table

Reason for update: In the nomination dossier submitted to UNESCO in 1999, the property's protected area is identified as 547.495 square kilometers (the core area: 178.915 square kilometers; the buffer zone: 368.58 square kilometers). The property was inscribed on the List in 2000 and put on records when the protected area totaled 547.495 square kilometers. There has been no modification to the protected area of natural resources.

#### Map(s)

Reason for update: The property was nominated as a mixed site but finally inscribed as a Cultural Heritage site, and the nominated protected area was put on records.

Since the area of natural heritage is not directly related to the inscribed property's OUV, this area should be removed from the boundary of the inscribed property.

Changes to these items will need to go through the proper processes."

While there is some hope that the above-mentioned inconsistency may be resolved during the current reporting cycle, it does not explain the unavailability of maps for the inscribed

cultural component parts. During a site visit in April 2024, the friendly staff of the visitor center in Qingchengshanzen replied to the author’s question about whether it would be possible to see a map of the World Heritage property. They stated that the map is subject to national security and can’t be shown to tourists.



Fig. 4: Accurate maps are rare, so visitors have to use sketch maps to find their way around, e.g. the sights of the “back slope” of Mt. Qingcheng component part. Photo: Martin Lenk, 27.4.2024

The content table of the nomination dossier includes a list of maps (Part 1, subchapter 5), even though the maps themselves are missing. The nomination document includes a summary, dated 20 July 1999, noting that the property was nominated as a mixed site. On page 179 of the file, it mentions three components: “The overall plan of the property covers three components: the Dujiangyan Irrigation System (231.5ha), Mount Qingcheng (1,522ha), and the Longxi Nature Reserve (16,138ha).” During the author’s site visit, the spatial situation indicated that there are not three, but four component parts, as Mount Qingcheng consists of two component parts: front slope and back [or rear] slope<sup>6</sup> (Fig. 4), which are separated from each other. Out of the 1,522 ha, the front slope part of Mount Qingcheng may cover about 890ha.

Parts of Mt. Qingcheng overlap with the SGPS natural WH property, inscribed in 2006. This is one of the rare cases where

areas belong to two WH properties, in this case a natural and a cultural site. This is also featured at the UNESCO website under the section “Protection by other conservation instruments”<sup>7</sup>.

### Sichuan Giant Panda Sanctuaries – Wolong, Mt Siguniang and Jiajin Mountains

The Longxi Nature Reserve is one of the remaining habitats for the Giant Panda in Sichuan. The component represented key natural features of the mixed nomination “Mount Qingcheng and the Dujiangyan Irrigation System”. Once the site was inscribed for cultural criteria only, China developed a new approach to get the iconic Giant Panda on the World Heritage list.

In 2006, “Sichuan Giant Panda Sanctuaries - Wolong, Mt Siguniang and Jiajin Mountains” (SGPS) was inscribed. Its size of 924,500 hectares is substantial and equals approximately Lebanon or Crete Island. Additionally, there are half a million hectares of buffer zone. While a few valleys with settlements were excluded from the property, the site appears largely un-fragmented.

The Giant Panda National Park (GP NP) established in 2018 is several times larger than the inscribed property but has completely different boundaries. As a result, substantial parts, perhaps 30% of the WH site, remain outside the GP NP protection zones. A solely partial overlap is also confirmed by the 2023 Periodic Reporting document on page 15: “With the establishment of Giant Panda National Park, which is partly overlapped

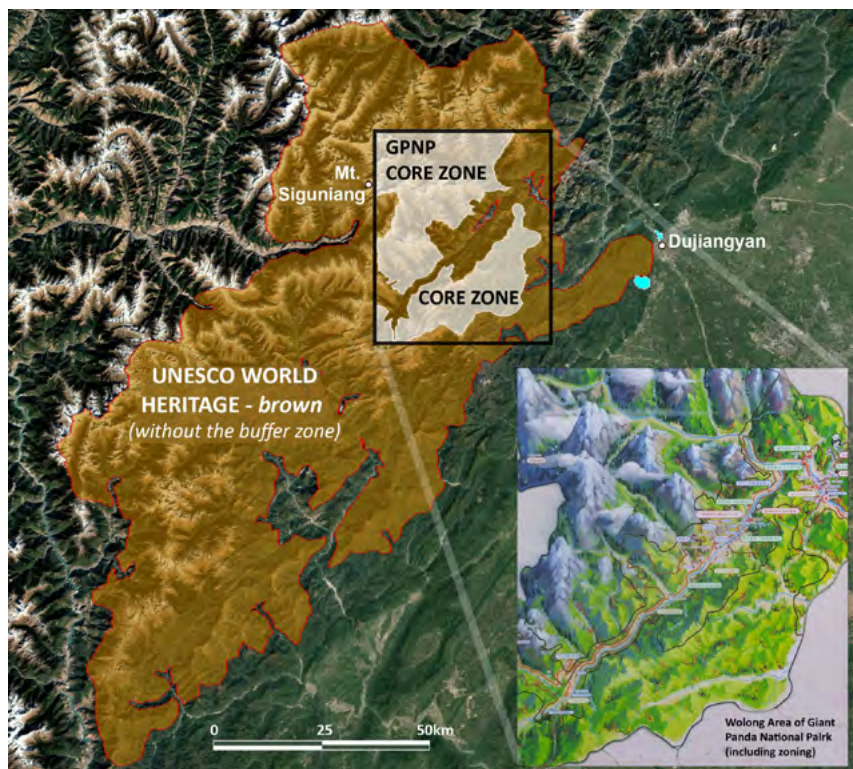


Fig. 5: Map of ‘Sichuan Giant Panda Sanctuaries - Wolong, Mt Siguniang and Jiajin Mountains’ WH property. The mismatch between the WH and the Giant Panda NP has bizarre dimensions. Core, buffer or development zone of the park: all can be found within the WH, and likely in the buffer zone of the WH as well. Map: Google Earth / Martin Lenk



Fig. 6: Roadside pole of the “Wolong area of Giant Panda NP”. The Chinese/English text beyond the QR-code provides basic information, mentions the world heritage, but not the zoning of the GP NP. Photos: Martin Lenk, 27.4.2024

with the property, and restructuring of the management units (many of them integrated into the national park), the management plan needs to be updated<sup>8</sup>. The report mentions the GP NP eight times, pointing out the existence of “The Master Plan for the GP NP” (page 40), the fact that the property’s management is coordinated by the Sichuan Forestry and Grassland Administration (page 41), and informs that the monitoring of key indicators of OUV shall be integrated into the Giant Panda National Park monitoring system (page 50). The boundary mismatch between the GP NP and the WH property is not addressed. Consequently, there is no need to propose items that will require formal consideration by the World Heritage Committee (page 53).



Fig. 7: The high-speed train from Dujiangyan to Mt. Siguniang under construction crosses the WH property, but may not impact the core and buffer zones of the GP NP. Photo: Martin Lenk, 27.4.2024

Between 2006 and 2025, China’s GDP has quadrupled, along with an increase of development pressure on the one hand and the availability of resources to protect heritage on the other hand. Any significant development inside a WH property demands the involvement of the WH Centre in line with the obligations outlined in the operational guidelines. The author, visiting the property in 2024, took notice of the construction of a new high-speed railroad track across the property which may affect the property’s OUV (Fig. 7). Whether or not the state party has been in contact during the early planning stages of this mega project with UNESCO and the advisory bodies is not known to the author.

However, this example illustrates the importance of a clarification of the (boundary) status of the WH site in relationship to the GP NP. Otherwise, a grey zone is created, with potential to jeopardize the OUV of this spectacular property.

The latest (2020) **IUCN Outlook assessment**<sup>9</sup> provides good marks to SGPS. The assessment mentions the “The incorporation of the site into the new Giant Panda National Park...” but the authors do stress any boundary issues, as “the whole site is now included in the Giant Panda National Park...” (page 5) to their knowledge, other than the online maps (see figures 5 and 6) or the above mentioned reported “partial overlap” are indicating. This matter must be subject to clarification. Possibly, the situation cannot be cured by a management plan update only but may demand another solution according to the convention’s procedures.

## Notes

- 1 <https://world-heritage-watch.org/content/wp-content/uploads/2022/11/Potsdam-Papers-2022.pdf> (see Potsdam Papers, page 110)
- 2 For example, the ‘Nubian Monuments from Abu Simbel to Philae’ consists of ‘Property: 374.48 ha’ (<https://whc.unesco.org/en/list/88> )
- 3 <https://whc.unesco.org/en/syndication> [downloaded Excel file, as of 29 April 2025]
- 4 <https://whc.unesco.org/document/164573> (Periodic Reporting Cycle 2, Section II), [PR-C2-S2-1001-2.pdf]
- 5 <https://whc.unesco.org/document/217566> (Periodic Reporting Cycle 3, Section II), [PR-C3-S2-4709.pdf]
- 6 In figure 3 translated as “Rear Mount Qingcheng Scenic Area”
- 7 <https://whc.unesco.org/en/list/1213> and <https://whc.unesco.org/en/list/1001>
- 8 <https://whc.unesco.org/document/217665> , (Periodic Reporting Cycle 3, Section II), [ PR-C3-S2-4809.pdf]
- 9 <https://worldheritageoutlook.iucn.org/explore-sites/sichuan-giant-panda-sanctuaries-wolong-mt-siguniang-and-jiajin-mountains>

# IUCN and UNESCO Must Insist on Additional Studies under the SEMP for the Sundarbans

Sultana Kamal and Sharif Jamil, National Committee for Saving the Sundarbans (NCSS) and Dhoritri Rokhhay Amra (DHORA)



The “Final” Strategic Environmental Assessment of the South-west Region of Bangladesh for Conserving the Outstanding Universal Value (OUV) of the Sundarbans (SEA) and the related Strategic Environmental Management Plan (SEMP) should be revised with scientific integrity, data transparency, active public participation, and a thorough evaluation of all major industries and infrastructure that could affect the OUV of the Sundarbans. This is something that NCSS has been advocating for since 2021. (The 2023 World Heritage Watch report has our in-depth analysis of the SEA).

The World Heritage Center and IUCN informed the World Heritage Committee in 2023 that “more research was needed to more explicitly determine the potential impacts on the OUV of the property” and that the Strategic Environmental Assessment for Bangladesh’s Sundarbans was inadequate.

They cautioned that there was “no distinction between specific impacts on the OUV of the property and the impacts identified under the various development scenarios for the wider region.” The rationale and viability of conclusions and mitigation strategies are unclear because they seem to be predicated on assumptions (for example, that if there is a “considerable reduction of anthropogenic pressure and improved management practice, suitable habitat improves, and poaching is brought to a minimum,” the tiger population will experience “healthy growth” under a “high-growth” development scenario).

There is a clear risk of direct, indirect, and cumulative impacts from developments in the study area over the next 20 years if appropriate and adequate mitigation measures are not taken, according to the SEA, which also notes that the extent of the potential impact on the OUV is unknown and needs more research. Additionally, a more thorough analysis of potential risks and impacts is still required. Not all factors are taken into account, including land conversion, freshwater availability, climate change, and socioeconomic benefits to local residents.

In addition, they recommended that the Committee urge the State Party to “conduct additional research to precisely evaluate the possible hazards and effects of various scenarios on the OUV, which also take into account elements like freshwater flow and climate change, and that the results of additional

research will guide future decision making to guarantee the long-term preservation of the OUV and prevent negative effects from extensive industrial development in the area of the property.”

The State Party was asked to “continue to implement the SEMP in order to avoid direct, indirect, and cumulative impacts from developments in the South-West region over the next twenty years that are identified in the SEA” and to “submit the additional studies and data-gathering framework outlined in chapter 4.8 of the SEMP to the World Heritage Centre for review as soon as they are completed.” However, the 45 COM Committee trimmed back that advice.

## The 46th session in Delhi

During the course of time, we continued advocacy with the UNESCO World Heritage Committee during the 46th session in Delhi together with Earth Justice and World Heritage Watch though it was not an agenda item there. However, in Riyadh during the 45th session, the committee came up with specific decisions that are yet to be complied by the state party. Among many, the key decisions (45 COM ¶B.14) are:

1. Appreciates the national measures taken by the State Party on the Maitree Super Thermal Power Plant (MSTP) to avoid impacts on the Outstanding Universal Value (OUV), in accordance with the Environmental Management Plan, and further appreciates the decision of the State Party to revise the Power System Master Plan (PSMP) to replace the second unit of the MSTP with solar PV power plant and subsequent cancellation of six other coal-fired power plants as part of Nationally Determined Contribution (NDC);
2. Notes with appreciation the completion of the Strategic Environmental Assessment (SEA) and the Strategic Environmental Management Plan (SEMP) for the South-West region of Bangladesh in 2021 and submission to the World Heritage Centre in 2023. Further notes the findings of the SEA that the scale of potential degradation of the OUV of the property through proposed development scenarios remains unknown, , and also requests the State Party to:
  - f) ensure that decision making regarding large-scale industrial development in the vicinity of the property is based

on the provisions of the Guidance and Toolkit for Impact Assessments in a World Heritage Context in order to ensure the long-term protection of the OUV,

- g) keep the World Heritage Centre informed of any major project that may impact on the OUV in conformity with Paragraph 172 of the Operational Guidelines;
- 3. Noting that the India-Bangladesh Joint Working Group and the India-Bangladesh Joint River Commission are important bilateral mechanisms to address trans-national matters, reiterates its request to the States Parties of Bangladesh and India to strengthen cooperative action for the eco-hydrology of the property and the adjoining Sundarbans National Park in India;
- 4. Acknowledges that continued sustainable development is a shared responsibility for all, and the State Party has the obligation to implement the relevant targets of the Sustainable Development Goals (SDGs) and therefore, requests the State Party to use the SEMP as a basis for deciding on the large development projects and take adequate national measures to protect the OUV of the property;



Fig. 1 and 2: A public hearing on “Climate Justice and Protection of the Coastal Ecosystem, Livelihoods, and Flora and Fauna of the Sundarbans” was organized at Mongla with the participation of more than 3000 community people. The hearing was held on Friday (November 22, 2024) afternoon, and organized by Waterkeepers Bangladesh and Dhoritri Rokhhay Amra (DHORA) where the CEGIS report of the pollution from Rampal Power Plant was revealed. Photos: Hasib Sarder

- 5. Takes note of the ongoing preparation of the new 2025-2035 Integrated Resource Management Plan (IRMP) for the Sundarbans and requests furthermore the State Party to continue consultations with the communities;
- 6. Finally requests the State Party to engage with the World Heritage Centre on a regular basis and submit to the World

Heritage Centre, by 1 December 2025, a progress report for examination by the World Heritage Committee at its 48th session, and a State of Conservation report by 1 February 2029, for examination by the Committee at its 51st session.

### Community people demand to shut down Rampal Power Plant

Recently after the changes in the political landscape in Bangladesh, CEGIS in their monitoring report identified 10 times higher mercury pollution to the Pashur river from Rampal Power Plant. The fishing community around the Sundarbans are struggling for their existence due to the alarming decrease of the fish population. The community people along with NCSS and DHORA demonstrated three big protests with the demand to shut down the Rampal Power Plant.



Fig. 3 and 4: On 29 November, a public gathering was held at Mongla with the demand to shut down Rampal coal plant, protect Pashur River and the Sundarbans, and ensure climate justice. DHORA, Waterkeepers Bangladesh and Pashur River Waterkeepers jointly organized the gathering where about 4000 fishers, farmers, forest resource collectors and villagers attended. Video link: [https://drive.google.com/file/d/1AP0Vnqg-43XQnGKCoXJokw5VNDNw\\_nb-/view](https://drive.google.com/file/d/1AP0Vnqg-43XQnGKCoXJokw5VNDNw_nb-/view)

Photos: Hasib Sarder (Fig. 3), Noor Alam SK (Fig. 4)

### Role of the interim government

Since August 5, the Interim Government is in charge, the Advisor, Ministry of Environment, Forest and Climate Change announced that within 10 Km radius there no industries would be allowed which was also a court verdict declared during the tenure of previous government. However, The Advisor is not put emphasis to control on existing polluting industries there



Fig. 5 and 6: On December 27, 2024, again a public gathering was held to demand the cancellation of Rampal Coal Plant to save the Pashur river and Sundarbans from destruction, for safe water, air and sustainable livelihood. DHORA, Waterkeepers Bangladesh and Pashur River Waterkeepers jointly organized the gathering where more than 4,500 fishers, farmers, forest resource collectors and villagers attended. For organizing the public gathering, also to ensure the wider participation of affected community, people around the Sundarbans conducted at least 05 preparatory meetings where hundreds of people participated. Video link: <https://drive.google.com/file/d/10mK6CKvm-k6HwKqXH6SqMEwwN3E4l6zHz/view>  
 Photos: Hasib Sarder



Fig. 7 and 8: On 30 October 2024, a fishers and farmers public gathering was held at Taltoli on the demand to shut down the coal plant, fishing nets, land and climate justice. DHORA and Payra Nadi Hilsa Raksha Committee jointly organized the event. More than 3000 farmers, fishers, and villagers attended the assembly and demanded shutting down of Barishal Coal Based power plant that had been also harming the Sundarbans and Payra river. Video link: [https://drive.google.com/file/d/1AObqjh7vMkocv4OarmWx-jPhUM\\_6SS5hl/view](https://drive.google.com/file/d/1AObqjh7vMkocv4OarmWx-jPhUM_6SS5hl/view)  
 Photos: Arifur Rahman

or the cancellation of Rampal coal plant. In order to preserve the Sundarbans, the interim government in Bangladesh should have prioritize the mangrove forest’s immediate protection and sustainable management, tackling risks from resource exploitation, illicit activity, and climate change. Should enhancing law

enforcement, keeping an eye on resource usage, and encouraging community involvement for conservation of the property could all be part of this. More importantly, the government should immediate initiate a complete revision of the Strategic Environmental Management plan submitted earlier.

# Lack of Information on Military Training Hinders the Conservation of Northern Okinawa

Hideki Yoshikawa, Okinawa Environmental Justice Project  
 Masami Mel Kawamura, Informed Public Project  
 Akino Miyagi and Shin-ichi Hanawa

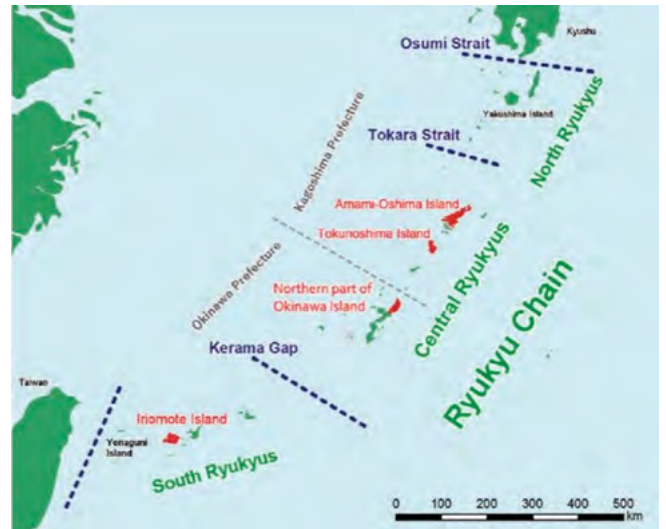
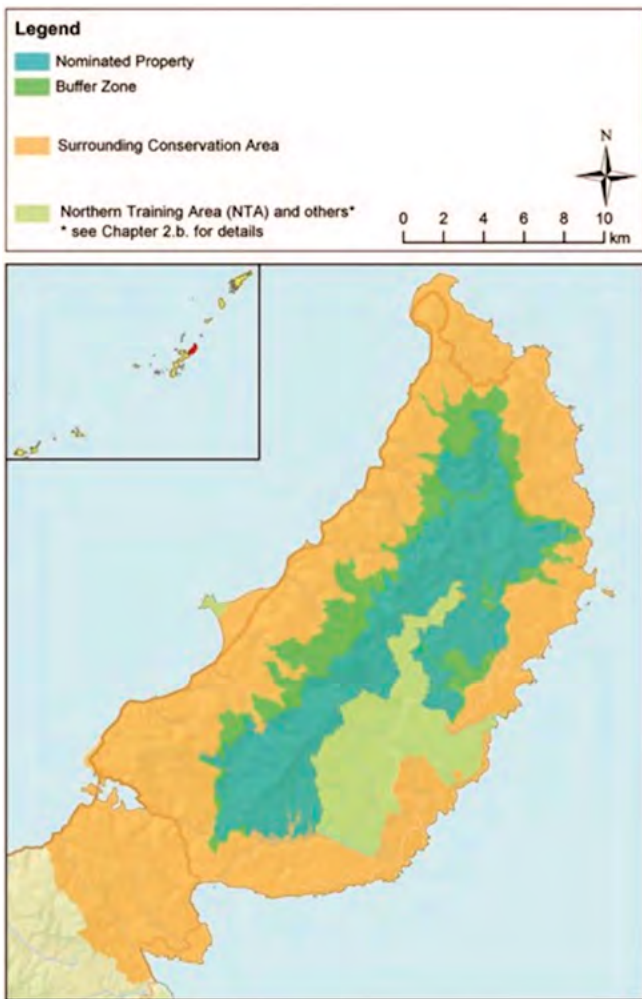


Fig. 1: The Northern Part of Okinawa Island (NPOI) and the U.S. military’s Northern Training Area (NTA) (2019) as part of the World Heritage property “Amami-Oshima Is., Tokunoshima Is., Northern Part of Okinawa Is., and Iriomote Is.” (2019).  
 Maps: Ministry of the Environment of Japan

insights, our efforts have not yielded meaningful outcomes. We argue that the lack of such information hinders efforts to secure the NPOI’s Outstanding Universal Value (OUV). Therefore, we present our recommendations.

It has been almost four years since the Northern Part of Okinawa Island (NPOI) and three other sites were inscribed in 2021 as World Natural Heritage for their rare endemic species and rich biodiversity. Throughout the inscription process and since the inscription, we have expressed concerns about the presence of the U.S. military’s Northern Training Area (NTA) next to the NPOI, the impact of military training, and military waste left in the NPOI. We have also raised concerns regarding the Japanese government’s reluctance to address these issues.

Over the past year, we have sought information about how the Japanese government and the U.S. military have attempted to address these issues. Although we have obtained some positive



Fig. 2: A view of NPOI and NTA from a visitor center (2024). Photo: Hideki Yoshikawa

## The Roles of UNESCO, IUCN, and the WHW Network

The 2023 document of the Japanese government, obtained through *Japan’s Act on Access to Information Held by Administrative Organs* by one of the authors, indicates that UNESCO,

IUCN, and the World Heritage Watch Network effectively encouraged the Japanese government to take action.

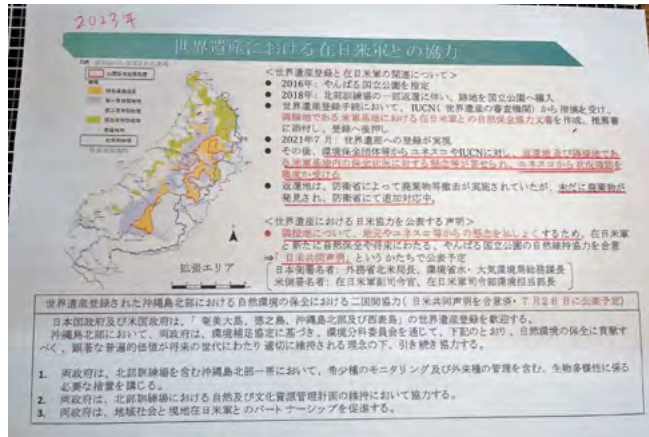


Fig. 3: This Japanese government document (2023) shows internal discussions about the inquiries from UNESCO, IUCN, and the WHW network (2023). Source: Ministry of the Environment of Japan

In our report in the *World Heritage Watch Report 2024*,<sup>1</sup> we highlighted that the Japanese government and the U.S. military issued a Joint Statement in July 2023, committing to collaborative efforts to conserve the NPOI. We commended them and expressed that the three new conservation frameworks included in the statement would prove effective. The 2023 document indicates that the joint statement was prompted by inquiries from UNESCO and IUCN, which were made after civil society raised concerns regarding the U.S. military-related issues. In response, the Japanese government and the U.S. military issued the Joint Statement to “dispel the concerns expressed by the local community, UNESCO, and others.”



Fig. 4: An MV-22 Osprey flying low over the local road near the NPOI (2021). Photo: No Helipad Takae Resident Society

However, it remains unclear how the new frameworks have been implemented and whether they have produced effective outcomes. It is also puzzling that during the two meetings with NGOs, the officials from the Ministry of the Environment did not acknowledge that UNESCO and IUCN had contacted the Ministry regarding these issues.<sup>2</sup>

### The Ministry of the Environment’s Reluctance to Address the Issues

The Ministry of the Environment’s reluctance to address the issues of the NTA, military training, and military waste in relation to the NPOI and the Yambaru Forest became apparent again in a new National Park Conservation Plan Draft (2025).<sup>3</sup> The Draft fails to meet Sections 96 and 97 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

In the 2019 nomination dossier of the NPOI prepared by the Ministry, the National Park Conservation Plan was described as one of “the highest-ranked strict protection measures in the Japanese protected area system” (p. 142), which “provides protective regulations and visitor facility plans” (p. 244). However, the Draft does not mention that the U.S. military’s dangerous and toxic waste has been found in the NPOI and that the Ministry of Defense has been cleaning it up. The Ministry of Defense was not included in the Yambaru National Park Council (p. 63), a collaborative planning and implementation umbrella organization. Moreover, all the maps in the Draft, including one showing land usage in the areas around the NPOI, fail to show the presence of the NTA.

Meanwhile, the Draft insists that the natural environment of the Northern Training Area has been adequately conserved and managed through the Environmental Division under the U.S.-Japan Joint Committee (pp.1–2). However, no scientific report has been available to the public to substantiate the Draft’s claim.

### The Lack of Information Regarding the Impacts of Military Training

The lack of information regarding the impacts of the U.S. military’s training on the environment of the NPOI, particularly concerning endemic and endangered species, has been a major concern. This troubling situation continues while the training appears to have intensified and now involves the militaries of other nations. We believe this situation fails to meet Section 96 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

The Ministry of the Environment has not publicly presented any monitoring studies regarding the impacts of the U.S. military’s training on the NPOI. It is unclear whether it has conducted such studies. One of the major concerns is the impact of training with the MV-22 Osprey aircraft on the endemic and endangered birds, such as the Okinawa woodpecker. The MV-22 is

known for its low-frequency noise and “rotorwash.” The U.S. military conducts landing and takeoff training in the NTA and terrain flight training over the NPOI. The U.S. military’s study indicated that “If nesting or roosting (sleeping at night in trees) protected bird species occur in forest edge areas near the landing point, significant impacts could occur due to an increase in rotorwash from the MV-22 aircraft.” (p. 4–42).<sup>4</sup>

NGOs have also expressed concerns to the Ministry that the U.S. military’s jungle warfare training could involve soldiers inadvertently consuming endangered species as they have to find food in the NTA.<sup>5</sup>



Fig. 5: World Heritage Yambaru Forest Watch Tent (2024). Photo: Hideki Yoshikawa

Meanwhile, the U.S. military has not released the 2024 *Integrated Natural Resources and Cultural Resources Management Plan* (INRCRP) regarding the U.S. military facilities in Okinawa. The previous INRCRPs provide information on the environmental conditions of the NTA, which the Ministry of the Environment considers a de facto buffer zone for the NPOI, and the military’s conservation measures.<sup>6</sup> It is anticipated that the 2024 INRCRP should include a section regarding the NPOI, as the Ministry of the Environment was involved in its preparation.

However, the INRCRPs cannot be regarded as a substitute for monitoring studies for the NPOI because it focuses on the NTA, and the previous INRCRPs did not include detailed studies on the impacts of military training on the environment.

Moreover, as the geopolitical situation in East Asia has become volatile, military training at the NTA has been intensifying, involving the Japanese Self-Defense Forces and allied countries such as the United Kingdom and the Netherlands. In light of this, we sent a letter to the United Kingdom and the Dutch militaries inquiring about their joint training with the U.S. military and whether they took any environmental protection measures while at the NTA.<sup>7</sup>

While the Dutch military has not yet responded, the U.K. military replied that there was “no information in scope of your request is held.” It also noted that “there were no British Armed Forces involved in any joint training exercises at the US Military Northern Training Area in Okinawa, Japan in 2022.”



Fig. 6: The U.K. Ministry of Defence’s reply to Civil Society’s Freedom of Information Request (2025). Source: The U.K. Ministry of Defence

This statement contradicts the widely circulated report from Japanese media outlets. Based on a press conference held by U.S. military officials in 2023, the Japanese media reported that the U.K. and Dutch militaries participated in joint training in 2022.<sup>8</sup> The confusion reflects the current state of information regarding military training in the NTA and, consequently, its impacts on the NPOI.

## The Suppression of an Environmental Defender

Akino Miyagi, one of the authors of this report, has led efforts to uncover the U.S. military’s waste in the returned areas of the NTA, which have been incorporated in the NPOI. She has also protested against the Japanese government’s continuing reluctance to officially acknowledge the presence of military waste in the NPOI and the U.S. military’s training in the Yambaru forest. To suppress her efforts and protests, the Japanese government filed lawsuits against her for violating various laws, including the Road Traffic Act and the Explosives Control Act. In March 2025, she was convicted and sentenced to three years in prison, suspended for four years, and fined more than 300,000 yen (U.S. \$ 2,000).<sup>9</sup> This situation is extremely troubling.

As we reported in the WHW Reports, Miyagi’s efforts prompted the Ministry of Defense to begin cleaning up military waste in the NPOI<sup>10</sup> and to admit that tons of dangerous and toxic military waste still remain in the NPOI.



Fig. 7: SOS sign made of U.S. military waste in the NPOI (2021). Photo: Akino Miyagi

We reported the suppression of Miyagi to the UN Special Rapporteur on Military Activities and Toxics, arguing that civil society's efforts to seek environmental information must not be hindered or threatened.<sup>11</sup>

## Recommendations

1. The Japanese Ministry of the Environment, in cooperation with the U.S. military, conducts a monitoring survey regarding the impacts of U.S. military training on the environment of the NPOI. In particular, it assesses the effects of aircraft noise and pallet firing training on endemic endangered species, including the Okinawa woodpecker. To effectively conduct monitoring, the Ministry needs to establish baseline information. This information should include estimated numbers and habitats of the endangered species (the Okinawa woodpecker and the Yambaru rail).
2. The U.S. military makes its studies regarding the impacts of military training on the environment of the NTA and NPOI publicly available. The Japanese government aids in translating these studies into Japanese.
3. The Japanese Ministry of the Environment, with assistance from the U.S. military, is developing a long-term plan to clean up military waste and restore the environment in the affected areas of the NPOI.
4. The Japanese and U.S. governments begin a review of military training and presence in the NTA adjacent to the NPOI, engaging in discussions about the possibility of ceasing military training and returning the NTA to Okinawa and Japan.
5. To ensure the OUV of the NPOI, local citizens' participation in seeking information regarding its condition must be encouraged, not hindered or threatened.
6. UNESCO and IUCN continue to urge the Japanese and U.S. governments to adhere to the Guidelines and their respective laws and regulations to ensure the OUV of the NPOI.

## Notes

- 1 Yoshikawa, H. et al. (2024). "Northern Okinawa: A Review of Japanese and U.S. Measures is Urgent." *The World Heritage Watch Report 2024*. World Heritage Watch. Berlin.
- 2 The NGO meetings with the Ministry of the Environment were held in November 2024 and April 2025.
- 3 Okinawa-Omami Nature Conservation Office (2025). Yambaru Kokuritsu Koen Kanriuneikeikaku (pabukome an) [Yambaru National Park Management Plan (Draft for Public Comments)].
- 4 Marine Corps Installations Pacific (2012). *Environmental Review for Basing MV-22 Aircraft at MCAS Futenma and Operating in Japan*.
- 5 This concern was expressed at the NGO and Ministry of the Environment meeting in November 2024.
- 6 Marine Corps Installations Pacific, Marine Corps Base Camp Smedley D. Butler, Okinawa, Japan (2019). *Integrated Natural Resources and Cultural Resources Management Plan*.
- 7 Okinawa Environmental Justice Project (2025). "Press Release: FOIA request sent to Dutch and British militaries regarding their training in U.S. military's Northern Training Area." <https://okinawaajep.blogspot.com/2024/12/press-release-foia-request-sent-to.html>
- 8 NHK (Japan Broadcasting Corporation) (2024). Beigunkunrenjo deno kunren ni gaikokubun heishi sannka gaimusho ya senmonka komento [Comments from the Ministry of Foreign Affairs and experts on foreign military participation in training at the U.S. military's training facilities]. May 9, 2024. <https://www3.nhk.or.jp/inews/okinawa/20240509/5090027711.html>
- 9 McElhiney, Brian and Koja, Keishi (2025). "String of anti-base protests brings suspended sentence for Okinawa woman." *Stars and Stripes*. March 7, 2025. [https://www.stripes.com/theaters/asia\\_pacific/2025-03-07/akino-miyagi-okinawa-protest-naha-17063756.html](https://www.stripes.com/theaters/asia_pacific/2025-03-07/akino-miyagi-okinawa-protest-naha-17063756.html)
- 10 IDEA Consultants, Inc. (Ministry of Defense contracted company) (2022). *Hokokusho hokubukunrenjo henkan-atochi haikibutsu chosa* [Report on waste materials in the returned areas of the Northern Training Area].
- 11 Okinawa Environmental Justice Project and Okinawa Human Rights Council (2025). "U.S. Military's Central Training Area and Northern Training Area in Okinawa, Japan: Military Activities and Toxics," submitted to U.N. Special Rapporteur on Toxics and Human Rights.

# The Great Barrier Reef

Imogen Zethoven, on behalf of the Australian Marine Conservation Society and WWF-Australia



The outlook for the Great Barrier Reef remains “very poor” and the property’s “integrity continues to be challenged”. These were the findings of the five-yearly Outlook Report<sup>1</sup> released last year by the Australian Government’s Great Barrier Reef Marine Park Authority.

## Climate Impacts

The greatest threat to the property is climate change. Last year, the most widespread and severe thermal stress event resulted in considerable mortality, particularly in the southern Great Barrier Reef. While a complete analysis of the impact of the event will not be published until August this year, the Australian Institute of Marine Science (AIMS) has uploaded<sup>2</sup> completed or “in progress” findings for all sections of the World Heritage property. In three of the 11 sectors, AIMS scientists found the single largest annual decline in hard coral cover since monitoring began 39 years ago.

This year, thermal stress is highest in the far northern section of the Great Barrier Reef where, as of 22 February, sea surface temperatures have remained at 13 Degree Heating Weeks for two weeks.<sup>3</sup> In addition, a monsoonal trough over North Queensland has led to many rivers in the region reaching major flood levels, resulting in large flood plumes of freshwater and sediment entering the property in the northern region.<sup>4</sup> (See the photographic documentation at the end of this paper.)

## Climate Policies and Actions

Currently, Australia’s climate policies and planned actions are inadequate to protect and conserve the Outstanding Universal Value of the Great Barrier Reef. Whilst some very welcome progress has been made, to date Australia is not on track to limit temperature increases to 1.5°C above pre-industrial levels. The current 2030 emissions reduction target of 43% is not 1.5°C aligned. To correct this, Australia’s climate policies must be significantly improved across both in-country and exported emissions. Australia has significant capacity to do this in a way that is good for the economy, supports jobs and reduces future climate impacts on the Great Barrier Reef.

The Queensland Government’s *Clean Economy Jobs Act 2024* (Qld Climate Act) is a very welcome commitment that increases

the Australian Government’s ability to set a strong 2035 emissions reduction target, given Queensland contributes approximately a third of Australia’s domestic emissions. The Qld Climate Act contains a 75% below 2005 by 2035 emissions reduction target for Queensland. This is a very welcome step that is not yet in line with a 1.5°C pathway for Queensland but provides a strong baseline to work from to ratchet up ambition through to 2035.

Unfortunately, the likelihood of the new Queensland Government, elected in October 2024, meeting these targets is currently at significant risk given an election commitment to repeal the *Energy (Renewable Transformation and Jobs) Act 2024* which supports meeting the emission reduction targets, particularly through legislating appropriate renewable energy targets.<sup>5</sup> There is currently no plan to replace that Act or to set out a clear and credible alternative energy plan for Queensland. Energy experts have expressed concern that removing support for the renewable energy targets puts the ability to meet the climate targets at considerable risk.<sup>6</sup>

## Water Quality Policies and Actions

In 2024, a Scientific Consensus Statement, the work of 200 experts, was released which emphasised that elevated levels of fine sediments, nutrients, and pesticides continue to have detrimental impacts on the Reef, particularly coastal, inshore, and mid-shelf marine ecosystems. For the first time the consensus statement has linked poor water quality to worsening the impacts of climate change and stressed the need for governments to focus on hot spots for pollution, rather than spread investment thinly across the whole catchment. Poor water quality remains the second biggest threat to the Great Barrier Reef, despite considerable investments to improve water quality in Reef catchments over the past two decades.

Despite their importance, Australia has again failed to achieve its committed water quality targets, which were due for completion in 2025. The latest joint government Reef Report Card showed that progress towards the targets had slowed down (reporting period until 2022) and that at the reported rate of progress, the targets for the two main pollutants would not be met until 2047 (fine sediment) and next century (2114) for

dissolved inorganic nitrogen (DIN). To sustain the Outstanding Universal Value of the Reef, especially in the face of increasing climate change pressures, it is imperative water quality improvement targets are achieved.

A significant reason for Australia's failure in achieving the water quality targets again has been a lack of targeted funding. At best, by 2030 under current government programs, Reef-wide progress to targets will be 37% for fine sediment pollution and 83% for DIN.

Actual on-ground progress to reduce sediment pollution continues to be very modest relative to the scale of the problem and timeframes needed to build Reef resilience. The major current investment is via the Australian Government's AU\$200 million *Landscape Repair Program*, which was announced in February 2024. Contracts with the six GBR Natural Resource Management (NRM) regions to act as delivery partners were finalized at the end of 2024. To date, there have been no public announcements on projects to be funded. While the CSIRO-led report to map priority grazing lands to guide the investments under this program has been completed, it is not publicly available.

Finalising and releasing the review of the Reef 2050 Water Quality Improvement Plan no later than the end of 2025 is essential. It is likely that the timeframe for meeting the water quality targets will once again be extended, this time to 2030. To accelerate progress to meeting the targets, the following are needed: fast tracking of the current Australian Government investments, additional investment by both Queensland and Australian Governments, and effective stacking of multiple market-based instruments to improve the uptake of these potential private investment pathways; completion and public release of expert reviews of identification of priority investment sites for sediment and nutrient reduction, and wetlands and coastal ecosystem restoration; and improved coordination of all investments and regular, timely reporting of progress on achieving the water quality targets.

The clearing of native vegetation continues in Reef catchments in riparian zones, lands vulnerable to degradation and other areas contributing to sediment and nitrogen pollution. The latest Great Barrier Reef Water Quality Report Card (combining years 2021 and 2022), released in May 2024, showed an alarming loss of riparian native vegetation<sup>7</sup>. During the period 2018-2021, the report showed very poor progress towards the target (the target being "the extent of riparian vegetation is increased") with 47,519 hectares cleared.

Broadscale clearing of remnant, high value regrowth and Category X native vegetation continues, although the Queensland Government does not provide any breakdown within Reef catchments. Both the Australian and Queensland Governments have not moved to: "Strengthen clauses under existing laws to ensure that all remnant and high value growth areas are

protected, including category X vegetation", as requested at 46COM. The Australian Government's 2025 Progress Report simply states: "there is no proposal to further regulate Category X".

## Fisheries Policies and Actions

The Queensland and Australian Governments have made some further progress in implementing some of the recommendations of the 2022 UNESCO/IUCN Reactive Monitoring Mission report over the last 12 months, however, key recommendations including implementing independent monitoring and reviewing the sustainability of the coral fishery require urgent attention.

The phase out of gillnet fishing from the World Heritage property is largely on track with the transitional 'NX' gillnet fishery operating throughout 2024. Electronic monitoring has been implemented on vessels in the NX fishery and a voluntary trial with limited uptake is occurring in the trawl fishery.

The next 12 months are essential for the establishment of a detailed policy framework and full implementation of electronic monitoring to meet the mission report Recommendation O7.

Serious concerns regarding the take of hard corals from the World Heritage property remain, particularly given the very poor outlook for corals and the property in the face of climate change and increasingly frequent and intense mass bleaching events. Further work is also required to ensure that the targets of the Sustainable Fisheries Strategy are fully delivered, in particular that fish stocks are built to resilient biomass levels and no species are overfished within the World Heritage property.

## Boundary Modifications

The Australian Government defines the western boundary for the property as "... **along the coastline at low water...**" and has always maintained this "...*remains consistent with the definition used at the time of its inscription in 1981*". The government has therefore never requested a boundary modification, nor do they believe one is required despite numerous changes to the boundary, mainly due to reclamations.

## Conclusion

In recent years, advances in the conservation and protection of the Great Barrier Reef have been largely due to oversight by the World Heritage Committee of State Party policy and action and AMCS is deeply thankful of that. We continue to urge UNESCO, IUCN and the Committee to (1) examine State Party policy and action to protect and conserve this imperilled ecosystem, (2) to express extreme concern about repeated thermal stress events and ongoing local threats in particular poor water quality, and (3) to request with the utmost urgency that policies and actions

are put in place to protect and conserve the OUV of this iconic World Heritage property.

Given repeated thermal stress events and ongoing cumulative local impacts on the property, we urge that the World Heritage Committee at its 47th session this year, reiterate the request for a state of conservation report to be submitted to the World Heritage Centre by 1 February 2026 for examination by the Committee at its 48th session, **“with a view to considering, in the case of confirmation of the ascertained or potential danger to its Outstanding Universal Value, the possible inscription of the property on the List of World Heritage in Danger”**.<sup>8</sup>

**Notes**

- 1 <https://www2.gbrmpa.gov.au/our-work/outlook-report-2024>
- 2 <https://apps.aims.gov.au/reef-monitoring/sector/list>
- 3 [https://coralreefwatch.noaa.gov/product/vs/timeseries/great\\_barrier\\_reef.php#gbr\\_far\\_northern](https://coralreefwatch.noaa.gov/product/vs/timeseries/great_barrier_reef.php#gbr_far_northern)
- 4 <https://www.abc.net.au/news/2025-02-25/satellite-floodwater-north-queensland-toward-great-barrier-reef/104974566>
- 5 <https://www.abc.net.au/news/2025-01-31/queensland-government-energy-future-questions-remain/104875906>
- 6 <https://www.afr.com/policy/energy-and-climate/qld-hits-pause-on-wind-farms-and-big-miners-are-among-those-worried-20250123-p5l6md#:~:text=Premier%20David%20Crisafulli%20has%20said,state%20Downed%20coal%20power%20stations>
- 7 <https://reportcard.reefplan.qld.gov.au/home?report=target&year=63fe-ba8962a7eebd85fb06ac&measure=RPN&area=GBR>
- 8 As stated in the GBR adopted decision (N 154) at the 38th session of the WHC in 2014.

**Photographic Documentation**

Flood plumes of freshwater and sediment entering the Great Barrier Reef  
 Examples given for the Tully, Herbert and Burdekin Rivers

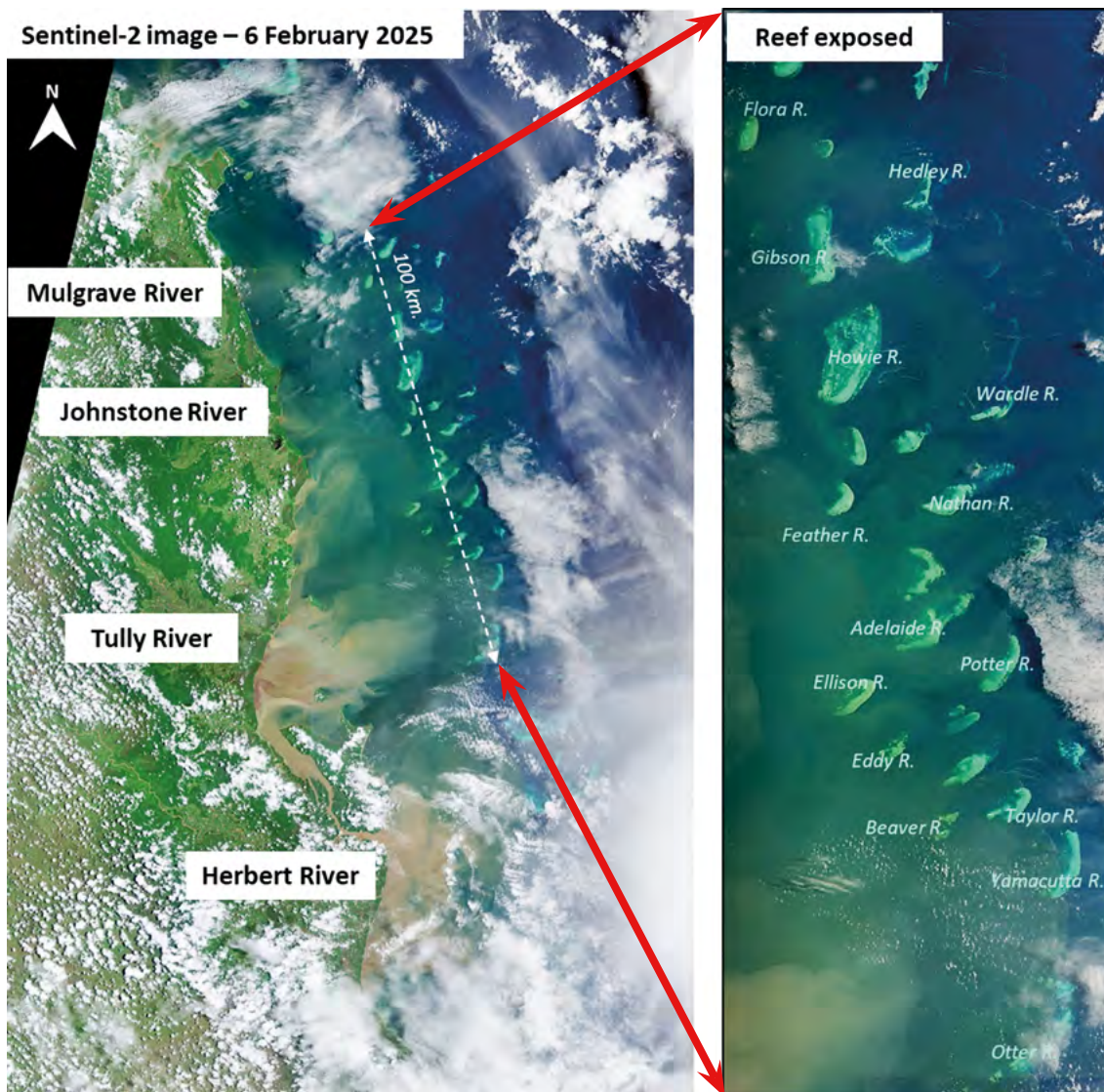




Fig. 2: Tully river plume, 6 February 2025



Fig. 5: The plume of the Herbert river, 6 February 2025.

Source of Fig. 1-5: Modified VIIRS and MODIS satellite images (True colour images). Snapshots extracted from the NASA worldview Browser and analysed by TropWATER, James Cook University (<https://worldview.earthdata.nasa.gov/>)



Fig. 3: The edge of the Tully River plume at the Yamacutta, Taylor and Beaver Reefs, 6 February 2025-03-30

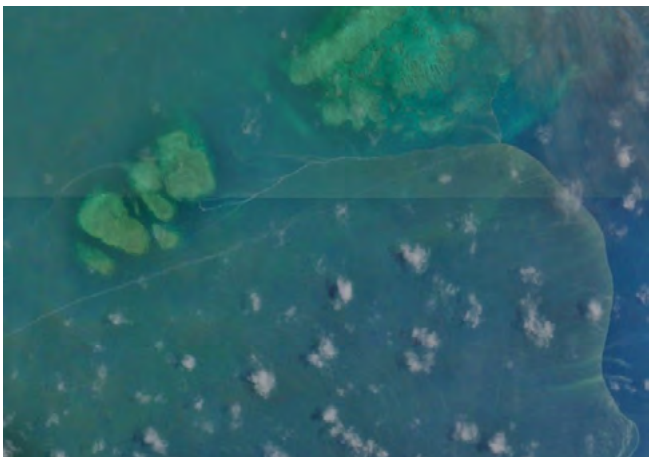


Fig. 4: The edge of the plume opposite the Tully River at the Otter reef, 6 February 2025

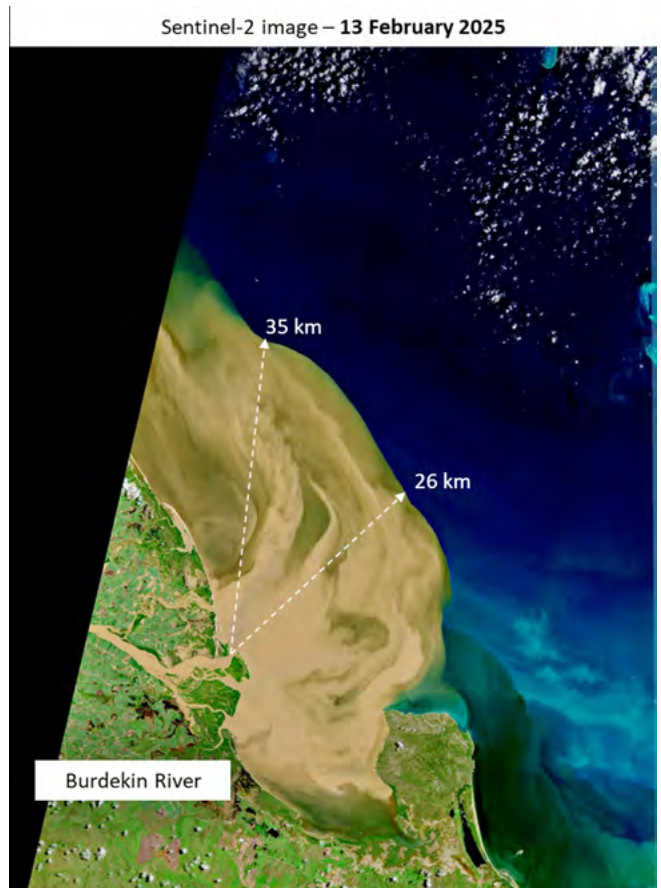


Fig. 6: The plume of the Burdekin river, 23 December 2024. Image: Modified Copernicus Sentinel-2 data (True colour images).

Snapshots extracted from the Copernicus Browser (@Sentinel Hub) and analysed by TropWATER, James Cook University (<https://browser.dataspace.copernicus.eu/>)



Fig. 7: Boundary of the Burdekin plume, 25 February 2025.  
Photo: James Cook University TropWATER



Fig. 9: Water quality in the Burdekin river plume, 25 February 2025.  
Photo: James Cook University TropWATER



Fig. 8: Burdekin river, 25 February 2025.  
Photo: Lorelle McShane



Fig. 10: Water samples at the TropWater Laboratory, James Cook University.  
Photo: James Cook University TropWATER

# Tasmanian Wilderness: the Extinction of Gondwana-Era Maugean Skate Must be Prevented

Eloise Carr, The Australia Institute



The Tasmanian Wilderness World Heritage Area (henceforth the 'Tasmanian Wilderness') is the equal highest-ranked World Heritage area, meeting an extraordinary 7 out of 10 World Heritage criteria, including three cultural and all four natural criteria. It is one of the world's largest and most spectacular wilderness areas and a precious cultural landscape.

The ancient Aboriginal heritage predates British colonisation by tens of thousands of years and remains powerful and core to today's Tasmanian Aboriginal people.

The Tasmanian Wilderness has several longer-term threats, and in recent years new ones have emerged.<sup>1</sup> None are more urgent, however, than the plight of the endangered Maugean skate (*Dipturus maugeanus*), under imminent threat of extinction from large-scale marine aquaculture for finfish (Atlantic salmon and trout).

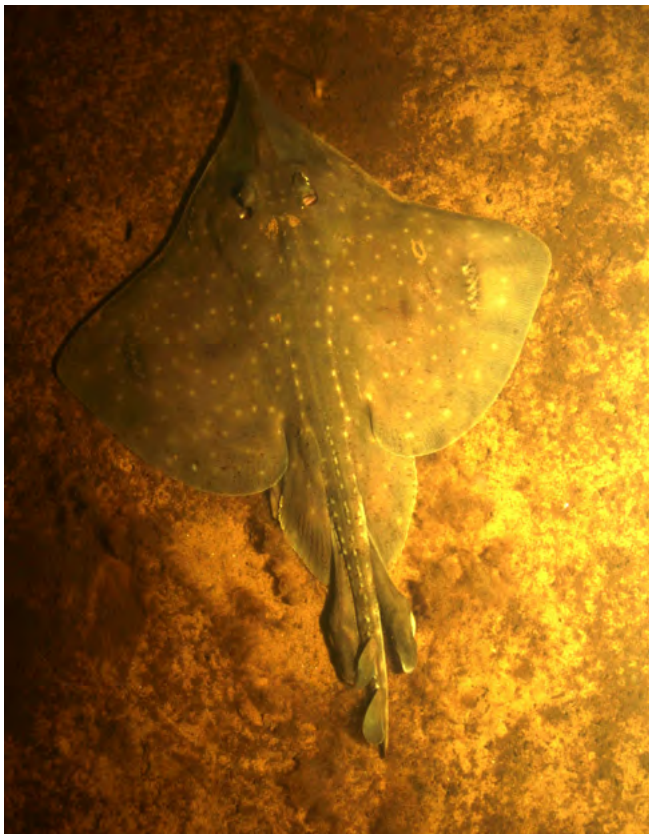


Fig. 1: A Maugean skate.

Photo: Neville Barrett (IMAS)

Maugean skate are an ancient taxa dating back to Gondwana. They are of outstanding universal value and are the only skate in the world known to mostly inhabit brackish waters.<sup>2</sup> The Tasmanian Wilderness contains approximately one third of Macquarie Harbour, where the famous, still wild and tannin-stained waters of the Franklin River flow freely into the sea. This harbour is the Maugean skate's only home.

The World Heritage Centre (WHC) last sent a Reactive Monitoring Mission (RMM) to the Tasmanian Wilderness in 2015, in response to a number of concerns.<sup>3</sup> By 2021, some of the recommendations arising remained outstanding, as noted by the 44<sup>th</sup> session of the WHC. Australia was asked to finalise these, including some as a matter of priority.<sup>4</sup>

A decade after the RMM, outstanding RMM recommendations include the completion of a Comprehensive Cultural Survey (Recommendation 13), the prevention and management of biosecurity risks, the management of boundary areas (Recommendation 19), and joint management with the Tasmanian Aboriginal Community (Recommendation 20). Unfortunately, the Tasmanian state government has subsequently chosen not to protect Future Potential Production Forest Land in the Tasmanian Wilderness within national park tenure, as was committed to through the RMM (Recommendation 11).<sup>5</sup>

At its 44<sup>th</sup> Session, the WHC also reminded Australia of the importance of carrying out impact assessments, and urged submission to the WHC, for review by the Advisory Bodies, details of any project that may affect the property's outstanding universal values, in accordance with Paragraph 172 of the Operational Guidelines.

## Tasmania's salmon industry has never been subject to an appropriate impact assessment under Australian law.<sup>6</sup>

Consideration of whether to undertake an impact assessment is under active consideration by Australia's environment minister. In 2023, Australia Institute research, supported by two other organisations, triggered a legal reconsideration of the 2012 decision that allowed expanded marine farming operations in Macquarie Harbour.<sup>7</sup> New evidence shows that fish farms

are having a catastrophic impact on Maugean skate, threatening it with extinction.<sup>8</sup> Federal environment department advice recommended the destocking of Macquarie Harbour before the Australasian Summer of 2023/2024 for the survival of the skate.

Despite this, neither the Federal nor Tasmanian governments have since required any reduction in fish biomass or feeding rates in Macquarie Harbour. Instead, in 2024 there were increases in dissolved nitrogen output from fish farms, approaching the Environment Protection Authority's 2022 cap.<sup>9</sup>

### Requests to publish Australia's response to UNESCO have been refused

Several civil society organisations have raised these concerns with UNESCO, who took up the issue with the Australian government in April 2024.<sup>10</sup> However, no response from Australia has subsequently been made public. Several requests have been made to the Australian Government to publish their response, including through freedom of information legislation. All requests have been refused.

The World Heritage Convention obliges State Parties to "keep the public broadly informed of the dangers threatening this heritage and of the activities carried on in pursuance of this Convention". Any official correspondence to UNESCO regarding the potential extinction of a species of outstanding universal value should also be released as a matter of public interest.

It has now been over 14 months since Australia's environment minister commenced the review of the 2012 decision. Over 2,500 submissions were made through the consultation process that closed on 2 February 2024. Under Australian law such decisions are required 'as soon as practicable' after the close of consultation.<sup>11</sup>

A separate but related decision, on the eligibility of the Maugean skate for uplisting from Endangered to Critically Endangered on Australia's threatened species list (and associated actions), has been delayed until 30 October 2025. However, it is worth noting that Australian Threatened Species Commissioner, Dr Fiona Fraser, told a Senate Environment Committee in May 2023 that "regardless of the uplisting, conservation action still needs to be taken, and still could be taken to address... the current suite of threats. Addressing that current suite of threats is not contingent on the uplisting occurring or any new conservation advice being agreed. There's sufficient information to know that the species is significantly imperilled."

**Despite attempts by the salmon industry and some Australian politicians to discredit evidence that salmon farming is the primary problem in Macquarie Harbour, the federal government's environment department has confirmed, in recently released documents, that the extinction threat remains and the science supporting their recommendation to remove farmed fish biomass is rigorous and sound.**

Research in 2024 by the Institute of Marine and Antarctic Studies (IMAS) confirmed the relative abundance of Maugean skate remains 47% less than the population at the time aquaculture expanded.<sup>12</sup> The extremely small number of juveniles recorded in surveys since 2021 suggest a one-off reproductive event in 2021 with no evidence that subsequent reproduction has occurred. Successful reproduction has been absent for at least eight years.

The extremely limited reproduction confirms the catastrophic condition identified by the department's Threatened Species Scientific Committee.<sup>13,14</sup> By 2021, the overwhelming majority of the population were mature adults. Maugean skates mature at 4-6 years old and live to 10–15 years, indicating what little recruitment occurred in 2021 will not begin to reproduce until 2025-2027, assuming they survive.

The success of captive breeding thus far demonstrates a clear disparity in reproductive success in the wild - conditions in captivity are optimal and do not reflect conditions in Macquarie Harbour. Dissolved oxygen in captivity is at or near 100%, nutrition is optimal, and skates are not exposed to predation. In the wild, the small number of juveniles now need to contend with the increased risk of predation from seals which are not endemic to Macquarie Harbour but have established colonies in recent years directly because of prey available in the form of

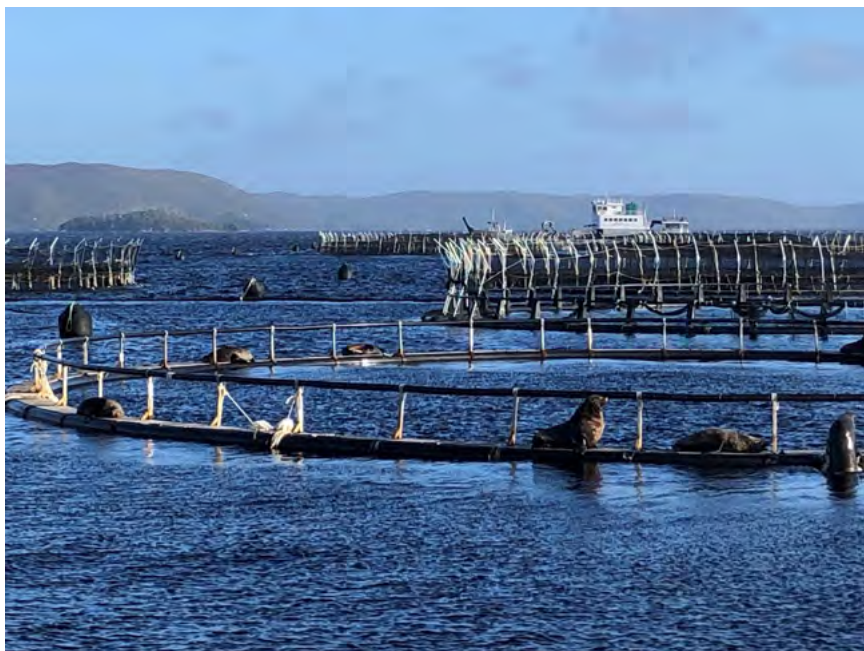


Fig. 2: Seals in Macquarie Harbour.

Photo: Eloise Carr

farmed salmon. The impacts of salmon farming may also inhibit reproduction in Maugean skate, as evidence has shown in another elasmobranch, the spiny dogfish.<sup>15</sup>

Dissolved oxygen levels in the Tasmanian Wilderness part of the harbour, particularly at preferred depths of 15-35 m (i.e., part of the depth range of the Maugean skate and where its eggs can be found), remain substantially lower than prior to aquaculture expansion, as reported by the Tasmanian EPA,<sup>16</sup> despite three years of strong recharge from oceanic inflows. Claims that the harbour is 'healthier than it has been in a decade' are based on dissolved oxygen values in areas which are not skate habitat and benchmarked against the period when the oxygen levels were at their lowest ever values. IMAS scientists have confirmed the improvement is due to naturally occurring oceanic replenishment, which cannot be relied upon to address the depletion. Tasmania's EPA oxygen monitoring reveal only a gradual increase in oxygen levels which predate the commencement of the Macquarie Harbour Oxygenation Project.<sup>17</sup>

Maugean skate are in a precarious situation, the health of Macquarie Harbour remains compromised, and the aquaculture industry's operations are creating unacceptable impacts. International commitments oblige Australia to take a precautionary approach to managing threats to a species' existence. More than 30 prominent Australian scientists, including five fellows from the prestigious Australian Academy of Science, felt compelled to publish an open letter in support of the science.<sup>18</sup> Signatories to the letter include the immediate former Chair of Australia's Threatened Species Scientific Committee as well as many who have held leadership roles in national and international marine institutions. Signatories called on the minister to remove fish farming from the Harbour to protect the skate.

The Australian government's failure to act on Conservation Advice, and its continued delay in making a decision on the review of marine farming, leave many concerned that Australia is not

acting in accordance with the World Heritage Convention. In light of the above, a further letter from 14 local and national civil society organisations has requested a RMM to the Tasmanian Wilderness in 2025 to examine the impact of marine farming operations on the outstanding universal value of the property and any other relevant matters.

## Notes

- 1 World Heritage Watch Report 2024
- 2 TWWHA Management Plan 2016; Adoption of retrospective Statements of Outstanding Universal Value
- 3 39COM 7B.35, Bonn, 2015
- 4 Decision 44 COM 7B.75, adopted during the extended 44th session of the World Heritage Committee (WHC/21/44.COM/18)
- 5 World Heritage Watch Report 2024, p.140
- 6 Australian Government EPBC Act Public Portal
- 7 EPBC Macquarie Harbour - Climate
- 8 Conservation Advice for *Zearaja maugeana* (Maugean skate)
- 9 <https://www.abc.net.au/news/2024-05-17/maugean-skate-conservation-pollution-in-macquarie-harbour/103855188>
- 10 UN seeks response to salmon farm skate impacts in Tas | The Australian
- 11 Environment Protection and Biodiversity Conservation Act 1999, s.78C
- 12 Institute for Marine and Antarctic Studies (2024). Interim Report Number 2 - Macquarie Harbour Maugean skate population, University of Tasmania.
- 13 Australian Government (2024) Consultation Document on Listing Eligibility and Conservation Actions – *Zearaja maugeana* (Maugean skate) (PDF 2.17 MB)
- 14 Australian Government (2023) Conservation Advice for *Zearaja maugeana*
- 15 Moreno D. (2018) An unusual habitat for a common shark: life history, ecology, and demographics of the spiny dogfish (*Squalus acanthias*) in Macquarie Harbour, Tasmania. University of Tasmania, PhD Thesis. Pp 165.
- 16 EPA Tasmania (2024) Macquarie Harbour - Status update for dissolved oxygen – September 2024, Hobart, Tasmania.
- 17 <https://epa.tas.gov.au/news/macquarie-harbour-seabed-compliance-results-best-on-record-since-becoming-epa-regulated>
- 18 Top Australian scientists unite in defence of science on Maugean skate



# Annex

## The Authors



### I Gede Yudha Bhis Maya

I Gede Yudha Bhis Maya (30) is the Data and Archive Officer at Photovoices International. He graduated from Udayana University with a major in International Relations. He is an avid photographer who's been actively involved in using camera

as a tool for community development in rural communities in Bali, Lampung and Aceh in Indonesia. He has also worked with AIESEC Warszawa, and other international initiatives focused on youth empowerment.

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### Toon Bijmens

Toon Bijmens (1987) is a Belgian civil-society activist with a focus on the Middle-Eastern region. He has worked in advocacy for Amnesty International and the Iraqi Civil Society Solidarity Initiative (ICSSI). In particular he has been involved with the Save the Tigris and Iraqi Marshes Campaign and is the current international coordinator. As part of this initiative, he has been campaigning in Iraq and internationally for the inclusion of the Iraqi Marshes on the UNESCO World Heritage List. Bijmens holds an MA in Modern History. He has worked on various development and humanitarian projects in Egypt and Iraq, and is currently project manager for a Dutch non-profit organization supporting sustainable economic development in developing countries.

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### Ibrahim Canbulat

Ibrahim Canbulat (77) is a conservation architect, hotelier, cook and writer with a Masters of Architecture. In 1972, he worked in the team that designed the Gaziantep Campus Plan Faculty of Architecture. He has held various positions at the Department of Architecture of the Middle

East Technical University (1973–1982) and at Karabük University. From 1992–2006 he worked as an independent consultant in Turkey's transportation, automotive and energy sectors. Since 2006, he has been a hotelier in the mansions which he restored in Safranbolu. He was granted an award for *Best Conservation and Revitalization Project* in 2006 by the Turkey Chamber of Architects for the restoration of the Macunağası İzzet Efendi House and for *Best Kitchen in the Black-Sea Region*

of Turkey in 2015 by the Government of Konya. He continues to publish about Ottoman Houses and Turkish cuisine.

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### Juanjo Carmona

Juanjo Carmona has been a lawyer and environmental consultant since 1999. In 1996, he started volunteering in Doñana through WWF Spain, so he lived through one of its blackest moments, the Aznalcóllar mining catastrophe. In 2001, he was hired for WWF's Doñana office, located in Hinojos, where he lives. Since then he has been working to conserve Doñana in close collaboration with local communities, NGOs, businessmen, farmers and administrations.

When talking about Doñana and its OUV, its beaches, lagoons, marshes, forests, dunes, lynx or imperial eagles, for him it is talking about his home and people.

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### Eloise Carr

Eloise Carr is a policy professional and former public servant who now leads the Tasmanian branch of the Australia Institute,



one of the country's most influential think tanks. Eloise currently focuses on democracy and environmental sustainability. The Institute's research has played a leading role in elevating awareness of aquaculture impacts on the Tasmanian Wilderness World Heritage Area. Eloise spent 8 years on Australia's delegation

to the Commission for the Conservation of Antarctic Marine Living Resources, part of the Antarctic Treaty system. Her work has included policy development for state and federal governments on international governance, responses to climate change, integrated ocean management, marine conservation and sustainable fisheries. Eloise has also worked in breast cancer research, as an independent consultant, and co-founded the Tasmanian Science Council.

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### Ian Convery

Ian Convery is Professor of Environment & Society at the University of Cumbria. His work focuses on the intersections of conservation, cultural landscapes, and ecological restoration with particular emphasis on protected areas, World Heritage, and



species translocations. He co-chairs the IUCN Commission on Ecosystem Management (CEM) Rewilding Thematic Group and serves as IUCN CEM Chair for Western Europe. A member of the IUCN World Commission on Protected Areas since 2016, his research explores the social dimensions of conservation, rewilding, and the role of protected landscapes in responding to the biodiversity and climate crises. He has published widely on these themes and is an advocate for integrating natural and cultural heritage in conservation practice.

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### Jack Corbett

Jack Corbett is an American social scientist who for more than fifty years has worked from Argentina to the Canadian Yukon on research, educational, and technical assistance projects centered on community-based natural and cultural resource management. As a specialist in administrative design and organization management he is a strong advocate for local leadership and multisectoral collaboration. Currently he is assisting a multinational team supporting the development of a community-based effort to initiate ecotourism and other sustainability programs in Oaxaca's Cuicatlan Valley. Jack holds a doctorate from Stanford University, has served on university faculties across North America, and is active in promoting international engagement through voluntary action.

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### Louay Dakhel



Louay Dakhel (1958) is an architect from Aleppo and has owned a consulting engineering office there since 2000. He is a member of ICOMOS International and has participated in several international conferences such as an International Symposium on Arab and Islamic Urban Heritage at Aleppo University in 2007, and a

Technical Coordination Meeting on Old Aleppo organized by UNESCO in Beirut in 2017. From 2017–2020 he has also been a lecturer at the Faculty of Archaeology of the University of Aleppo, and since 2020 he has participated in the project of restoring the wall of the Citadel of Aleppo. Mr Dakhel is the author of books such as "The Art of Islamic Decoration" (1993) and "Aleppo" (2017).

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### Defensa Ambiental del Noroeste

Defensa Ambiental del Noroeste ([www.dan.org.mx](http://www.dan.org.mx)) is a civil society organization dedicated to promoting the defense of nature and environmental human rights through law in the northwest region of Mexico. We work to support a just energy transition and climate justice, conserve wildlife and protected natural areas, secure the rule of law and environmental rights, and safeguard oceans and coasts, among other activities. Our efforts focus on protecting the Gulf of California's unique characteristics and the communities that depend on them, including participation in the 2010 UNESCO-IUCN-Ramsar petition for Cabo Pulmo.

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### Adrian J. Delnevo

Currently retired. Previously CEO and Principal Scientist of a private consulting corporation providing scientific and strategic support for major environmental legal cases. Professor (adjunct) of Applied Ecology and Conservation Biology. Scientific advisor to the US and other governments, national and international institutions and NGOs. Principal scientist for multiple long-term studies on bio-acoustics, population ecology, and conservation biology. Developer of non-linear neural network models, and scaling tools for ecological asset and liability management, and carbon offset strategies and management. He continues to advise on ecological issues and is increasingly concerned at the loss of ecological services, and the changing rural character of the Oxfordshire landscape within which he was born and raised.

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### José Pedro de Oliveira Costa

Architect, Master in Environmental Planning at the University of California-Berkeley, PhD in Environmental Structures, with distinction, at the Faculty of Architecture and Urbanism at the University of São Paulo-USP, were a teacher for 40 years. Program Vice-coordinator of Amazonia in Transformation at the Institute for Advanced Studies at USP, is primarily responsible for the creation of more than a hundred protected areas at the states, national and international level, including the recognition of the Serra do Mar and the Atlantic Forest as a Biosphere Reserve and for the listing of several World Heritage Brazilian Natural sites. Former Special Advisor for the Director of the World Heritage Center at UNESCO, in Paris and author of books and articles in forests conservation. Since 2021, Ze Pedro has been World Heritage Watch's representative in Brazil.

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### Wiwik Dharmiasih

Wiwik Dharmiasih (39) is a lecturer at the Department of International Relations, Universitas Udayana, in Bali, Indonesia. 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 Unit 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 of the management of World Heritage property in Bali under the Subak Research Center, Universitas Udayana (2014). She is currently active in supporting community participation and youth involvement in the management of Bali's Cultural Landscape. She recently facilitated a photovoices community engagement initiative in Subak Jatiluwih to elicit local perspectives on the future management of the site.

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### Ni Luh Emi Dwiyanti



Ni Luh Emi Dwiyanti (25) served as the field facilitator of the Photovoices International initiative in Subak Jatiluwih, Bali. She is a local resident of Jatiluwih and recently graduated with a degree in tourism management from Politeknik Negeri Bali. She is an active member of youth initiatives in Jatiluwih and works to enhance local participation and raise awareness on

management of the World Heritage Site.

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### EXPEDITIO



EXPEDITIO Center for Sustainable Spatial Development is a non-governmental organization based in Kotor (Montenegro) whose mission is to encourage sustainable spatial development in Montenegro and SEE region through activity in the fields of sustainable architecture, cultural heritage, urban planning and through projects that encourage overall development of the civil society. EXPEDITIO was established in 1997, and it has implemented numerous projects and activities, through cross-disciplinary engagement and participative practices, addressing various issues of cultural heritage and landscape. A member of EXPEDITIO represented non-governmental organizations in the Council for the Management of Natural and Culturo-Historical Region of Kotor.

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### Samah Jazi Faisal Al Khasoneh

Samah Jazi Faisal Al Khasoneh is a dedicated conservator and the Academic Manager at Sela for Training and Protection of Heritage, where she plays a vital role in developing and overseeing educational programs focused on the preservation of cultural heritage in Jordan. With a strong emphasis on academic excellence, Samah leads initiatives that enhance local capacity and foster knowledge in heritage conservation. Her international experience includes volunteering with the Mora Sample Collection project at ICCROM in Rome, as well as contributing to various UNESCO projects throughout Jordan. These experiences reflect her commitment to cultural heritage preservation on both local and global scales. Samah aims to empower communities by providing them with the necessary skills and knowledge to protect their cultural heritage, ensuring its sustainability for future generations.



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### Henning Frase



Henning Frase is a Graduate Engineer (University of Applied Sciences) and works as a freelance architect and expert for damage to buildings, mainly in Berlin and Lower Saxony. Through years of work as an architect as well as an expert in the field of recording structural damage and the associated restoration and repair

of structural facilities, he is closely associated with the city of Goslar and has known the development of the city for decades.

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### Kate Freeman

Born in Portugal, Kate originally trained in horticulture in the UK. She changed career following a successful campaign for an award winning flexible bus scheme, and subsequently retrained to practice professionally as a transport planner. She has supported the Stonehenge Alliance since its inception 30 years ago and represents Friends of the Earth South West on its Committee.



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## Friends of Boka Kotorska



The Friends of Boka Kotorska Heritage Society is a non-governmental organization established primarily with the aim to protect and enhance the natural and built heritage in Boka Kotorska, especially the Natural and Culturo-Historical Region of Kotor as part of the World Heritage. The organization was founded provoked by the current appalling state of the cultural and natural heritage in the area of Boka Kotorska. Its founders are experts in cultural heritage protection from Boka Kotorska. The Society has had several projects and actions aimed at pointing out the problems in the World Heritage Region.

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### Teresa Gil

Teresa Gil is a Spanish biologist with 20 years of professional experience in Natura 2000-Protected Areas management and habitats and flora conservation. Since April 2019, she has been the Head of the WWF-Spain Freshwater Programme.

WWF-Spain's origin is closely linked to Doñana. Over the last 50 years, WWF has been fighting to ensure the preservation of its OUV, trying to stop the illegal theft of water that is degrading outstanding aquatic ecosystems like Doñana National Park, and promoting marshland restoration in the Guadalquivir Estuary as a way to restore some of the losses of the past and giving a green economic alternative to intensive agriculture and tourism. Teresa is a member of several NGOs like WWF, SEO Birdlife, Territorios Vivos and SEBICOP. She is member of the IUCN WCPA (World Commission on Protected Areas) and EAGL-Spain.

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### John D. Grainger

Dr John D Grainger is a semi-retired consultant specialising in the establishment and management of protected areas for biodiversity conservation. He has worked in 12 countries, mainly in the Middle East, as a project team leader or senior policy adviser for biodiversity conservation initiatives. From 1996 until 2002 he was the International Project Manager for the EU funded project to establish and develop the St Katherine Protectorate in South Sinai, Egypt and was closely involved in the nomination of the St Catherine Area as a World Heritage Site. He is a founder member of Nature Conservation Egypt, a civil society NGO which undertakes advocacy and prac-



tical work for biodiversity conservation in Egypt, and also the ex-president and life member of the Saudi Arabian Natural History Society.

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### Fritz Groothues

Fritz Groothues studied in France and Germany and after two years as a social researcher in Ghana he moved to the UK in 1974. He spent most of his working life in the BBC World Service, first as a producer, then as Head of Strategy Development.

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### Shin-ichi Hanawa

Shin-ichi Hanawa is a veteran environmental conservationist. He serves an advisory role for various environmental NGOs and communities. Trained at Tohoku University and Tokyo University of Agriculture and Technology, he specializes in ornithology, ecology, and environmental conservation. Shin-ichi worked for the Wild Bird Society of Japan, conducting extensive surveys across Japan. He also worked for WWF-Japan, planning and implementing conservation measures for endangered environments. His commitment to protecting the environment of Okinawa has been widely acknowledged. He played a crucial role in IUCN's adoption of recommendations (2000 and 2004) that called for the inscription of the Yambaru Forest as a World Natural Heritage Site.

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### Saad Hanif

M. Saad Hanif works as a research and teaching assistant at Eastern Mediterranean University's Department of Architecture. He holds a Master's degree in Cultural Heritage Studies from the same university and a Bachelor's in Interior Architecture from the University of Bahrain. He is an active member of World Heritage Watch, DLALA Cultural Advisory- U.A.E, Migration Research Hub, DOCOMOMO Bahrain and Urban Research and Development Center-EMU. His research interests focus on heritagization, cultural commodification, and the complexities of cultural identity, especially in the context of migrations and mobility in the Gulf region.

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### Joe Hobbs

Dr. Joseph Hobbs is an Emeritus Professor of Geography at the University of Missouri, with primary research interests in the Bedouin peoples and natural histories of Egypt and the Arabian Peninsula. He served as the team leader of the Bedouin Support Programme for the St. Katherine Natural Protectorate Development Project in the late 1990s. He spent seven months in 1989 as an American Council of Learned Societies and American Research Center in Egypt fellow studying the lifeworlds of the Bedouin, monks, pilgrims, and travellers in the region of the Monastery of St. Katherine. That research culminated in the publication of the book *Mount Sinai* (University of Texas Press, 1995). He is the author of *Bedouin Life in the Egyptian Wilderness* (University of Texas Press, 1989) and co-author of *The Birds of Egypt* (Oxford University Press, 1989).

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### Ben Hoffer



Ben Hoffer grew up in the Midlands, UK. He studied geography at Hertford College, Oxford, before working as a shipwreck hunter for Odyssey Marine Exploration. In 2008, he moved to Egypt and soon discovered the Sinai, walking the peninsula as widely as possible. Ben Hoffer is now a trail developer and author. Over

the last decade he has walked more than 10,000km across the region, working with more than 14 different Bedouin tribes to create some of its most successful, highly-decorated community tourism projects. He is a founder of Egypt's first long-distance hiking route the Sinai Trail, along with its sister projects the Red Sea Mountain Trail and Wadi Rum Trail. He lives in the Middle East and spends a few months in the Sinai every year. He's a Fellow of the Royal Geographical Society and has a special interest in the nomadic cultures of the region.

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### International Campaign for Tibet



The International Campaign for Tibet (ICT) works to promote human rights and democratic freedoms for the people of Tibet. ICT monitors and reports on human rights, environmental and socio economic conditions in Tibet; advocates for Tibetans imprisoned for their political or religious beliefs; works with governments to develop policies and programs to help Tibetans; secures humanitarian

The International Campaign for Tibet (ICT) works to promote human rights and democratic freedoms for the people of Tibet. ICT monitors and reports on human rights, environmental and socio economic conditions in Tibet; advocates for Tibetans imprisoned for their political or religious beliefs; works with governments to develop policies and programs to help Tibetans; secures humanitarian

and development assistance for Tibetans; works with Chinese institutions and individuals to build understanding and trust, and explores relationships between Tibetans and Chinese, mobilizes individuals and the international community to take action on behalf of Tibetans; and promotes self-determination for the Tibetan people through negotiations between the Chinese government and the Dalai Lama. Founded in 1988, ICT maintains offices in Washington, DC, Amsterdam, Berlin, Brussels and Dharamsala, India.

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### Sharif Jamil

Sharif Jamil is an internationally recognized leader and activist in the global environmental movement. For more than two decades he has been organizing civic action for environmental justice in Bangladesh. He is a Council Member of Waterkeeper Alliance and the Co-ordinator of Waterkeepers Bangladesh. Sharif is currently serving as the General Secretary of the civil society initiative, Bangladesh Poribesh Andolon (BAPA). He was declared a Waterkeeper Warrior in the world on the eve of the 20th anniversary of the organization in 2019. He has been organizing grassroots movements against dirty industries and promoting global campaign against climate change. He is a founding member of the National Committee for Saving the Sundarbans (NCSB) and working in the global campaign for the Sundarbans World Heritage Site and promoting renewable energy in Bangladesh.

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### Mzia Janjalia



Mzia Janjalia is senior research fellow at George Chubinashvili National Research Center for Georgian Art History and Heritage Preservation and associate professor in the history of medieval Georgian art at Tbilisi State Academy of Arts. Her research focuses on medieval Georgian art and covers issues of medieval cultural identities, intercultural

relations and cultural transfer. Her interest lies in methodologies of cultural heritage preservation and conservation. She is author and co-author of several publications on medieval Georgian art. She has participated number of research projects on issues of medieval cultural developments, as well as projects and international collaborations for the conservation of wall painting and stone, and general issues of research and education for conservation of cultural heritage.

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### Pratiti Joshi

Pratiti Joshi is an Architect and a Cultural Heritage Professional having an M.A. in World Heritage Studies from Brandenburg University of Technology, Cottbus, Germany. From 2022 - 2024 she worked with the Ministry of Culture, Government of India as a Consultant on UNESCO matters. During her tenure with an NGO, the Indian National Trust for Art and Cultural Heritage (2014-2017), she worked on a diverse range of heritage preservation projects and publications, and was involved in the preparation of the draft serial nomination dossier for 'Iconic Saree Weaving Clusters of India'. She has represented India at various international platforms, and assisted the Bahrain Authority for Culture and Antiquities for the management of 42COM in Bahrain. Currently an independent consultant, she assessed world heritage potentials in the Nilgiris and Ladakh for WHW, and attended 46COM in Delhi.



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### Sultana Kamal



Sultana Kamal is the Convener of the National Committee for Saving the Sundarbans (NCSS), a coalition of more than 50 civil society and non-governmental organizations of Bangladesh having shared interest in the environment, is concerned that the Government of Bangladesh continues to disregard the 2017 decision of the World Heritage Committee

(WHC) 41COM 7B.25 to protect the outstanding universal values (OUV) of the Sundarbans Bangladesh World Heritage site.

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### Masami Mel Kawamura

Masami Mel Kawamura is the Director of the Informed Public Project (IPP) in Okinawa, Japan. IPP engages in research and advocacy regarding environmental contamination related to U.S. military bases in Okinawa. Her research utilizing the Freedom of Information Act has helped reveal the contamination at former and present U.S. military bases in Okinawa, including the UNESCO World Natural Heritage site, Yambaru Forest. Masami holds a Ph.D. in Interna-



tional Sociology from Hitotsubashi University and teaches as an adjunct lecturer at the University of the Ryukyus and Okinawa International University. She is a member of the IUCN Commission on Ecosystem Management.

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### Salman Khairalla

Together with Toon Bijnens, Salman Khairalla is the coordinator of the international campaign 'Save the Tigris' ([www.savethetigris.org](http://www.savethetigris.org)), which is a network of over 15 civil society organisations from Iraq, Iran, Turkey, Syria and other countries with the aim to advocate for the preservation of heritage in the



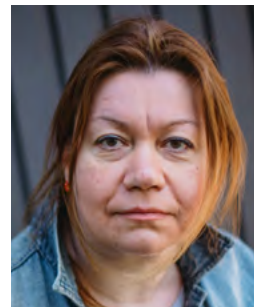
Tigris-Euphrates basin. Particularly, Save the Tigris has been advocating for the protection of the natural heritage of the marshlands in Iraq through advocacy with stakeholders, research and awareness activities. Through their campaign members Un Ponte Per and Humat Dijlah, Bijnens and Khairalla are also coordi-

nating 'Sumereen', a major UNDP-supported project to develop the natural and cultural heritage of the Ahwar through the construction of infrastructure, training and livelihood support.

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### Evelina Kravchenko

Evelina Kravchenko is Senior research fellow at the Institute of Archaeology of the National Academy of Sciences of Ukraine. She has a diploma of specialist in history from the Ivan Franko Lviv National University (1998), a master degree from the National University of the Kyiv-Mohyla Academy (2002) and a PhD in archaeology (Candidate in historical science) from the Institute of Archaeology of the National Academy of Sciences of Ukraine (2008). She conducted her own excavations and worked in several international projects in Crimea from 2001 to 2014, such as the project of the Institute of Classical Archaeology of Texas University in Chersonesos. For the last 10 years she has worked in Kyiv with material of her previous excavation, other material from Ukrainian archaeological sites, and monitors the archaeological heritage in occupied Crimea.



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### Martin Lenk

Martin Lenk holds a degree in geography with minors in landscape ecology and Slavic studies from the University of Greifswald, Germany. He studied abroad in Russia, Kazakhstan, and Spain, and contributed to the World Heritage nomination of “Saryarka – Steppe and Lakes of

Northern Kazakhstan.” From 2018 to 2022, he coordinated the World Heritage nomination of Hin Nam No National Park at the Lao PDR’s Ministry of Information, Culture, and Tourism. Currently, he works with Commonland as a consultant landscape developer, fostering a peatland community of practice. He is a member of the German Society for Nature Conservation and has served on the board of World Heritage Watch since early 2025.  
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### Karen Lloyd

Dr Karen Lloyd is a Senior Research Associate and writer in residence with Lancaster University’s Future Places Centre. She is an environmental communicator and author of a number of books including *Abundance: Nature in Recovery* (Bloomsbury, 2021) longlisted for the Wainwright Prize for Writing on Conservation. Her work has been published with the Ecologist, BBC Wildlife, the Guardian and elsewhere. She documented changing land use in the Lake District for *Storm Cloud: Picturing the Origins of our Climate Crisis*, published by Yale University Press and the Huntington Library, Art Gallery and Botanical Garden, California. She is lead author of ‘Reimagining the Lake District’ and ‘A Right to Roam: for Whom?’ both published on The Ecologist, and the paper ‘Viewing Stations: Environmental Change and the Rights of Nature in the English Lake District Cultural Landscape’.

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### Awad Abdalla Masaoud

Awad Abdalla Masaoud is an electronic systems and digitisation engineer, researcher and activist in the field of cultural heritage and cultural rights. He has worked with the British Cultural Protection Fund, King College London, and the Sudan Memory Project. He is also the co-

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### Akino Miyagi

Akino Miyagi is an entomologist and independent researcher specializing in the study of butterflies. She worked at the Uruma City Sea Cultural Museum in Okinawa, where she helped raise public awareness about the lives of insects in the Yambaru Forest. After parts of the U.S. military’s Northern Training Area in the Yambaru Forest were returned to Japan in late 2016, Akino began surveying the impacts of the U.S. military training area on the forest. Her discovery of the U.S. military’s waste and land contamination in the former training areas, now incorporated into the World Natural Heritage site, has prompted a public call for the Japanese and U.S. governments to clean up.

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### Anne Collier Morriss

Dr. Anne Collier Morriss is a Professor of Academic Research and Writing. She has published five books and worked, before beginning her teaching career, as the historian on a number of high visibility projects, to include acting as the historian for the Howard Hughes Spruce Goose Museum and the Olympics Committee photograph project. She has been involved, as a volunteer, in many environmental issues both in Europe and in the United States, to include the current fight to stop the building of an incinerator on the Jurassic Coast, a World Heritage site.

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### Alejandro Olivera

Alejandro Olivera is the Mexico Representative of the Center for Biological Diversity. He works to conserve Mexican wildlife, including highly endangered vaquita porpoises and loggerhead sea turtles. He is a marine biologist from the University of Baja California Sur and has a master’s degree in the use, management and preservation of natural resources as well as a diploma in environmental law. He comes to the Center after years of work at the Mexican Center for Environmental Law (Cemda) and Greenpeace México. He is a petitioner for “in danger” designation of two World Heritage Sites in Mexico: The Islands and Protected Areas of the Gulf of California and Reserva de la Biósfera El Pinacate y Gran Desierto de Altar.

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### Frank Petersen



Frank Petersen works with the Dutch NGO “Waddenvereniging” to promote and protect the natural beauty of the Wadden Sea. The Waddenvvereniging 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. Waddenvvereniging 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.

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### Philnise Phillips

Philnise “Nya” Phillips is a Political Science and German Studies graduate at Mississippi State University in the United States. Originally from Greenville, Mississippi, she is participating in the CBYX-PPP program, a cultural exchange initiative, and is completing her internship with World Heritage Watch in Berlin. In this role, she supports the World Heritage Watch’s efforts to protect and preserve UNESCO World Heritage Sites.

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### Herbert Rasinger

Herbert Rasinger has been the chairman of the Cityscape Protection Initiative (Initiative Stadtbildschutz), based in Vienna, Austria since 2015. He is active in cultural heritage site (last atelier of Gustav Klimt) and city protection matters (Wien Mitte, Vienna ice skating ring). He is a graduate of the Vienna Technical University and of a high school in Wilmington, Delaware, USA.

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### Kate Rawnsley

Kate Rawnsley is a retired further and higher education lecturer. She is an artist, printmaker and jeweller. Resident of Saltaire for 30 years, co-founder of ‘SOS: Save our Saltaire’ group with the sole aim to ‘To protect

the World Heritage status of Saltaire’. We have no affiliation and are not funded as part of our campaign.

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### Roman Reida

Roman Reida is senior research fellow at the Institute of Archaeology of the National Academy of Sciences of Ukraine. He has a diploma in history and geography from the V. G. Korolenko



Poltava Pedagogical Institute (1999), a master degree from the National University of the Kyiv – Mohyla Academy (2005) and a PhD in World History (Candidate in historical science) from the Taras Shevchenko National University of Kyiv (2009). He conducted excavations in the Poltava region since 2001 and in Crimea in

2009-2010 (underwater research in Chersonesos). He worked in a project in Crimea from 2004 to 2008 (Institute of Classical Archaeology of Texas University in Chersonesos). Since 2012 he has been leading an expedition to study the burial ground of the Chernyakhiv culture in Shyshaky (Poltava region). He monitors the archaeological heritage in occupied Crimea.

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### Amber Reimondo

Amber Reimondo is the Energy Director at the Grand Canyon Trust. She holds a master’s degree in environmental science and policy from Northern Arizona University. Amber spent her early career working with conservative lawmakers and regulators on oil and gas-related environmental issues in Wyoming. She came to the Grand Canyon Trust in 2016 and has since worked with tribes, community leaders, and nonprofit partners to end uranium mining in the Grand Canyon region. In that time, Amber has testified before congressional committees twice and has had the great honor of working in support of the 13 tribes of the Grand Canyon Tribal Coalition. She has forged strong working relationships with impacted Indigenous community leaders who graciously teach her about their resilience and the challenges they face every day protecting their homelands, their communities, and their ways of life.

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### Andrew Rein

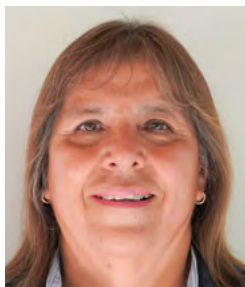
Dr Andrew Rein is a founding member of the Campaign to Protect Old Woodstock (C-POW) and its treasurer. He began his career as a lecturer in philosophy at the University of Oxford where he taught for five years before switching to a career in law.

He was called to the Bar in 1992 and was a senior legal adviser to the UK Treasury and HMRC (the UK tax authority). He has published articles in a wide range of philosophy and law journals. Now retired, he is active in promoting the aims of C-POW.  
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### Nelly Margarita Robles Garcia

Nelly Margarita Robles Garcia is Senior Archaeologist, National Institute of Anthropology and History (INAH) in Mexico. She earned a doctorate in anthropology at the University of Georgia and in 1997 was appointed as director of the World Heritage Site of Monte Alban, Oaxaca, where she developed Mexico's first management plan for national archaeological sites. She led the team that in 1999 responded to the earthquake devastating the site, restoring more than 20 buildings that collapsed. Subsequently she served as the president of Mexico's Council of Archaeology and as National Coordinator of Archaeology. Nelly has served UNESCO as an evaluator for World Heritage nominations and was the first Mexican female archaeologist elected to the governing board of the Society of American Archaeology. She has authored or edited twelve books on Mexican archaeology and cultural resources.

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### Hans-Ulrich Rösner

Hans-Ulrich Rösner is a biologist and ornithologist and has been working for the protection of the Wadden Sea since 1984. Since 1986 he worked for the global nature conservation organisation World Wide Fund for Nature (WWF). He is head of the Wadden Sea

office of WWF Germany, focusing with his team on more sustainability in sectors such as fisheries, tourism, energy, shipping and coastal defence. The focus is also on climate adaptation, public information, education, and on support for the National Parks and the Wadden Sea World Heritage. He is serving also as an advisor to the Wadden Sea Board, which represents the Trilateral Cooperation on the Protection of the Wadden Sea.

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### Maria Elena Ronza

Maria Elena is an architect and an archaeologist. Her career focuses on sustainable tourist development of archaeological and heritage sites through community engagement. Since 2011, she is involved in the management and conservation of the WHS site of Petra, first as Project Manager (2011-2014) and then as Project Co-director (2014-2017) with the American Center for Oriental Research's Temple of Winged Lions Cultural Resources Management Initiative. Subsequently, in 2015, she founded the non-for-profit company, Sela for Training and Protection of Heritage, aiming at building capacity within communities for a sustainable management of the Jordanian heritage. Currently, Sela is engaged with the Petra Development and Tourism Regional Authority in the maintenance of the WHS of Petra through the engagement of trained community members.

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### Isber Sabrine



Isber Sabrine (PhD) is a Syrian-Spanish archaeologist who specializes in cultural heritage management during conflicts. Since 2011, he has been involved in projects and studies on the protection of cultural heritage during conflicts. He is currently chair and co-founder of the international NGO Heritage for Peace. He is leading the Abuab Initiative, which is a social

project that works on using cultural heritage as a tool for intercultural dialogue with refugees and immigrants from the MENA region and Ukraine. He is the founder and director of the Arab Network of Civil Society Organizations to Safeguard Cultural Heritage (ANSCH).

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### Lee Schofield

Lee Schofield is the author of *Wild Fell: Fighting for Nature on a Lake District Hill Farm*, his account of a decade working for the RSPB at Haweswater in the Lake District National Park, where he oversaw pioneering conservation work across an upland mosaic of woodland, bog, mountain and meadow covering thirty square kilometres. *Wild Fell* details the personal and professional challenges involved



in working at the coal-face of nature conservation in the uplands of Cumbria. He is now employed by the Lowther Estate, working on the largest Landscape Recovery Project in England, aiming to create a 60 square mile corridor of wildlife-rich land extending from Penrith to Kendal, with Haweswater at its wild heart. He is a vocal critic of the Lake District World Heritage Site, having experienced first-hand how it is frequently being used as a blocker to nature recovery.

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### Christian Schuhböck

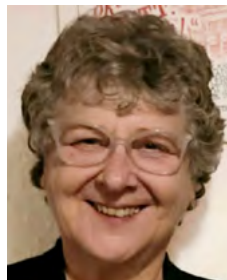


Prof. Dr. Christian Schuhböck, Secretary General of the nature, culture and landscape conservation organization "Alliance For Nature", is a court-certified expert for nature conservation, landscape ecology and landscape management, specializing in UNESCO World Heritage Sites, national parks and other protected areas. Due to his initiative "World Heritage Semmering Railway", for the first time in the history of railroads, World Heritage railroads have been recognized as a distinct type of World Heritage sites. In addition, his initiative was instrumental in UNESCO adding two new categories of properties to the World Heritage List. His initiative (1993-1998) has become a model worldwide. Countries such as India, Switzerland and Iran followed his initiative, so that as of today, six railroad lines have been inscribed in the UNESCO World Heritage List.

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### Gabriele Schulze

Gabriele Schulze is a civil and transportation engineer. She has taught and researched water protection at various scientific institutions. In the Berlin Senate Administration, she worked in the area of integrated environmental protection at the Water Authority for Water Protection. She sits on the board of the Papageiensiedlung association, which was founded in 2010 and is committed to reconciling environmental protection and heritage in the Waldsiedlung Zehlendorf, also known as Papageiensiedlung (Parrot Settlement). She is also a founding member of kliQ – a climate-friendly neighborhood cooperative in the same neighbor-



hood whose aim is to make the area climate-neutral as quickly as possible, using geothermal energy and solar systems, among other things. The kliQ project struggles with the Berlin authorities' over an intended "monument preservation plan" which is not climate-friendly.

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### Eugene Simonov

Eugene Simonov is an environmental activist and expert. He is the International Coordinator of the Rivers without Boundaries Coalition (RwB) focusing on North Eurasian transboundary rivers. He collaborated with the WWF Amur Program to curtail three hydropower projects and designed a methodology for basin-wide environmental impact assessments of hydropower and analysis of the role of hydropower in flood management. He also works with the trilateral "Dauria" International Protected Area and the Sino-Russian Expert Committee on Biodiversity and Protected Areas. Since 2012, RwB has campaigned on hydropower projects sponsored by the World Bank and China Exim Bank. Since 2016 Eugene has worked with the Green Silk Road Coalition that pushes for more accountability and environmental sustainability of China's Silk Road Economic Belt integration initiative.

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### SOSOrinoco

The purpose of SOSOrinoco is to shed light on the existing body of work regarding the situation in the Amazonia and Orinoquia re-



gions of Venezuela, to raise awareness of the tragedy that is occurring and to outline some urgent measures that need to be taken in order to halt the unfolding human and environmental disaster. SOSOrinoco is an advocacy group started in 2018 by a group of experts inside and outside of Venezuela. They have been working anonymously, concealing the names of team members and witnesses, due to the high risk of doing this type of research in Venezuela. Their commitment has been to document and create an in-depth diagnostic of the region south of the Orinoco River and to raise awareness about the tragedy that is occurring, as well as to outline urgent measures that need to be taken in order to halt this disaster.

*Contact: info@SOSOrinoco.org*

### Nevin Soyukaya



Nevin Soyukaya graduated from Atatürk University, Department of Archeology. Between 1989 and 1994, she worked as the Culture and Art Director at the Diyarbakır Municipality. Between 1994 and 2013, she served as an Archaeologist and Museum Director at the Diyarbakır Museum. She served as the head of the Diyar-

bakır Castle and Hevsel Gardens Cultural Landscape Area Management during and after the UNESCO candidacy process. In 2017, she was dismissed from civil service by a decree-law. Simultaneously with her duties in the public sector, she participated in voluntary work and carried out projects in various NGOs, designating the cultural inventory of Mardin and Diyarbakır provinces. She has been running the Archive and Portal Project on Diyarbakır/Sur under the Diyarbakır Association for the Protection of Cultural and Natural Assets since 2018. Contact: [soyukaya@gmail.com](mailto:soyukaya@gmail.com)

### Ben Stern



Dr Ben Stern is an Assistant Professor in Archaeological Science at the University of Bradford, UK. BSc Honours Chemistry from the University of Bristol, PhD from the University of Newcastle. He has been employed at the University of Bradford for 28 years. He is Director of Studies for the School of Archaeological

and Forensic Sciences and a Senior Fellow of the Higher Education Academy. Resident of Saltaire for 25 years, co-founder of 'SOS: Save our Saltaire' group with the sole aim to 'To protect the World Heritage status of Saltaire'. We have no affiliation and are not funded as part of our campaign. Contact: [sosworldheritage@gmail.com](mailto:sosworldheritage@gmail.com)

### Yefta Sutrisno

Yefta Sutrisno (30) is a freelance researcher interested in social issues in Bali. He has been involved in Jatiluwih working with the local community since 2013. He is currently working on research project in Jatiluwih that is part of a multi-country study on "resiliency in indigenously engineered, yet vulnerable, rice farming landscapes." Contact: [yeftasutrisno@gmail.com](mailto:yeftasutrisno@gmail.com)



### Tasos Tanoulas



Dr. Tasos Tanoulas is an architect who worked in the Greek Ministry of Culture from 1976-2016, at the Service for the Preservation of the Acropolis Monuments (1977-2010), and in charge of the Propylaia Restoration Project (1984-2010). After retirement, he was superintendent of the Restoration of the Propylaia South Wing (2013-2016). A member of Greek and international scientific institutions and committees, he published more than seventy articles in scholarly periodicals and volumes, on architectural history and theory from antiquity to date, and published several books on the Propylaia. He received the Europa Nostra Award for Conservation and the Europa Nostra Public Choice Award in 2013, as the leader of the Propylaia Restoration Project. In 2020, he founded the initiative Acropolis SOS.

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### 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 Valley. 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.

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### Clara Winkler

As energy and climate expert at Deutsche Umwelthilfe (DUH), Clara Winkler investigates the environmental and climate impacts of fossil fuel projects in the North Sea. Holding a law degree, she leverages her legal proficiency to challenge environmentally harmful practices through the judicial system. In the past two years, she achieved multiple significant legal victories against offshore oil and gas drilling in the North Sea near the Wadden Sea, setting a precedent for future environmental protection cases. Contact: [winkler@duh.de](mailto:winkler@duh.de)



## Hideki Yoshikawa

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Hideki Yoshikawa is the Director of the Okinawa Environmental Justice Project (OEJP) in Okinawa, Japan. OEJP engages in research, advocacy, and lobbying to protect Okinawa's environment from the overwhelming presence of U.S. military bases in the region. Hideki was trained as an anthropologist at universities in the U.S. and Canada. For 15 years, he has been at the forefront of internationalizing Okinawa's military base-related environmental issues. His work has highlighted the controversial situations surrounding the UNESCO World Natural Heritage Yambaru Forest and the U.S. military's Northern Training Area adjacent to the World Heritage Site.

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## Imogen Zethoven

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Imogen Zethoven is director of Blue Ocean Consulting. She has 30-years of experience working to conserve nature on land and in the ocean through the development of public policy and environmental advocacy. She has worked for several NGOs in Australia, the USA and Germany including WWF, The Pew Charitable Trusts and the Australian Marine Conservation Society (AMCS) on matters such as marine park establishment, environmental law reform and climate change. She is currently advising AMCS on the Great Barrier Reef and World Heritage Committee advocacy. AMCS is the Australia's only national NGO dedicated solely to protecting Australia's ocean wildlife and ecosystems. AMCS was established in 1965 by a community of scientists and conservationists to protect the Great Barrier Reef.

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## 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. In UNESCO, recognition has now grown that the over 1000 World Heritage properties cannot be monitored, protected and sustainably managed without the active involvement of civil society.

World Heritage Watch (WHW) is also a worldwide civil society network of more than 250 NGOs, indigenous peoples, individuals and local communities who contribute to the safeguarding of UNESCO World Heritage sites. We claim our rightful role in the global governance system of the UNESCO World Heritage Convention, and we insist on our right to participate in the identification, interpretation, management and monitoring of World Heritage sites. We claim the right of local communities to know, understand, benefit from, maintain, enjoy and develop natural and cultural heritage, and we raise awareness in the general public about challenges the World Heritage faces from mismanagement, development pressures, climate change, overtourism and armed conflict.

### 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.

### Please support our work

This report, as well as all our work, is made possible by the great unpaid commitment of our network and staff, to whom we are very grateful. Please help us continue our work for the World Heritage with a generous donation!

#### World Heritage Watch e.V.

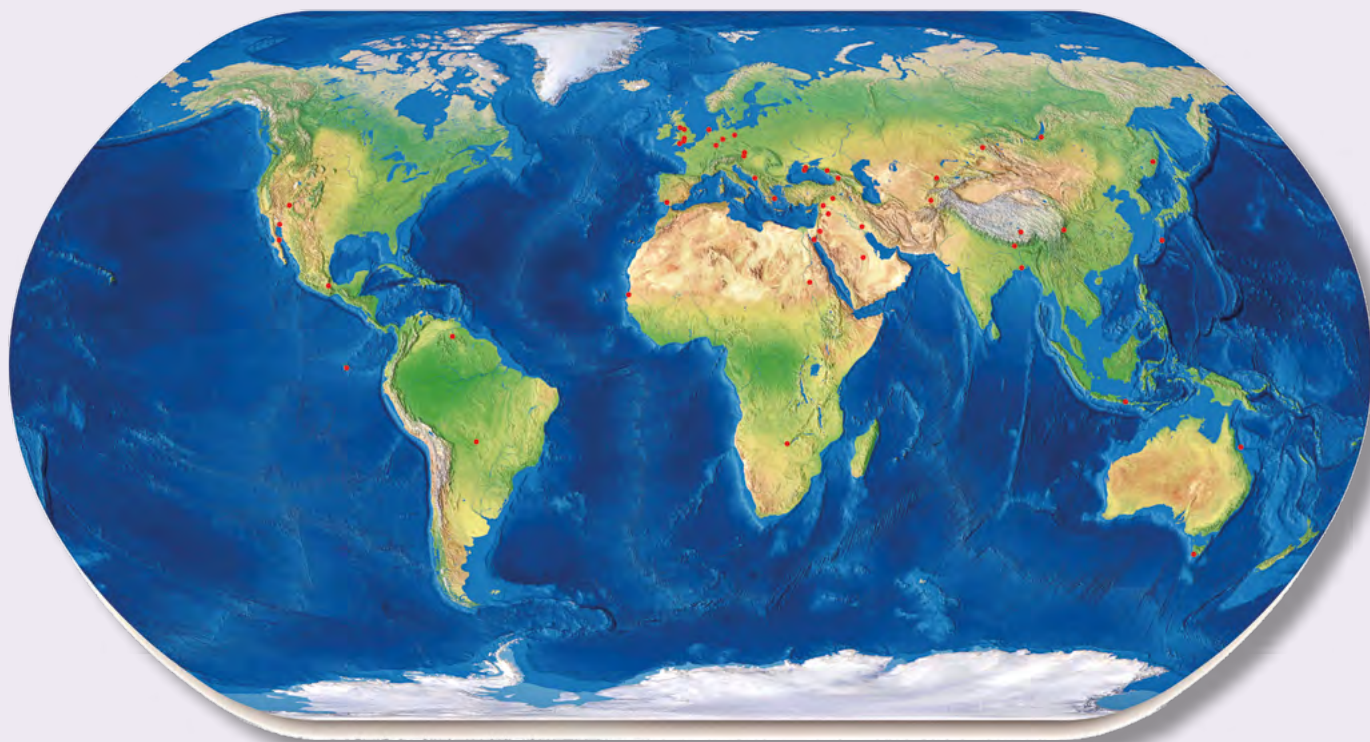
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Map of the properties covered in this volume

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