



World Heritage on the Edge

PART II: ENGINE OF NEGLECT

OHRID
SOS

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Preface

The following report was produced by Ohrid SOS, a Macedonian civic initiative comprised of scientists, activists, NGO leaders and concerned residents that is devoted to the protection of the profound biological heritage of the Balkan Peninsula's UNESCO Ohrid-Prespa region, one of the most species rich locations in all of Europe.

The document records the various ways in which the natural treasures of the region have been damaged or threatened since 2017, when Ohrid SOS produced its first [World Heritage on the Edge](#) report and a World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission was conducted to Macedonia's Ohrid region.

Readers who are also familiar with the official report from the reactive monitoring mission as well as the Republic of Macedonia's February and November 2018 progress reports in response to its findings will understand *World Heritage on the Edge Part II: Engine of Neglect* to greatest effect. All of these background documents are available on the [UNESCO web page for the Natural and Cultural Heritage of the Ohrid Region](#).

Abbreviations

CMNCHOR: Commission for the Management of the Natural and Cultural Heritage of the Ohrid Region;

JICA: Japan International Cooperation Agency

OUV: Outstanding Universal Value

MoEPP: Ministry of Environment and Physical Planning

UNESCO: United Nations Educational, Scientific and Cultural Organization

Note: *The Republic of North Macedonia is referred to as the Republic of Macedonia or Macedonia throughout the following document.*

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Introduction & Summary



A. The Ohrid Region

If a signature of world heritage is an ability to transfer exceptional natural or cultural significance between generations, maintaining and redefining a universal relationship with all humankind indefinitely through time, few locations can more strongly justify UNESCO status than the Republic of Macedonia's Ohrid region.

A rare ancient lake brimming with endemic species, once-in-a-world evolutionary narratives, and unique natural history, Lake Ohrid has preserved a rich inland freshwater of startling originality over a period of millions of years, during which almost all of its contemporaries have long since vanished from Earth.

Its tempering influence upon climate extremes has sheltered trees through glacial advances and preserved wetland habitats through the post-glacial drying of Balkan valleys, leading to exceptional floral diversity on its shores and surrounding mountains in the present day.

For seven thousand years, humans have availed themselves of this spectacle of nature, creating a diverse cultural spectacle of their own within. The archaeological remains of stilted Neolithic communities sleep beneath the lake's waves, which lap at a coast displaying histories from many empires in countless frescoes, ancient ruins, icons and structures of great architectural interest.

Throughout this period, both Lake Ohrid and the surrounding mountains have provisioned food, water, shelter and even medicine to their human residents. Added to this is a spiritual significance that began with sites of pre-Christian water worship and expanded through the churches and mosques that abound in the region.

More recently, yet another layer of importance has accumulated at the site as the ancient lake's ability to function as a natural laboratory for evolution studies alongside the vast climate and environmental archives stored within its sediments have become the focus for various fields of scientific research.

In 2018 alone, a world-first observation of an evolutionary phenomenon emerged from Ohrid (SIAL, 2018), and an innovative study into the origins of European agriculture was announced for the region (Universitat Bern, 2018). The discovery of species previously unknown to science is still ongoing (Levkov et al, 2011), not only in the lakewaters, but also on the mountain slopes (Muller, 2016) and present-day ecology is informing reconstructions of the weather tens of thousands of years ago (Sinopoli et al, 2019).

Given this layered relevance (not all of which has been appropriately recognized by UNESCO to date), it is impossible to presume the knowledge, uses and meaning that future generations will discover in the Ohrid region to augment those that we enjoy today, although its function as a climate refuge will likely be one of them.

Uncertain is also whether the location will remain in a suitable condition to cover the needs of future generations effectively.

B. Clear and Present Danger

In 2010, Goran Kostoski of the Hydrobiological Institute Ohrid was the lead author on a landmark paper for conservation in the Ohrid region, *A freshwater biodiversity hotspot under pressure – assessing threats and identifying conservation needs for ancient Lake Ohrid*. Published in the journal *Biogeosciences*, the paper identified 26 key threats to Lake Ohrid that ranged from the irresponsible harvesting of aquatic resources to pollution from wastewater and agricultural runoff. Of these 26, no less than 11 were assessed at the highest level of impact.

Subsequent reports by the IUCN (2014 and 2017); Japan International Cooperation Agency (2012); the World Heritage Centre, ICOMOS and IUCN Reactive Monitoring Mission (2017); and Ohrid SOS (2017) have also indicated that the anthropogenic burden upon the Ohrid region is approaching a critical level of stress from which some aspects of its Outstanding Universal Value — providing refuge for numerous endemic and relict freshwater species of flora and fauna dating from the tertiary period — may never recover.

Simultaneously, authoritative voices in the scientific community such as the Society of Wetland Scientists and two of the most prominent international Lake Ohrid researchers, Doctors Christian Albrecht and Thomas Wilke, have warned that the final remains of previously extensive coastal wetlands require imminent protection if they are to continue to fulfil their important ecosystem services both for biodiversity and the wider lacustrine area.

The sense of urgency even increased recently when Lake Ohrid was identified among the most climate-vulnerable freshwaters across the entire of Europe in a study that encompassed some 18,783 catchments (Markovic et al, 2017), placing added weight upon research findings from over a decade ago that predicted irreversible ecosystem damage in the Ohrid region from accelerated eutrophication in global warming scenarios (Matzinger et al, 2007).

Most—if not all—of these individuals and organizations have offered suggestions for how authorities both in the Republic of Macedonia and beyond can improve conservation of the Ohrid region. To name a brief few, these have included upgrades and maintenance of the wastewater system; proclamation of new in-lake and shoreline protected areas; advanced urbanization controls; restrictions upon the use of motorized boats; sustainable tourism practices as presented in the Ohrid SOS Green Platform (see Bibliography); improved and enforced legislative architecture; and a moratorium on fishing for species believed to be threatened such as *Salmo letnica*.

Nearly one decade on, however, the number of meaningful proactive measures taken by authorities to alleviate the “creeping biodiversity crisis” described within the Kostoski paper is close to zero. On the contrary, almost every plan for the Ohrid region proposed by either local or central decision-makers in the Republic of Macedonia since 2010 has been aimed at short-term monetization of the site via exploitation for unsustainable tourism development.

This goes hand in hand with a seemingly wilful lethargy to tackle obvious transgressions of legislation for nature-friendly practices, disentangle a juridical system that emasculates nature protection, or to ameliorate the consequences such as from illegal construction, mismanagement of hydro-electric facilities, illegal dumping and various other desecrations of natural values. As will be seen in the proceeding chapters, far from simple indifference, this is in fact an engine of neglect, whereby

important habitats are allowed to fall into disrepair before being primed for urbanization, all the while supported by Strategic Environment Assessments whose primary aim is to facilitate construction.

Against a background in which ecologically and/or environmentally intended actions are routinely aborted prior to actualization; delayed; poorly maintained; reversed; or discontinued (Apostolova & Scarry, 2017), the following document shall demonstrate that a systematic block is in operation to subvert and prevent effective nature conservation in the Ohrid region. This has most recently found expression in the selective and delayed implementation of the World Heritage Committee's Decision 41 COM 7B.34.

While this decision implies implementation of all 19 recommendations from a World Heritage Centre, ICOMOS and IUCN Reactive Monitoring Mission that was conducted to the Ohrid region in 2017, the majority of these requests are incomplete. In some cases, no attempt to resolve related issues has been made; in others, far more effort has been given to the appearance of measures being taken than real solutions enacted. The table below provides a summary of recommendations; their implementation status at the time of writing; and shortcuts to chapters in this document where the matter is discussed.

Number	Reactive Monitoring Mission Request	Status	More info
1	Provide alternative routes for railway and A2 road	Incomplete ¹	N/A
2	Improve design of A2 road	Incomplete ¹	N/A
3	Cumulative impact assessment for railway and A2	Incomplete ¹	N/A
4	Permanently abandon A3 road sections	Complete	N/A
5	Cease ski-resort/zone changes & move to ecotourism	Part Complete ²	Chap. 1
6	Moratorium on coastal transformation	Incomplete	Chap. 1
7	Finalize all planning documents, incl. tourism strategy	Incomplete	Chap. 3
8	Cumulative impact assessment for all plans	Incomplete	Chap. 4
9	Address illegal buildings & enforce laws	Incomplete	Chap. 1
10	Assess and establish a buffer zone	Incomplete	N/A
11	Clarify decision-making and involve civil society	Incomplete	Chap.1 & 8

¹The evidence in the Progress Report submitted by the Republic of Macedonia to Mechthild Rossler of the UNESCO World Heritage Centre in November 2018, i.e. the *Expert Opinion on the UNESCO Recommendations Made by Civil Engineering "Macedonia" (CEIM) JSC Skopje* does not contain sufficient information to satisfy cumulative impact criteria and provides stated intentions not to comply with the Reactive Monitoring Mission advice such as for wildlife crossings.

²Plans to change national park zoning and construct a ski-resort have been abandoned. However, moves to ecotourism practices have not been meaningfully followed.

12	Strengthen cross-boundary cooperation with Albania	Unknown	N/A
13	Improve wastewater	Incomplete	Chap. 5
14	Review chemicals at Bay of Bones Museum	Complete	N/A
15	Stabilize water levels, monitor ELEM & River Sateska	Part complete ³	Chap. 7
16	Close Bukovo, clean dumps & establish waste system	Part complete	Chap. 6
17	Take extensive biodiversity protection measures	Incomplete	N/A
18	Reduce motorized traffic in Ohrid old town	Incomplete	N/A
19	Prevent loss/degradation of archaeological/architecture		N/A

Table 1: Implementation status of the World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission recommendations from 2017

It is the Ohrid SOS hope that the evidence presented here will spur improved future decision-making not only in the local and national context but also from UNESCO, whose incredible potential to safeguard natural heritage has not translated into full effectiveness in the Republic of Macedonia.

Alternatively, in a worst-case scenario, it will serve as documentary evidence of the forces that led to the unravelling of Lake Ohrid's world-unique ecosystems and the World Heritage Convention's inability to deal with them.



³ No new measures have been taken to control water levels or monitor the power company ELEM. Some steps have been taken regarding the River Sateska but much further work is still required.



Chapter 1: Urbanization & Coastal Transformation

Summary

- ❖ Urbanization one of largest threats to World Natural & Cultural Heritage of the Ohrid Region
- ❖ Macedonian government says moratorium on construction is occurring but evidence poor
- ❖ Coastal and urban transformation continuing despite World Heritage Committee request
- ❖ Even mayor of Municipality of Ohrid unaware that moratorium conditions exist
- ❖ Huge array of tourism development projects still in the pipeline
- ❖ New bodies and legislation unlikely to make major difference to urbanisation trajectory
- ❖ Legalization of illegal constructions continues without necessary impact assessments

A. Background

That urbanization is depleting the natural values of the UNESCO Ohrid region is well-established (Kostoski et al, 2010). The earliest State of Conservation Report for the property in 1998 describes how “the enormous increase in constructions and settlement activities has seriously altered the original balance in the region”, making specific reference to the vicinity of Struga town (World Heritage Committee, 1998). The conclusion arose from a joint UNESCO/ICOMOS/IUCN monitoring mission that recommended, among other things, a special legal framework for the world heritage site and the preparation of a spatial plan for the area and towns.

Moving forward to the next publicly available State of Conservation Report from 2014, housing and tourism impacts are identified as main factors affecting the property, manifesting in the “uncontrolled interventions and development” that has impacted both its condition and integrity. Again, the report states that effective implementation of planning tools and regulatory measures are required to control development pressures and concern is raised about whether laws are fully enforced and management coordinated.

State of Conservation Reports for 2016 and 2017 paint a similar picture: “Large-scale projects continue to be proposed within the property” (2016) and urban planning documentation is being prepared for a wild array of projects, including piers, pontoons, tourism zones, platforms and even a sports airfield (2017). According to the reports, these have been elaborated and approved despite the absence of a cumulative impact assessment and the troubling state of both solid waste and wastewater systems in the region (2017). Simultaneously, “incremental and uncoordinated urban developments” are one of the pressures that “could deteriorate key attributes of the natural and cultural values of the property (such as the overall form of the monumental urban ensemble and the lake region’s biodiversity), if no immediate measures are taken.” (2017)

In consideration of the increasingly vulnerable state of conservation resulting in no small part from an unsustainable approach to tourism and urban development, a World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission was then conducted to the Ohrid region in 2017: Recommendation 6 of its wide-ranging report called for a “moratorium on any urban and coastal transformation within the World Heritage Property, at least until all relevant planning documents have been prepared and adopted, effective protective juridical regulations have been approved, and effective control mechanisms are established.”

According to the Reactive Monitoring Mission Report, the deadline for implementation was February 2018. This was reinforced by Decision 41 COM 7B.34 of the World Heritage Committee, which warns that the Ohrid region “may face potential danger, in line with paragraphs 179-180 of the Operational Guidelines” if priority recommendations are not implemented within a two-year timeframe, i.e. in 2019.

B. The Ghost Moratorium

Characteristically, in its first *Progress Report on the Implementation of the Recommendations of the Decision 41 COM 7B.34 of the World Heritage Committee* (hereafter referred to as the February Progress Report), the government of the Republic of Macedonia made no mention of the moratorium on urban/coastal transformation that had been requested by the World Heritage Centre, ICOMOS and IUCN, even though the submittal of this document also fell in February 2018, i.e. at the same time as the implementation deadline.

This attempt to sidestep the issue was compounded by the government's second progress report, *State of Conservation Report on the implementation of the recommendations from the Decision of the World Heritage Committee 41 COM 7B.34* from November 2018 (hereafter referred to as the November Progress Report), in which it claims that controlled implementation of the moratorium is in fact taking place despite

- a) no moratorium having been formally announced nor any supporting documentation provided to verify its scope and guiding principles;
- b) coastal and urban transformation continuing within the property;
- c) neither the mayor of the Municipality of Ohrid nor local citizens being aware of moratorium conditions; and
- d) 8 requests for urban planning document preparations (25% of the total) still receiving a positive response from the Commission for the Management of the Natural and Cultural Heritage of the Ohrid Region (CMNCHOR) since its inception during April 2017⁴.

Perhaps recognizing that such "controlled implementation" cannot be meaningfully distinguished from total non-implementation, the government emphasizes in its November Progress Report that no urban plans had been adopted by the Municipality of Ohrid between November 2017 and October 2018; that legal obstacles and owners' rights present an impediment to a full moratorium; that the rejection of the Decision for the Draft Detailed Urban Plan for the central town area of Ohrid signifies the alleged moratorium "slowly achieves its results"; and that 25 of the aforementioned requests for preparation of planning documents (75%) had not been accepted by CMNCHOR. These assertions are misleading on several levels:

I. Ongoing Destruction

The moratorium emphasized in the November Progress Report exists only in PDF and therefore defocuses from the real-world coastal transformation that is presently occurring at numerous locations within the Ohrid region. As demonstrated by Evidence 1A, 1B, 1C and 1D in the pictures below, shoreline habitat in Struga, Sveti Stefan and Lagadin is undergoing clear modification. Given that at least one of these cases is contrary to law (Evidence 1C) yet construction creeps forward at

⁴ Although the November Progress Report claims the CMNCHOR was established in April 2017, the formal stamped documentation for the appointment of a president, vice-president and members is dated at 29th January 2018. The commission's first meeting was held on 1st February 2018.

the site anyway, the November Progress Report’s concern for owners’ rights does not appear an entirely well-founded justification. Furthermore, the photographs in Evidence 1 are not the full picture. Several other constructions are taking place, including in urban areas.

Evidence 1

Inserts A to D on the ensuing pages have all been taken in the Ohrid region world heritage site during 2018, when the government of the Republic of Macedonia claims to have been actively working on “preserving the lakeshore belt and establishing order in the urban transformation” as part of a controlled moratorium on coastal and urban transformation (Ministry of Culture, 2018b).

A



APRIL 2018: Coastal habitat is readied for construction approximately 0.5 kilometres to the west of Lake Ohrid’s River Black Drim outflow at Struga.

B



MAY 2018: Another area of coastal land is cleared in the Municipality of Struga, a hotspot of habitat loss and natural heritage destruction since the 1990s (UNESCO, 1998).

C



JUNE 2018: Building proceeds in the village of Lagadin at a TUI Netherlands-linked hotel even though the permission for construction has theoretically been quashed by the Municipality of Ohrid after a request from the National Inspectorate for Construction and Urban Planning. The hotel is believed to contravene provisions in up to 12 laws (see Table 2 or Ohrid SOS, 2017).

D



SEPTEMBER 2018: *The concreting of Lake Ohrid's shore continues to the south-east of Ohrid town at Sveti Stefan unimpinged by the alleged moratorium on coastal transformation. The hotel's construction follows a contentious Strategic Environmental Assessment (see [Chapter 4](#)). The project commenced after publication of the 2017 World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Report that called for immediate measures to cease deterioration of the coastal zone. Public consultation requirements for the project were not fulfilled (see Table 7).*

II. Even the authorities did not know a moratorium exists!

Alongside the absence of land clearance or construction, one expected indicator for the existence of a moratorium on coastal and urban transformation is that authorities and local residents would know about such restrictions, especially since these key groups might find themselves inconvenienced by related regulations. Certainly, one would expect the Ministry of Transport and the mayor of a municipality subject to a moratorium to be fully aware that it had entered effect. Moreover, in this situation, it is to be predicted that, if citizens came onto the streets and barricaded the offices of their local municipality with a huge banner reading “moratorium” in protest at the lack of urbanization controls (Evidence 2A), the relevant authorities might seek to defuse the protest by informing the protestors of the measures that had already been implemented to ensure temporary cessation of construction activities.

Strangely, this does not match the Ohrid experience: Neither local residents nor the municipality mayor seem to have been informed that a moratorium was taking place in their territory. As depicted in Evidence 2, citizens of the Ohrid region have conducted two recent protests drawing attention to uncontrolled construction and demanding the UNESCO moratorium to be put in place, a bizarre activity in which to participate if such a moratorium was already effective. Even though the protests occurred during July and August 2018 respectively, i.e. in the middle of the time-period when, according to the Republic of Macedonia's November Progress Report to the World Heritage Committee, moratorium conditions had long been underway, the Municipality of Ohrid did not respond by explaining how subtle measures had already been tailored to ensure that their urbanisation concerns were being addressed.

On the contrary, Ohrid SOS notes from a meeting that was held at the time between protestors and Mayor Stojanoski of the Municipality of Ohrid clearly record that no moratorium was considered

active. This dovetails with the response to a moratorium request⁵ received by three CSOs (Ohrid SOS, Ekosvest and Front 21/42) from the Ministry of Transport and Communications on May 28th 2018, which sidestepped the issue by stating that the ministry had no jurisdiction to proclaim a moratorium, instead deferring power for such a decision to the local authorities. Ohrid SOS followed this up with a subsequent request direct to the Ohrid mayor on June 29th 2018, to which no response was received.

Mayor Stojanoski did contradict the Ministry of Transport’s opinion that imposition of a moratorium was within the power of local authorities in another context, however: Underlining that no moratorium measures had been taken, he was quoted in pro-government media with the following:

“We will give a decision, but the government also needs to give a decision, because it is the one that has signed the ratification with UNESCO and it will have to decide whether there will be a moratorium or not. For the moment, we just appeal to citizens to only demand things for which we are responsible.” — *Mayor Stojanoski seeming to indicate that no moratorium is in place in August 2018 (Libertas, 2018)*

By November 2018 with the release of the government’s second Progress Report, a revisionist attitude to the moratorium’s existence seems to have been adopted, creating a less than accurate picture of the situation on the ground.

Evidence 2

A



JULY 2018: Protestors erect a giant banner reading “moratorium” across the entrance to the Municipality of Ohrid administrative building, demanding controls on urbanization and construction in the Ohrid region. Staff at the municipality have to walk through the letter O to access their offices. Although the government claims in its November Progress Report that a moratorium on coastal and urban transformation was already happening in July 2018, no announcement had been made and the public clearly had not been informed

that one was taking place. At the time, the local municipality did not seek to calm the protests by explaining that a moratorium was in progress. Indeed, a quote from Mayor Stojanoski of Ohrid Municipality (see above) at the time of the protest strongly indicates that he was unaware of any such measures.

⁵This moratorium request was submitted to the Prime Minister, Ministry of Environment and Physical Planning and Ministry of Transport and Communications.

B



AUG 2018: An alternative version of Swan Lake is performed in Ohrid, symbolizing how uncontrolled urbanization is damaging the superlative natural phenomena of the UNESCO region. It is the second protest against poorly planned and illegal construction in as many months. Just as in July 2018, at no stage during the protest or aftermath do authorities seek to neutralize the situation by declaring that a moratorium is already in effect. Indeed, the November Progress Report is the first mention of an actualized moratorium most citizens (including environmental organizations such as Ohrid SOS) ever see.

III. 33 +1 Requests

According to the November Progress Report, 8 of 33 requests for preparation of planning documents were accepted by the Commission for the Management of the Natural and Cultural Heritage of the Ohrid Region (CMNCHOR) and allowed to step closer to realization, which, as intimated previously, already misaligns with the moratorium concept. That not all of the remaining 25 were actually refused but rather deferred for amendments further suggests insubstantiality, particularly since neither figures for the number of all-out refusals nor details of the required amendments have been provided by the Republic of Macedonia. All combined, that these are put forward as proof of a moratorium in action indicates a paucity of quality evidence to support such a conclusion.

The lack of context, explanation for decisions and transparency related to the 33 requests is telling: No details are provided in the November Progress Report; none are automatically available to the general public; and it is only after a specific request for information that Ohrid SOS was able to learn more about 7 of the 8 that have been passed by CMNCHOR⁶. These are a 3,3803m² poultry farm, for which, despite the inherent eutrophication risk, the company responsible can choose whether to conduct a Strategic Environmental Assessment due to its classification as light industry; commercial, residential and administrative buildings consuming 8,551m² over 2.68 hectares between the roads

⁶ To its credit, CMNCHOR has been broadly communicative and cooperative with Ohrid SOS in recent weeks, contrasting with other bodies and administrative units.

for Velgosti and Bitola in the Municipality of Ohrid; a 400kw cable connecting the city of Bitola and the Macedonia/Albania border; 2 residential plans in Struga for 4,057m² of construction over 1.3 hectares, and 2,700m² over 5,500m² respectively; 2,492m² of residences over 9,762m² at Grasnica; and a 2,672m² shopping mall in a 9.47-hectare area at the exit of Struga City. For some reason, documents provided to Ohrid SOS did not cover the 8th CMNCHOR acceptance, which passed for DUP UE 8, Block 9/1 in the Municipality of Struga even though it had previously been rejected, providing insight on the likely fate of other requests which have been sent back for amendments.

The smoke and mirrors extend further too: CMNCHOR has approved at least one more request for preparation of planning documents since the release of the November Progress Report, for Municipality of Struga DUP Block 23, UE 8, where residential, hotel and commercial buildings comprised of constructions rising G+2+attic to G+6+attic and a ten-storey building are envisaged next to the lakeside road. The total area for the development is 16 hectares, of which 12 will be built upon, which is seemingly incompatible with the essence of the World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Report, which in Section 5.3 states:

“There should be strict enforcement of land-use plans in each municipality, avoiding any urban sprawl by providing none or only very limited urban extensions, and forbidding any development out of urban areas and urban extensions.”

CMNCHOR president, Mr. Zoran Pavlov, confirmed that voting in absence, i.e. in writing, was allowed for Municipality of Struga DUP Block 23, UE 8⁷, which appears to be outside procedural boundaries since the Commission Rulebook states that voting is to be conducted by a public by raising of hands with no provision for written submission. According to the documents received by Ohrid SOS, a total of 12 positive votes were counted from 13 voting members of the commission (how many were actually present is unknown). These figures are interesting, because 12 members are the minimum required both by law for the commission to be operational and for it to achieve the necessary majority to pass a decision. In other words, it is not impossible that positive votes in writing could have been called in effectively to guarantee quorum and acceptance for the residential/commercial complex. (A second noteworthy point is where the Commission Rulebook states that a substitution request will be submitted to the government for any CMNCHOR member that has missed 3 sessions. How this inter-relates with written votes is not immediately apparent.)

The sizeable footprint of this residential and hotel complex including ten-storey building further raises questions about the group of 25 requests that have not yet met CMNCHOR's satisfaction. Either they are of a smaller scale, in which case the reason for their current non-accepted status while larger projects pass is unclear⁸; or are potentially even more impactful, whereby there is great

⁷A credible source with strong insider access claimed that votes have also been submitted by telephone, although this was denied by Zoran Pavlov, the commission president.

⁸The lack of transparency and partial application of the alleged moratorium have created a space in which applications for preparation of planning documents can either be frivolously submitted to or frivolously refused by CMNCHOR both to act as a smokescreen for the progress of priority projects and to manufacture the illusion of control measures/moratorium conditions. Ohrid SOS does not allege that this is taking place, but acknowledges the potential for such manipulation given that the quality of publicly available information is so poor.

concern for what exactly is being planned and amended in the Ohrid region at present⁹. Certainly, greater information and oversight is required about the status of these 25 plans.

IV. All of Death's Faces

The November Progress Report places much emphasis upon steps taken by the Municipality of Ohrid in both restraining itself from adopting urban plans during an arbitrarily defined November 2017 to October 2018 period and rejecting a proposed Decision for the Draft Detailed Urban Plan that would have affected Ohrid town's central area. Here, another selective representation of the Ohrid region reality has been put forward.

To begin, although the non-adoption of urban plans during a narrow timeframe beginning some eight months from the deadline¹⁰ suggested by the 2017 Reactive Monitoring Mission is intended to imply that projects impacting the superlative natural phenomenon of the Ohrid region are not moving forward in the Municipality of Ohrid, the production, at the municipality's request, of a Strategic Environmental Assessment (SEA) for development of a 44-hectare tourism complex plus port at Gorica on Lake Ohrid's east coast suggests other forces at work, especially considering the heavy bias towards urbanization within the assessment (see [Chapter 4](#)) and its references to an unexplained strategy goal of "motivating investors for realization of the proposed program of tourism development as synchronized with the current economic tendency of the country" (Enviro Resources, 2018).

An evaluation of the necessity for a Strategic Environmental Assessment covering commercial zones, hotel complexes, accommodation, housing and infrastructure has also been released for the neighbouring plot of land, North Gorica. This is adjacent to Studenchishte Marsh (see [Chapter 2](#)), whose habitats constitute a blueprint for the wetland rehabilitation that has been repeatedly identified as an important site need (Watzin, 2003; Kostoski et al, 2010; Spirovska et al, 2012; Apostolova et al, 2016; IUCN, 2017; Society of Wetland Scientists, 2018).

The Municipality of Ohrid has not provided an adequate response to Ohrid SOS's enquiries about the specific nature of proposed development for North Gorica, but calls for several SEAs in the surrounding area have also been issued, some even passing the public consultation stage, indicating that a slew of developments from Gorica to Sveti Stefan is intended. Because related environmental assessments are fragmented, the interactive impact of these plans is almost certainly underestimated, especially in combination with the aforementioned port at Gorica and the proposed modification of 700m of beach from Studenchishte Marsh to Hotel Park (see below).

⁹Ohrid SOS had been reliably informed that plans for a residential complex involving tens of apartments had been passed by CMNCHOR for the Municipality of Ohrid. This does not appear to be the case from the documents released, which possibly indicates that such plans are under amendment.

¹⁰The non-adoption of urban plans at municipality level during this period should not be read as non-acceptance by CMNCHOR. The committee's positive responses to 8 requests for preparation of planning documents all took place during November 2017 to October 2018.

Several other potentially damaging plans are still active, even if they are not currently being actualized. During the 12-month period when no urban plans are said to have been accepted by the local government, the Ministry of Transport and Communications provided an update to the national government on the foreseen construction of a platform (presumably in-lake) near Ohrid airport and simultaneous refurbishment of the ports at Sveti Naum, Radozda, Trpejca and Pestani¹¹ (Ministry of Transport, 2018b). What this renovation will specifically entail has not been detailed.

On February 6th 2018 at its 53rd Session, the government also received an update on the progress of plans to modify beaches at Lake Ohrid, revealing that this insidious pressure to aquatic and wetland ecosystems has not been reversed by national authorities (Government of the Republic of Macedonia, 2018). References to beach modification in the official record from the session are codified in the same imprecise language as the previous government's environmentally inconsiderate plans to pimp up 1,560m of the coastal area at 5 locations, including at Studenchishte Marsh and Ljubanishta, and are traced to the same source, the Ministry of Transport and Communications, indicating that they are the very same proposals. Paradoxically, the record mentions the need to align these plans with World Heritage Committee recommendations¹², even though denaturing and manipulation of shoreline environments is one of the most thoroughly studied and best understood threats to the natural values of the Ohrid region (Kostoski et al, 2010).

Adjacent to the Municipality of Ohrid, the Municipality of Struga has been busy too. Reports from VOX Struga, a local media outlet, suggest that a large section of the Struga waterfront is to be made available for concession to private businesses, opening yet more natural and semi-natural coastal areas to transformation for tourism purposes (see Evidence 3E) and demonstrating that plans to remodel the Lake Ohrid shore are progressing in earnest, despite the November Progress Report's attempt to characterize them as on hold.

Further, although numerous environmental impacts ranging from habitat fragmentation to fish kill (see [Chapter 7](#)) have resulted from the exploitation of Lake Ohrid's water resources for hydropower, a plan has been announced by the Municipality of Struga in conjunction with a consortium of Dutch companies to install more hydro-electric facilities on the River Black Drim. These are understood to be of a different design to previous such facilities, and the potential environmental influence is therefore unknown. However, given concerns about the current hydropower practices in the Ohrid region (World Heritage Centre/ICOMOS/IUCN, 2017) and the huge deficiency in Strategic Environmental Assessments (see [Chapter 4](#)), this announcement requires close attention.

Evidence 3

Featured on the ensuing pages is a selection of documents related to development proposals in the Ohrid region. It is a small sample of the total number, which, practically speaking, is unknowable.

¹¹The refurbishment and platform construction are described as conservation issues in UNESCO's 2017 State of Conservation Report for the Natural and Cultural Heritage of the Ohrid Region.

¹²Documents submitted to the General Secretary of the Government of the Republic of Macedonia indicate that over 7.5 million Euros are needed for the entire beach modification plan, which gives some insight into its scope.

Each document is suggestive of an active plan for coastal modification, creating the impression that alleged moratorium conditions in the Ohrid region are not leading to any functional change in the approach to tourism and urbanization planning in the world heritage site. Imagining the interactive completion and operation of these plans in conjunction with the many other development proposals for which Ohrid SOS has not obtained documents requires also imagining massive cumulative threats to Lake Ohrid's species, habitats, ecosystems and oligotrophic waters, i.e. core components of its Outstanding Universal Value.

A

Податоци за органот кој го изработува планскиот документ	
Назив на планскиот документ	Урбанистички план за населено место (УПНМ) - Горица Север, Општина Охрид
Орган-надлежен за изработка на планскиот документ	Општина Охрид
Орган-надлежен за донесување на планскиот документ	Совет на Општина Охрид

Податоци за изработувачот на планскиот документ	
Име на лицето задолжено за подготвување на планскиот документ	Боранко Арнаудоски
Назив на работното место	Пом. раководител на Сектор за урбанизам и заштита на животна средина
Контакт податоци за лицето	Тел. 046/262-492, 070/348-348

Страна 1 од 5

30th OCTOBER 2017: Evaluation for the necessity of a Strategic Environmental Assessment for an area known as North Gorica, adjacent to Studenchishte Marsh, released by the Municipality of Ohrid. It suggests that significant development is envisaged for the 17-hectare site including residential buildings, temporary accommodation, commercial buildings, a hotel complex, and infrastructure. Other SEA calls from the municipality indicate that a cluster of developments is planned nearby, including a port. Taken together, the scale of proposed coastal transformation from Gorica to Sveti Stefan appears massive. It is just one location among many in the Municipalities of Ohrid and Struga still facing interventions.

Република Македонија
Бр. 02-384/1
10.01.2018 година
Скопје

МИНИСТЕРСТВО ЗА ТРАНСПОРТ И ВРСКИ

ДО ГЕНЕРАЛНИОТ СЕКРЕТАР
НА ВЛАДАТА НА РЕПУБЛИКА МАКЕДОНИЈА

Име на материјалот: Информација за текот и прогресот на активностите за уредување на плажи на брегот на Охридското, Дојранското и Преспанското езеро во Република Македонија, согласно извадок од Нацрт-записник од 99 седница на Владата на Република Македонија, одржана на ден 10.03.2017 година

ЕПП бр. _____ (Број на материјалот од Програмата за усојување на правото на ЕУ)

Усогласеност со Годишната програма на Владата: Да

Усогласеност со член 68 од Деловникот за работа на Владата: Да

Предлог на која седница на Влада да се разгледа материјалот:
На прва наредна

Карактер на материјалот:
• слободен пристап

Итност на материјалот:

Прилог:

Дата на доставување на материјалот:
Јануари, 2018 година

ПОТПИС
Горан Сутарески

B

JANUARY 10th 2018: An update on beach development proposals provided by the Ministry of Transport to the General Secretary of the Government of the Republic of Macedonia reveals that plans to artificialize 1.5 kilometres of coast, including in the comparatively pristine Ljubanishta area and the crucial zone where Lake Ohrid and Studenchishte Marsh interact, have not been cancelled. These appear to be relicts of the previous government's intention for vast anthropogenic manipulation of the Ohrid coast. The current government still harbours hope that beach modifications will be compatible with world heritage status (Government of the Republic of Macedonia, 2018).

C

Република Македонија
Бр. 02-384/1
15.01.2018 година
Скопје

МИНИСТЕРСТВО ЗА ТРАНСПОРТ И ВРСКИ

ДО ГЕНЕРАЛНИОТ СЕКРЕТАР
НА ВЛАДАТА НА РЕПУБЛИКА МАКЕДОНИЈА

Име на материјалот: Информација за напредокот на реализација на активностите за санација на пристаништата во Свети Наум, Радожа, Трпејца и Пеушани, изградба на платформа кај Охридското езеро, согласно Извадок од Нацрт-записник од Деведесет и деветтата (деветта) седница на Владата на Република Македонија, одржана на ден 10.03.2017 година

ЕПП бр. _____ (Број на материјалот од Програмата за усојување на правото на ЕУ)

Усогласеност со Годишната програма на Владата: Да

Усогласеност со член 68 од Деловникот за работа на Владата: Да

Предлог на која седница на Влада да се разгледа материјалот:
На прва наредна

Карактер на материјалот:
• слободен пристап

Итност на материјалот:

Прилог:

Дата на доставување на материјалот:
јануари, 2018 година

ПОТПИС
Горан Сутарески

JANUARY 23rd 2018: Another update from the Ministry of Transport to the General Secretary of the Republic of Macedonia confirms that plans for an in-lake platform and port renewal at multiple locations are also still envisaged.

Со цел навремено да се согледаат евентуалните влијанија врз животната средина и здравјето на луѓето, како и социјално - економските аспекти од реализација на УПВНМ за дел од ТК Горица, планскиот опфат 2 во КО Општина 4, општина Охрид, согласно член 85, став 2 од Законот за животна средина („Сл. Весник на РМ“ бр. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123/12, 93/13, 187/13, 42/14, 44/15, 129/15, 192/15 и 39/16), постои обврска за спроведување на Стратегиска оцена на влијанието на планскиот документ врз животната средина.

Извештајот за Стратегиска оцена е потпишан од Експерт за Стратегиска оцена на влијанието врз животната средина (видено од Копија на потпира, дадено во прилог).

Во подготовката на Извештајот за Стратегиска оцена на влијание врз животната средина учествувале:

- Емил Стојановски, дипл. инж. по заштита на животна средина,
- Љупчо Аврамовски, дипл. економист.

Горенаведениот извештај за стратегиска оцена на животната средина согласно член 66 став (5) од Законот за животна средина е потпишан од лице кое е вклучено во листата на експерти за стратегиска оцена на влијанието врз животната средина која ја води Министерството за животна средина и просторно планирање. Како доказ за истото во прилог на извештајот е дадена копија на Потврдата со број 07-10997/2 од 26.12.2012 година дадена од страна на Министерството за животна средина и просторно планирање.

КД Енвио Ресурси, ДОО
Управител
Емил Стојановски

Копија се користи само за целите на информирање и не се смета за дел од документот. КД Енвио Ресурси, ДОО Охрид, Наведениот извештај за влијанието врз животната средина на УПВНМ на дел од ТК Горица, планскиот опфат 2 во КО Општина 4, општина Охрид. Документот не смеа да се бира и дистрибуира на целите или на волани без согласност на КД Енвио Ресурси, ДОО Охрид.

2

D

E



JULY 2018: A completed Strategic Environmental Assessment for a 44-hectare tourism complex at Gorica is released. It includes unspecified references to a port. This is additional to the neighbouring 17-hectaresite at North Gorica for which similar developments are envisaged. Environmental assessments for other areas in the surrounding locale are also at varying stages of completion but a thorough description of all plans from Studenchtishte Marsh to Sveti Stefan has never been revealed to the public.

NOVEMBER 2018: A document published by VOX Struga alleges plans from the Municipality of Struga to offer almost the entire coastal strip of the town on concession. If the report is accurate, heavy modification and commercialization of the coast are almost certain to occur.

V. (Lack of) Urgency

In harmony with many aspects of the document, the Republic of Macedonia's November Progress Report to the World Heritage Committee twice emphasizes that its alleged moratorium measures are designed to achieve a "slow decrease in urban pressures", i.e. a stated intention not to comply with the Reactive Monitoring Mission Report's April 2017 request for immediate steps to be taken to prevent "severe deterioration" of the coastal zone and World Heritage Committee Decision 41COM 7B.34 from June of the same year.

On the one hand, such emphasis on slowness reduces the alleged moratorium to unquantifiability, perhaps to avoid scrutiny of its results; on the other, it depicts how authorities have failed to grasp the urgency of decreasing pressure upon a freshwater ecosystem of almost unparalleled species richness that has been assessed variously as one of the most climate-vulnerable in Europe (Markovic, 2017); at realistic risk of developing anoxia — a so-called dead-zone — as a result of the interplay between climate change and local anthropogenic stressors (Matzinger et al, 2007); and as being on the point of a biodiversity crisis (Kostoski et al, 2010).

C. Legal Imbalance

Incompleteness of the moratorium requested by World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Recommendation 6 is justified by the November Progress Report on the grounds of legal obstacles, i.e. "owners' rights in view of already commenced processes and procedures". This ignores both the illegal character of certain coastal transformations and the frequent bypassing of the legislative framework established to protect Lake Ohrid. It therefore constitutes a continuation of the unbalanced application of law that has long hamstrung nature protection in the Ohrid region.

For example, in 2017, Ohrid SOS submitted an official complaint about the construction of a TUI-Netherlands-linked hotel in the village of Lagadin on Lake Ohrid's east coast, outlining how the process was in conflict with 12 laws (Ohrid SOS, 2017). The complaint was upheld after a combined inspection by the State Inspectorate for Construction and Urban Planning and the State Inspectorate for Environment, which requested the Municipality of Ohrid to revoke the building's permission, an order which the municipality did not truly complete. First, the municipality's apparent annulment was for reasons different to those that had been identified by the inspectorates, presumably to smoothen the path to a revised decision in the future¹³. Second, the construction permit was not

¹³In its decision to request revocation of permission for the Lagadin hotel, the State Inspectorate for Environment made reference to "an array of irregularities in the procedure for determining conditions for the manner of construction in Lagadin village, Municipality of Ohrid, as well as in the procedure for issuing the approval for the construction of the hotel complex in question". It stated that requirements for an environmental impact assessment related to the General Act for Lagadin had not been completed. Despite this, the Municipality of Ohrid's apparent annulment for the building permission gives as the reason for the rescindment only that the official announcement for the project had not been made within the appropriate timeframe. Because such untimeliness is perceived as a less serious offense, it is potentially much easier to overturn.

entirely rescinded—only its validity clause was annulled, a technical legal move allowing the investor to submit repeated requests to the Second Appeals Commission. Since then, six appeals to reinstate the permission have been lodged and each has failed, yet work has resumed at the hotel (Evidence 1C) on at least three occasions during 2018 regardless. Ohrid SOS has attempted to obtain the decisions from the Second Instance Committee to no avail and its own appeal to the Commission for Public Access to Information has been spuriously denied.

1. Law on Management of the World Natural and Cultural Heritage in the Ohrid Region (Article 9; Article 17 Paragraph 1 & Article 23, Paragraph 2)
2. Law on the Protection of Lakes Ohrid, Prespa and Dojran
3. Law on Environment
4. Law on Nature Protection
5. Law on Waters (Article 131, Paragraph 1, Clauses 4,5 and 7)
6. Law on Physical and Urban Planning (Articles 33 & 35)
7. Rulebook on the Procedure for Obtaining an Electronic Construction Permit (Article 8)
8. Law on Construction (Article 84 & Article 137, Paragraph 4)
9. Law on General Administrative Procedure
10. Law on Public Sector Employees (Articles 8, 9 & 10)
11. Law on Property and Other Rights (Articles 9, 26, 118, 124 & 152)
12. Constitution of the Republic of Macedonia (Articles 26 & 30)

Table 2: List of laws with which the TUI-linked hotel at Lagadin is believed to be in conflict

Although the matter has been raised with authorities, responsibility for taking action has been passed from institution to institution. Meanwhile, the building inches closer to completion, at which point it may undergo the same legalisation process that has legitimized many objects whose establishment was originally contrary to Macedonian law. The likelihood of such an outcome has strengthened with recent comments by the Republic of Macedonia’s prime minister (see [Chapter 1, Section E](#)). To date, no steps aimed at removal of the construction have been taken place even though the case has become emblematic of the uncontrolled coastal development in the Ohrid region that has been described by the IUCN (2014, 2017) as a main threat to the World Heritage Site.

Legislation aimed at protecting wetland habitats within 10m of water bodies under Article 55 of Macedonia’s Law on Nature is also routinely ignored or overridden. Meanwhile, reed belts were once specifically protected under the Law on Fishing unless special permission was received to enable their destruction (Official Gazette, 1993). Such provisions appear to have been discarded from legislation since 2008 (Official Gazette, 2008), and, although updated rules prevent the removal of reeds at Lake Prespa, similar legal safeguards do not seem to have been put in place for Lake Ohrid.

Provisions in the Law on Waters to prevent permanent construction within 50m of Lake Ohrid’s highest waterline have been equally disregarded. Several of the actions pictured in Evidence 1 seem to be occurring within this zone, and, on February 5th 2019, the present acting mayor for the Municipality of Ohrid, Mr. Georgieski, provided ample insight into the way it is regarded at the decision-maker level during a public address on the subject of construction, the moratorium and Lagadin:

"When an investor comes and asks for permission to build based on an existing plan, I as mayor am obliged to act upon that request [...] When a plan allowing construction of such a building within 50 meters from the coast is already adopted – it is a done deal." — *Acting Mayor Georgieski, public address, 5/2/2019*

This is despite the following context provided to Recommendations 6, 7, 8 and 9 of the 2017 World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Report:

"No construction should be undertaken in the future in the coastal belt of the lake, in a width larger than 50 metres from the elevation of the highest water level of Lake Ohrid, in conformity with the Law on Waters."

Given these anomalies in the application of law, the Republic of Macedonia's assertion that "a controlled implementation of the recommendation for a moratorium is being achieved, by fully respecting the national legislation" (Ministry of Culture, 2018b) lacks credibility. In fact, the reverse is true: A moratorium is not occurring and the legislative mechanisms to prevent illegal construction and block the deterioration of Lake Ohrid's world heritage values are functionally absent.

D. New Legislation

Preparation of a new Law on the Management of the Cultural and Natural Heritage of the Ohrid region is underway in the Republic of Macedonia. It is presumably intended to provide the juridical controls requested in the 2017 World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Recommendation 6.

Although demonstrating tentative improvement on existing legislation, current drafts for the new law lack i) criteria to objectively assess damage to world heritage; ii) triggers to ameliorative action when damage occurs; iii) sufficient punitive measures to act as a deterrent; iv) sufficient responsibility provisions to ensure that any negligent or destructive actor will be subject to sanction; and v) measures to address obvious deficiencies in strategic environmental assessments. Recommendations for improvements put forward by Ohrid SOS as part of the official public consultation are available in [Annex 2](#).

No matter how the law is written, however, it is destined to fail unless deficiencies in the entire legal architecture are addressed: Other laws, including for urbanization, either under draft or already in place, render the new legislation aimed at world heritage meaningless, a technique that has been regularly applied to circumvent legal requirements for nature protection in the Republic of Macedonia (Apostolova and Scarry, 2017).

For example, speaking at a rally named *Strong Economy, Opportunity for All* in the Ohrid region alongside the prime minister on February 1st 2019, the Minister for Transport and Communications, Goran Sugareski, characterized new legislation for construction and urbanization that will be voted on in March 2019 as reform laws to make processes for obtaining construction permits easier and simpler. In diametric opposition to Reactive Monitoring Mission advice against urban sprawl (World Heritage Centre/ICOMOS/IUCN, 2017), Prime Minister Zaev simultaneously expressed a vision for the future of Ohrid that involved the city spreading in all directions with streamlined planning laws underpinning urban growth:

“I love Ohrid, probably not as much as you, but I love it a lot. However, first and foremost, Ohrid people need to take care of Ohrid. Forceful urbanization of Ohrid will impose a problem. It must stop. That is why, my opinion is for the urbanization of Ohrid to be peripheral, to expand. GUR needs to be done fast. The new Law on Physical and Urban Planning provides a fast track to bringing urban plans. It speeds up the whole procedure — of GUP, DUP and village urban plans. First, it allows for that opportunity. Second, whenever there is a weak link, speak publicly about it. Start from Zaev if need be, in order to remove it. The plan for Ohrid is scalable growth. There cannot be 25-storey buildings on the quay. Isn’t that right? It must be properly dimensioned and executed. Ohrid is too dense in the city centre. We should not force it in the downtown any more. It is true that one has right to build if they have construction land. But the plan makes a plan [sic] for growth and development of the town. It must be in the periphery. That is how the town should expand, towards the back, towards all directions.”

The new Law on Physical and Urban Planning mentioned by Prime Minister Zaev additionally contains provisions for so-called *buildings of state importance*, currently under draft in Section 6, Article 17. Permitted in national parks and other protected areas, these buildings are poorly defined and would therefore enable a wide range of constructions. Moreover, the proposal for *buildings of state importance* closely mimics that for *buildings of special interest*, which was previously contained in Article 50 of the present Law on Physical and Urban Planning. Article 50 was repealed by the Constitutional Court of the Republic of Macedonia by Decision no. 136/2016-1 on July 5th 2017 on the grounds that it allowed “the possibility of arbitrary decision-making” on the part of the government; failed to distinguish between private, state or municipal ownership; and excluded public opinion. It is now being re-attempted under a different name.

Other dangers lurk in the draft as well. Requirements for strategic environmental assessments that are part of the current urban planning law have been removed and Article 23 in Section 12 appears to provide solid legal status to several highly contentious planning documents that have emerged in opaque circumstances over recent years. Typifying how the legal framework is designed to disempower nature protection, the entirely new Article 94 establishes that the Law on Physical and Urban Planning will take precedence over any other legislation, thus rendering pointless the newly undertaken revisions to the law for the world heritage site:

“The provisions of other laws that refer to the urban planning process that are subject to the regulation of this law, that is, provisions of other laws that regulate

parts of the subject of the regulation of this law or affect the content of the urban plans, the conditions for performing the works in the field of urban planning, the procedures for drafting, adopting and implementing the urban plans, as well as other work in the field of urban planning are not prescribed by this law, will not apply.” — Article 94, draft Law on Physical and Urban Planning as of 12th February 2019.

Yet the new Law on the Management of the Cultural and Natural Heritage of the Ohrid Region may not require other legislation to weaken its effect. Intrinsic measures can create similar outcomes: In Paragraph 28 of the current draft, provisions for a moratorium on coastal and urban transformation have been included. However, these only become effective when the new law enters force and then end as soon as the new *Management Plan for Natural and Cultural Heritage* is adopted,¹⁴ thereby instigating a twofold threat:

First, lifting of the moratorium has not been conditioned upon functional legal and control systems, which are central to any long-term effectiveness that could be expected from Reactive Monitoring Mission Recommendation 6. Instead, it is conditioned with a PDF for a management document, which, as has been shown many times in Macedonia, has a high probability to disconnect with real-world circumstances (Apostolova and Scarry, 2017). In the meantime, as has been demonstrated here and in [Chapter 1, Section C](#), those steps that have been taken towards the establishment of legal and control systems are cosmetic measures intended to hide rather than solve underlying urbanization issues.

Second, since drafting of the Management Plan is at an advanced stage, the pieces are in place to declare and discontinue a moratorium within a minimal timeframe to give the appearance of fulfilling the World Heritage Committee’s requests, yet without meaningfully doing so¹⁵.

E. Legalization of Illegal Constructions

World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Recommendation 9 requires the Republic of Macedonia to undertake an inventory of illegal constructions within the world heritage property, assess their environmental and heritage impact, and remove those which represent a threat to the property as well as ensuring strict adherence to existing laws. Particular emphasis is placed on objects in National Park Galichica.

To the knowledge of Ohrid SOS, no inventory or assessment process has been undertaken to date. Objects whose encroachment on protected areas has expanded in recent years, such as the restaurant at the strictly protected Springs of Sveti Naum in National Park Galichica (see Evidence 7B), continue to operate unimpeded as do constructions within the 50m green belt.

¹⁴ By implication, this is yet more evidence that moratorium measures have not yet been enacted in the Ohrid region.

¹⁵ Ohrid SOS advises conditioning the moratorium with objective measures of progress in terms of controlling urbanization. Please see [Annex 2](#).

At the same time, legalization processes for illegal constructions legitimize more and more buildings: The 5th of February 2019 at the Municipality of Ohrid, for instance, was dedicated to an assembly meeting where 61 out of the 70 items on the agenda aimed to legalize illegally constructed buildings, largely in the UNESCO-designated area, often in villages both along the coast and in National Park Galichica (UB Ohrid 4, Ramne, Konjsko, Pestani, Trpejca, Ljubanista). Some of the items referred to more than one structure.

During this legalization episode, one suspicious item concerning Gradishte, a campsite on the Ohrid coast, was withdrawn from the agenda at the last minute following public pressure. Not only did the item seek to give legitimacy to 209m² of actual illegal constructions¹⁶, but it also incorporated 61,814m² of land (cadastre no. 2295/1 in Pestani) to be legalized as if it contained buildings when none in fact were present, a manoeuvre that was widely interpreted as an attempt by authorities to secure the land under denationalization laws before making it available for development.

Affirming the arbitrariness with which urbanization processes occur in the Ohrid region, at the *Strong Economy, Opportunity For All* public rally on February 1st 2019, Prime Minister Zaev even personally pledged to ensure that a notorious illegal hotel construction in the village of Lagadin (see [Chapter 1, Section C](#) and Evidence 1C) would receive legal status, describing how he was in direct SMS communication with the investor. This is despite huge anomalies in the urban planning process leading up to its construction, including foregone requirements for an environmental assessment, and the aforementioned decisions by the State Inspectorate for Construction and Urban Planning and the State Inspectorate for Environment (see [Chapter 1, Section C](#) and Ohrid SOS, 2017)¹⁷.

At the same rally, the prime minister put pressure on staff at the Municipality of Ohrid to facilitate building permits, explaining how the process for applications should work:

“...even if there might be some formally legal aspect in the urbanization department, there should not be ‘cannot be’ or easiest to say ‘no’ as an answer on their part. They must find a way to make it ‘yes’”. – Prime Minister Zaev during the *Strong Economy, Opportunity For All* rally in Ohrid, February 1st 2019.

Mr Georgieski, the Municipality of Ohrid’s acting mayor, gave yet more credence to the suspicion that illegal constructions will not be addressed in the manner requested by Reactive Monitoring Mission Recommendation 9 by stating in March 2019 that buildings outside the law could not currently be removed because new legislation was being prepared.

F. Conclusions

The World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Report is unequivocal in the wording of Recommendation 6 that a moratorium should be established on **any** coastal or urban transformation in the Ohrid region world heritage site, conditioned upon a) the adoption of planning documents; b) effective juridical instruments; and c) operational control systems. At the same time,

¹⁶Despite their illegality, these constructions have been registered in the national cadastre.

¹⁷The prime minister later backtracked on this position, nonetheless stating that the final decision will be made according to the revised Law on Physical and Urban Planning, which, as seen in [Chapter 1, Section D](#), is worrisome.

Recommendation 9 requires appropriate assessment, management and reversal of harmful illegal constructions.

The World Heritage Committee Decision 41 COM 7B.34 is equally clear that if priority measures are not implemented by 2019, the property may face potential danger in line with paragraphs 179-180 of the *Operational Guidelines*. Understanding the threats posed to the globally unique natural values of the Ohrid region by urbanisation in terms of habitat loss; wastewater and associated eutrophication; solid waste disposal; and related changes in species composition (Watzin et al, 2003; Avramoski et al, 2005; Matzinger et al, 2007; Kostoski et al, 2010; IUCN, 2014 and 2017; World Heritage Centre/ICOMOS/IUCN 2017), it is difficult to imagine recommendations with greater priority.

Despite this pressing urgency, the Republic of Macedonia has not only failed to meaningfully act on the urbanization issue and related moratorium request, but attempted to cover its inaction with a carefully curated, selective version of events in its November 2018 *State of Conservation Report on the implementation of the recommendations from the Decision of the World Heritage Committee 41 COM 7B.34* (the November Progress Report). Either the steps it has taken have been so minimal that not even the Municipality of Ohrid's mayor noticed their controlling effects or they do not factually exist.

Indeed, where the November Progress Report claims that a controlled implementation of a moratorium is in place, in fact land is being cleared and constructed upon in the Municipality of Struga; both legal and illegal developments are continuing in the Municipality of Ohrid; plans for large-scale plastification of beaches driven by the Ministry of Transport are still active; a Strategic Environmental Assessment has provided a favourable opinion of a 44-hectare tourism complex on Lake Ohrid's east shore at Gorica; the need for a new Strategic Environmental Assessment has been established for an adjacent plot of land at North Gorica; new residential and commercial areas have been accepted for the Municipalities of Ohrid and Struga by the CMNCHOR; the Ministry of Transport (again) continues to entertain plans for several port makeovers and an in-lake platform; laws are being revised to ease buildings procedures; the national leader has a stated intention to expand urban areas; and, of course, the west coast anticipates road and rail construction. The cumulative impacts of these developments are likely to be significant but have never been calculated and these are only the plans for which minimal details are in the public realm. Others are known to exist (with even less detail).

Legal mechanisms such as the Law on Waters are still insufficient to prevent this onslaught, and, even when the law is robust in theory, it can still be simply ignored in practice, including by the prime minister. At the same time, CMNCHOR, the alleged control system, is providing delay options for preparation of planning documents about which little information is provided. Mechanisms in the new Law on the Management of the Cultural and Natural Heritage of the Ohrid Region (currently at draft stage) appear to suggest improvement but still lack punitive and control measures linked to objective indicators of destructive activity. Regardless, the new law will almost certainly be overridden by provisions in other laws, both already active and under draft.

All in all, the situation in July 2019 cannot be substantially distinguished from any given year in the Ohrid region's recent history. Hunger for urbanization is intense in the Municipality of Struga, disbalancing the region, just as remarked by the World Heritage Committee in 1998. Kostoski et al would surely form similar conclusions today about the biodiversity-adverse modification of coastal habitats as they did in 2010. Development pressure and destruction of shoreline habitats remain a key conservation issue, matching precisely the IUCN's 2014 *World Heritage Outlook* report. And, just as concluded by the IUCN in 2017, legal enforcement is weak with documentation in the pipeline for an eclectic mix of construction-based projects. All the while, legalization procedures for illegal buildings continue as they have done for many years with neither inventories nor impact assessments complete.

Self-evidently, the intention of the moratorium measure is to provoke a reorientation of regional development policy away from destructive urbanization practices. However, as we have seen, effective control measures are still absent; new juridical instruments are predicted to be stillborn; and no moratorium is practically in place, allowing coastal and urban transformation to continue at pace. Indeed, a veritable tsunami of construction plans is waiting to be unleashed.





Chapter 2: Studenchishte Marsh & Wetland Protection

Summary

- ❖ UNESCO designation failing to result in wetland protection
- ❖ Wetlands a case study for the natural values of the Ohrid region
- ❖ Ecosystem services from wetlands underpinning Outstanding Universal Value
- ❖ Massive wetland loss has reduced fully functional wetlands to 63.97ha Studenchishte Marsh
- ❖ Wetland restoration an important site need
- ❖ Protected areas and Ramsar Convention proclamation required
- ❖ Institutional obstruction, including from Macedonian Ramsar Committee, hindering conservation
- ❖ *Declaration on the Protection of Lake Ohrid Ecosystem* released by Society of Wetland Scientists

A. Ohrid Wetlands: History and Importance

Underrated and overlooked at every level from the World Heritage Committee¹⁸ to local authorities, coastal wetlands in the Ohrid region both support and directly contribute to the natural values upon which the site's world heritage status is founded.

Buffering Lake Ohrid's oligotrophic waters from excessive nutrients and thus contributing to their clarity, quality and the specific chemical balance that enables their world-unique biodiversity to flourish, the wetlands have furnished extensive habitats for many thousands of nesting/wintering water-birds (Watzin, 2003) and spawning/sheltering grounds for countless generations of fish, including the Ohrid trout (Spirovska, 2012), all of which closely correlates with the Ohrid region's Outstanding Universal Value statement.

Ohrid wetlands are additionally a case study in natural heritage: As post-glacial warming pushed such habitats out from many Balkan valleys, the Lake Ohrid microclimate, which lessens extremes of temperature and dryness, was able to sustain them, both preserving flora that was gradually disappearing from this part of Europe and forming unusual plant associations, some of which endure to the present day alongside a diverse vertebrate and invertebrate fauna, including endemic planarian and diatom species (Spirovska et al, 2012).

Previously extensive, these coastal wetlands are now functionally reduced to a small area (approx. 63.97 hectares) at Studenchishte Marsh on Lake Ohrid's eastern shore, whose significance is attested in several sources in terms of biodiversity, relict flora, endemic taxa, support to species during key stages of their life-cycle and ecosystem services (Ministry of Environment and Physical Planning (MoEPP) 2003, 2016; Spirovska et al 2012; Apostolova et al, 2016; Society of Wetland Scientists, 2018).

B. Wetland Loss, Abuse and Consequences

Over the past century, a devastating loss of wetlands has occurred in the Ohrid region, one which echoes with growing insistence through its natural world.

In the vicinity of Struga alone, 500 hectares of wetland have been drained almost in entirety, while several other coastal wetland habitats have been similarly substituted for agriculture and urban land uses (Apostolova et al, 2016). Substantial reduction and misuse of Studenchishte Marsh has been permitted too, even though it is the final, remaining shoreline wetland of significance in the Ohrid region, whose contribution to biodiversity has been established over many years (Spirovska et al, 2012). Much decline has occurred in the four decades since UNESCO designation (Apostolova et al, 2017b). Recent plans, presently on hold, have even attempted to drain and concrete the area completely (MoEPP, 2018). Other proposals that would heavily damage Studenchishte, such as

¹⁸ Nospecific measures to address wetland decline or protect Studenchishte Marsh have been suggested at World Heritage Committee level, an oversight that may lead to total destruction of wetland habitats.

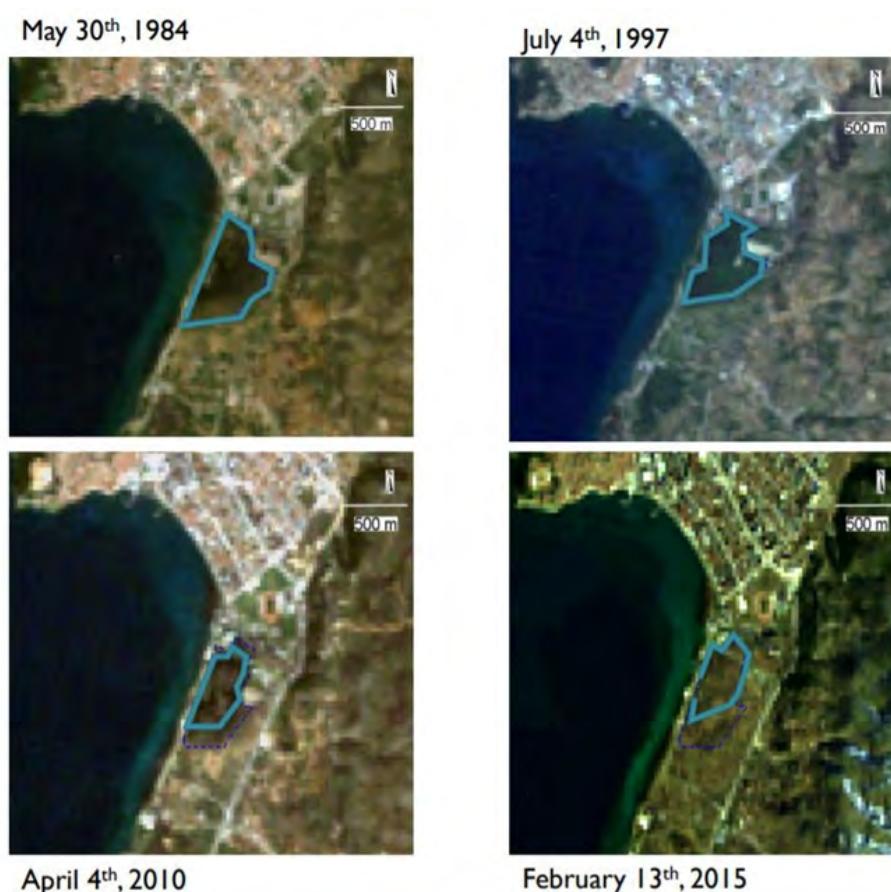
marina construction (MoEPP, 2014b) and remodelling of the shoreline for artificial beaches (see Evidence 3B), are thought to be still active.

Understanding that wetlands filter nutrients such as nitrogen and phosphorous, their replacement with agriculture and urban developments, well-known nutrient sources, has perhaps not surprisingly been accompanied by growing eutrophication concerns at Lake Ohrid. More directly quantifiable has been the decrease and suspected local extinction of wetland plant species rare in south-eastern Europe (Spirovska et al, 2012); a decline in the population of wintering birds that can now be measured in the tens of thousands (IUCN, 2017); abandonment by nesting water-birds (Spirovska, 2012); and the alteration/loss of traditional spawning grounds for fish, which has coincided with significant changes to Lake Ohrid's fish community (Kostoski et al, 2010).

In all likelihood, the impact on Lake Ohrid's natural habitats is even greater, but the lack of baselines or monitoring for many species groups makes firm conclusions impossible.

Evidence 4

The four pictures below are taken from the conference presentation *Proposed measures for restoration of Studenchishte wetland* (Apostolova et al, 2017), which was unveiled at the 13th Europe Chapter Meeting of the Society of Wetland Scientists. Evidently, wetland loss at Studenchishte has been occurring at an alarming pace even since Lake Ohrid received UNESCO designation in 1979.



C. Declaration on the Protection of the Lake Ohrid Ecosystem

Several journal papers and reports have called for wetland rehabilitation to mitigate and reverse the anthropogenic pressures currently causing fray to the Ohrid region's Outstanding Universal Value (Watzin et al, 2003; Kostoski et al, 2010; Spirovska et al, 2012; Apostolova et al, 2016; Ohrid SOS, 2017; IUCN, 2017). Studenchishte Marsh is often named as a specific target for such measures, although on-the-ground action has been conspicuous by its absence (see [Chapter 2, Section D](#)).

Efforts to advance wetland-focused policy solidified when the Society of Wetland Scientists' Europe Chapter, an expert organization whose global umbrella incorporates over 3000 experts, unanimously passed the *Declaration on the Protection of the Lake Ohrid Ecosystem* ([Annex 1](#)) at its conference in May 2018, which was hosted in the city of Ohrid. The declaration states

- Studenchishte Marsh is critically important as the very last fully functioning marsh ecosystem along the lake due to its species composition, 4000-year peat layers and services to humankind such as water quality improvement, carbon storage, flood retention and others (spawning of fish species et cetera);
- Despite its importance, the condition of Studenchishte has been deteriorated by building development, drainage and agricultural use, waste dumping, establishment of a plant nursery, and road construction;
- UNESCO designation has neither resulted in specific measures to protect Studenchishte, despite its value, nor prevented the inflow of polluted waters to Lake Ohrid;
- Lake Ohrid including Studenchishte Marsh should be designated as a Ramsar Wetland of International Importance based upon already existing information in order to substantially enhance the status of their protection;
- Measures such as removal of hard boundaries, safeguarding of the connection to Lake Ohrid, a cessation of inappropriate activities and careful rewetting should aim at the long-term goal of restoring Studenchishte Marsh to its original boundaries; and
- Restored and reconstructed wetlands should form part of an overhaul of water management practices aimed at reducing pollution and improving water quality in the Ohrid region.

The conference at which the declaration was unveiled attracted influential politicians and institutional figures such as the mayor of Ohrid and Aleksandar Nastov, the National Focal Point for Ramsar Convention Matters within the Republic of Macedonia's Ministry of Environment and Physical Planning. Promises were made to establish protection for Studenchishte by the end of 2018. Yet, as shall be seen, the only concrete progress achieved within that timeframe was the announcement of a call to extend valorisation of the area.



MAY 2018: Experts from the Society of Wetland Scientists perform a site visit to Studenchishte Marsh. Subsequent to the visit, they unanimously passed the Declaration on the Protection of the Lake Ohrid Ecosystem, calling for a substantial improvement in wetland protection in the Ohrid region, including Ramsar nomination.

D. Non-Protected Status

The Ramsar Convention on Wetlands entered force in the Republic of Macedonia in 1991, indicating that the country has long understood the importance of wetland protection, at least on paper. As stated in the Society of Wetland Scientists' *Declaration on the Protection of the Lake Ohrid Ecosystem*, accessing this international convention on behalf of Lake Ohrid, establishing the site as a Wetland of International Importance, would form a base from which protection of the lake and its coastal wetlands at Studenchishte Marsh could be consequentially upgraded.

Two of Macedonia's three tectonic lakes (Prespa and Dojran) have in fact been designated as Ramsar Sites, but no application has ever been submitted for Lake Ohrid, even though it certainly passes the criteria for designation (MoEPP, 2018); has been on the Ramsar shadow list since 1994; has seen Ministry of Environment and Physical Planning action plans set now-expired deadlines for nomination (see Table 3); and urgently needs progressive wetland protection.

Studenchishte Marsh has been overlooked repeatedly at the national level too. Since 1979, the same year as Lake Ohrid achieved UNESCO designation for its natural heritage, several attempts have been made to provide it with protection, starting a journey through proposed legal categories such as Special Purpose Area within the Basic Urban Plan for the city of Ohrid; Special Nature Reserve

within the Spatial Plan for Macedonia; Landscape with Outstanding Natural Features within the General Urban Plan; and, most recently, Monument of Nature. Nonetheless, its status in regard to Macedonia's Law on Nature Protection has still not been defined (Apostolova et al, 2016).

E. Institutional Obstruction & Ramsar Status

The Republic of Macedonia's November 2018 *State of Conservation Report on the implementation of the recommendations from the Decision of the World Heritage Committee 41 COM 7B.34* mentions in respect to Reactive Monitoring Mission Recommendation 11 that the Ministry of Environment and Physical Planning has "upon the initiative of the civil society sector", begun the process of proclaiming Lake Ohrid and Studenchtishte Marsh as "a landscape with a higher degree of protection". The civil society sector agent in question is EDEN/Ohrid SOS and the so-called "higher degree of protection" should, in accordance with the Record from the 60th Session of the Government of the Republic of Macedonia held on 20th March 2018, specify designation as a Wetland of International Importance under the Ramsar Convention.

The decision to begin the process of proclamation is unquestionably a positive step on the part of the government. However, several aspects remain of concern, notably the speed with which the designation process is proceeding; the omission of any guarantee of the size of the protected area to be established at Studenchtishte Marsh; the obstructive attitude of figures essential to the Ramsar nomination process; and previous attempts to drain the area for various forms of construction, which occasionally reappear in the media under the guise of a marina. Although the latter have been blocked for the present time, the level of institutional opposition to protection of the full area suggests that they may not have entirely disappeared.

I. Slowness

Since the government's 60th Session at which the proposal to improve Lake Ohrid and Studenchtishte Marsh's protected status was adopted, few further steps have been taken towards designation as a Wetland of International Importance or to place Studenchtishte within a protection category at national level¹⁹ with the exception of preliminary moves toward a valorisation study, which has not yet begun.

This mirrors previous failed attempts to establish protection for the area. Several of Macedonia's national reports to the Convention on Biological Diversity (CBD) stretching back to 2003 have admitted Studenchtishte Marsh to be a nationally rare habitat under severe anthropogenic pressure containing important and endangered species (MoEPP 2003, 2010, 2014, 2018), but, as already mentioned, none of this government-level hand-wringing has translated into a protected area.

¹⁹IUCN Category III — Monument of Nature

As early as 2004, the *Biodiversity Strategy and Action Plan of the Republic of Macedonia* (MoEPP, 2004), also submitted to the CBD, foresaw restoration of Studenchishte Marsh with a deadline for the same year. One decade later, the Ministry of Environment and Physical Planning, with little restoration evident, decided to downgrade to the rather less ambitious target of completing a plan to protect the wetland in its *2014 Biodiversity Strategy* (MoEPP, 2016b). The ministry gave itself a generous 4-year window to complete the plan, but unfortunately even this preliminary task proved impossible to achieve. It has now been put back to 2018-2023 (MoEPP, 2018).

Ramsar nomination for Lake Ohrid has followed an almost identical trajectory. The aforementioned 2004 *Biodiversity Strategy and Action Plan of the Republic of Macedonia* envisaged a completed proposal for a Lake Ohrid Ramsar nomination by 2008. Unfulfilled, a similar measure reappeared in the *2014 National Strategy for Biological Diversity with Action Plan*, which promised a 2017 application. Still requiring more time, the subsequent *National Biodiversity Strategy and Action Plan for the Period 2018–2022* (NBSAP 2018-2022)²⁰ pushed the deadline for nomination back to 2018. As 2019 begins, Lake Ohrid is still not a Ramsar Site.

What these examples depict is the sizeable gap between intentions and actions in relation to nature conservation in the Ohrid region. Given the many years that have elapsed between recognizing threats at Studenchishte and establishing measures to eclipse them, which are still outstanding, it is difficult to interpret the passivity in any terms other than a deliberate attempt to stall and avoid wetland protection. All the while, the condition of Studenchishte is deteriorating, which leaves it vulnerable to development²¹ and may cause it one day to cross a threshold from which protected status is even harder to achieve (see [Chapter 3](#)).

Hence, the government's stated initiative in the November 2018 Progress Report to secure further protective status for Lake Ohrid and Studenchishte Marsh, while welcome and positive, cannot be invested with particular meaning until it is supported by verifiable activity and wholly processed applications for protected areas whose size truly reflects the natural values they are intended to safeguard. So far, nothing substantial has been achieved and the deadline for Ramsar nomination from NBSAP 2018-2022, adopted by the government almost concurrently with the initiative, has already passed.

Report/Date	Measure	Deadline	Achieved
NBSAP 2004	A.4.1.2. Restore Lake Ohrid (including Struga and Studenchishte Marsh)	2004	No
NBSAP 2004	A.3.4 Prepare proposal to nominate wetland ecosystems to the World Ramsar List (Dojran and Ohrid Lake, Monospitovo Marsh)	2008	No

²⁰The *National Strategy for Biological Diversity with Action Plan* was also adopted in March 2018 at the government's 58th session.

²¹Attempts to amend urban plans to allow for construction at Studenchishte have already been made (Ohrid SOS, 2017).

NBSAP 2014	11.3.1. Nomination of Lake Ohrid for Wetland of International Importance in accordance with the Ramsar Convention	2017	No
NBSAP 2014	10.4.1. Identification of the most threatened lowland wetlands and preparation of an action plan for their conservation, such as, for example, Studenchishte Marsh [...]	2018	No
NBSAP 2018	11.4.1 Nomination of Lake Ohrid for Wetland of International Importance in accordance with the Ramsar Convention	2018	No

Table 3: Overview of proposed actions to conserve wetlands in the Ohrid region. NBSAP stands for National Biodiversity Strategy with Action Plan.

II. Size

A 2012 expert study *State of the Remains of Studenchishte Marsh and Measures for its Revitalization* concluded that 63.97 hectares of wetland at Studenchishte Marsh (not including a buffer zone) should be designated at the national level as a Monument of Nature. Understanding the vast area of coastal wetland that has already been lost and in line with advice in the Society of Wetland Scientists' *Declaration on the Protection of the Lake Ohrid Ecosystem* ([Annex 1](#)) to aim towards full wetland restoration in the long term, this should be taken as a minimum.

To date, although the Macedonian government has adopted the Ohrid SOS initiative to establish a protected area for Studenchishte, no guarantees have been offered about the size. However, a media report announcing a valorisation study indicated 30 hectares. While the source for this information was not specified and it may be a simple misunderstanding, suspicions persist that a token area insufficient to safeguard remaining—or re-establish lost—biodiversity might be designated at Studenchishte to mislead those unfamiliar with the situation to believe that true conservation efforts are being made.

These suspicions were heightened by media statements from the architectural studio Tetraktis about the creation of a new-build marina at Studenchishte. Indeed, representatives from Tetraktis are known to have met with the late Mayor Stojanoski, the latter refusing to exclude the possibility of marina construction at the location. Further, it is worth noting that on no occasion have Macedonian authorities mentioned revitalization of the lost wetlands of Studenchishte. Quite to the contrary, it has been said that the marsh will be partially protected (whatever is left) and partially urbanized.



MARCH 2018: Concurrent to a meeting with Mayor Stojanoski of the Municipality of Ohrid, architectural studio Tetraktis put forward new vision for the Studenchishte Marsh area, involving construction of a new-build marina.

III. Institutional Obstruction

The decades-long pattern of Studenchishte Marsh and Lake Ohrid wetlands approaching protection and ultimately failing to achieve it, appearing as the subject of various official action plan measures that are never fulfilled ([Chapter 2, Section E, ii](#)), suggests either a Ministry of Environment and Physical Planning (MoEPP) that lacks power to secure the natural values of the Ohrid region against stronger contrary interests or opposition within the ministry itself.

Ohrid SOS has been informed by an extremely well-placed individual (source protected) within MoEPP that the process of designating Studenchishte Marsh as a protected area in particular is being obstructed internally. Considering the relatively clear and established justification for such designation in terms of Ohrid region nature conservation on the one hand and the pressure the wetland faces as a proposed object for urbanization on the other (MoEPP, 2018), the motivation for this obstruction within an institution charged with achieving environmental goals is not easily comprehensible.

Given that risks and degradation to the wetland persist day to day, it is also unclear why the Ministry of Environment and Physical Planning has not taken up the opportunity provided by the Law on Nature Protection to place Studenchishte under temporary protection, especially since its own reports repeatedly confirm the importance of the area.

One unexpected disruption to reinforcement of Lake Ohrid wetlands is the Macedonian Ramsar Committee (MRK), which, although ostensibly tasked with promoting and implementing wetland protection in the Republic of Macedonia, has consistently blocked and slowed the process of Ramsar nomination for Lake Ohrid. Whether through incompetence, self-interest or genuine intent to impede the progress of nature conservation in a zone earmarked for construction remains unknown, but MRK has variously (Evidence 5)

- imposed an arbitrary ten-year limit on data inclusion, for which there is no basis in Ramsar documentation, thereby disqualifying several important studies from the application process;
- denied the existence of data/information that can legitimize the nomination of Lake Ohrid and Studenchishte Marsh to the Ramsar Convention in opposition to the stated opinions of both the Ramsar Secretariat and Society of Wetland Scientists;
- forcibly removed an Ohrid SOS representative from a meeting related to the Ramsar proclamation process when asked to keep full records of the discussion;
- misrepresented the criteria which need to be fulfilled in order for Lake Ohrid and Studenchishte Marsh to become a Ramsar Site;
- ignored scientific sources supplied in support of Ramsar nomination;
- provided misleading opinions about whether Lake Ohrid can justify Wetland of International Importance designation; and
- indicated that Studenchishte Marsh may be excluded from any Lake Ohrid Ramsar Site, despite its hydrological and biological significance to Lake Ohrid and contrary opinions from both the Central Ramsar Committee (Evidence 5B) and the Society of Wetland Scientists.

None of this would be particularly noteworthy if MRK did not have monopoly power over the nomination process. As things stand, however, its stance constitutes a block to Ramsar application and represents a very real danger that Studenchishte Marsh, i.e. the final significant coastal wetland for the Ohrid region world heritage site, will be excluded from Ramsar designation if Lake Ohrid ever does end its decades-long wait for recognition as a Wetland of International Importance.

Evidence 5

Excerpts from letters and emails are presented below to document how the Macedonian Ramsar Committee (MRK) has obstructed and misrepresented the Ramsar application process. Comments by MRK are presented alongside statements from other sources to highlight the divergence between its position and that of other expert bodies. Table 4 summarizes the justification and reference material to demonstrate Lake Ohrid's applicability to the Ramsar Convention.

A) The Society of Wetland Scientists, many of whose members have strong familiarity with both the Ramsar Convention and the process for nominating a related Wetland of International Importance, has encouraged Ramsar designation for the Ohrid region on several occasions. It has made clear in its unanimously adopted *Declaration on the Protection of the Lake Ohrid Ecosystem* that existing data is sufficient for an application from a Ramsar perspective; that the Ramsar Secretariat is well disposed to the designation of Lake Ohrid; and that Studenchishte Marsh should be included within the nomination.

“...call upon the Macedonian authorities from the national to the local level to substantially enhance the status of protection of Lake Ohrid, including Studenchishte Marsh and its catchment through existing legislation and instruments. This should also be achieved by designating the Lake system as a Wetland of International Importance under the Ramsar Convention. Macedonia is a Contracting Party of the Ramsar Convention and SWS has information that the designation would be welcomed by the Ramsar Secretariat in Gland, Switzerland, and that this designation can be based on the information that is currently available;” – Taken from the Society of Wetland Scientists 2018 Declaration on the Protection of the Lake Ohrid Ecosystem ([Annex 1](#)).

B) On July 1st 2018, Dr. Tobias Salathe, Senior Advisor for the Ramsar Secretariat, addressed a letter to Aleksandar Nastov of the Macedonian Ramsar Committee and Vlatko Trpeski, the Director of the Nature Department in the Republic of Macedonia’s Ministry of Environment and Physical Planning ([Annex 3](#)), indicating that sufficient justification already exists for Lake Ohrid and Studenchishte Marsh’s designation as a Wetland of International Importance.

“We are confident that the available knowledge, and the most recent studies by Macedonian and international experts provide sufficient information, data and understanding to allow you to nominate “Lake Ohrid and Studenchishte marsh” for listing as a “Wetland of International Importance” (Ramsar Site) under the Convention on Wetlands.” – Dr. Tobias Salathe, Senior Advisor Europe, Ramsar Convention Secretariat.

C) In an update to its latest report to the Convention on Biological Diversity, the Ministry of Environment and Physical Planning has expressed certainty that Lake Ohrid passes the criteria for proclamation as a Wetland of International Importance.

“It is necessary to improve the management of internationally protected areas in the country (most of them are transboundary). Dojran and Prespa Lakes are under international protection in accordance with the Ramsar Convention, but Ohrid Lake, which meets the criteria for designation as wetland of international importance, has not been nominated yet.” — National Biodiversity Strategy and Action Plan for the Period 2018-2023, Ministry of Environment and Physical Planning (2018) as part of the GEF projectSupport to the Republic of Macedonia for revision of National Biodiversity Strategy and Action Plan and development of the Fifth National Report to the Convention on Biodiversity

D) The Macedonian Ramsar Committee (MRK) has contradicted the opinions of the Society of Wetland Scientists, Ministry of Environment and Physical Planning, and the Ramsar Secretariat on several occasions. Notably, MRK president, Branko Micevski, has claimed that an application (RIS) cannot be made for Lake Ohrid to become a Ramsar Site because the only relevant data is out of

date, even going so far as to suggest that the basis for an application is non-existent. This is despite the fact that a) Ramsar has no time limits for data inclusion; b) numerous expert-produced data and peer-reviewed materials such as International Waterbird Counts from 2010-2019²² and research from the SCOPSCO Drilling Program from the past decade can support a Ramsar application for Lake Ohrid (see Table 4); and c) the Macedonian Ramsar Committee has already been presented with convincing evidence to proceed with nomination by Ohrid SOS.

“We have no entry data to start filling in the RIS for Ramsar. If they are at the disposal of your expert Prof. Dr. Jos Verhoeven, he should submit them. We only have data for the birds (Micevski, B., 2003. Avifauna of Ohrid Lake. BSPSM’s special edition, 5/2003. Skopje, pp. 42.), but they need to be updated as the data is more than 15 years old.” (e-mail communication received by Ohrid SOS on February 13, 2018)

“Neither I nor the Macedonian Ramsar Committee can lean on speculations, but exclusively on concrete data and importantly not older than 10 years.” (e-mail communication related to Ramsar nomination for Lake Ohrid received by Ohrid SOS on November 26th, 2018)

“If you think that there is enough data including ones for birds, go ahead and do it. I think that there is no data whatsoever and the existing ones are old and irrelevant”. (e-mail communication received by Ohrid SOS on December 5th, 2018)

Other communications from MRK have falsely implied either that Ramsar nomination can only be attempted on the basis of multiple criteria or that data on waterbirds is critical to the application process. In fact, any one of Ramsar’s nine criteria can be justified for a location to receive designation as a Wetland of International Importance — Lake Ohrid is thought to pass all 9 (see Table 4) — and, while significant waterbird presence can be used to support nomination, it is not essential. Even disregarding this, however, firm data since 2010 show that Ohrid avifauna crosses Ramsar thresholds.

“...the Ramsar Convention is a Convention for protection of wetland habitats as waterfowl habitats. Apparently there is a book on birds for Lake Ohrid so go ahead and use it. I cannot stand in support as the president of the National Ramsar Committee, nor as a scientist for what I am not familiar with.”

“You should be clear that Macedonian Ramsar Committee can undertake filling in the RIS when sufficient data is available from all aspects, that is from as many Ramsar criteria as possible” (e-mail communication received from Branko Micevski of MRK by Ohrid SOS on February 13th, 2018)

²²Dates selected on the basis of the data received by Ohrid SOS.

In opposition to both the Ramsar Secretariat's senior advisor for Europe and the Society of Wetland Scientists, MRK repeatedly displays unwillingness to include Studenchishte Marsh in the Lake Ohrid nomination, seeming to question the value of ancient Lake Ohrid's last remaining fully functioning marsh system. In doing so, it ignores reports, research, expert-authored articles and peer-reviewed papers that have consistently reinforced the importance of Studenchishte Marsh over a period of more than 100 years (Cvijic, 1911; Kostoski et al, 2010; Spirovska et al, 2012; Albrecht and Wilke, 2015; Apostolova et al, 2016; Society of Wetland Scientists, 2018).

"I don't know on what grounds would Studenchishte Marsh join if not valorized."— (e-mail communication from Branko Micevski, November 26th, 2018)

"Regarding Studenchishte Marsh, it is unknown what there is and what there could be if revitalized. For something unknown it's hard to believe that anyone would invest unless led by political incentives on national or local level or from ignorance." — (e-mail communication from Branko Micevski, March 1st 2018)

Table 4: Justification for the designation of Lake Ohrid as a Wetland of International Importance according to the 9 Ramsar criteria. Although the Macedonian Ramsar Committee expresses doubts about whether the location can support a Ramsar nomination based on existing data, a wealth of information and research, much published and compiled in the previous decade, can verify its suitability.

	Ramsar Criterion	Pass	Justification
1	Representative, rare or unique wetland	✓	Oldest lake in Europe (Albrecht & Wilke, 2008); singular hydrology with 50% of water from karst springs; unique ecosystem with global importance for evolution studies (Albrecht and Wilke, 2008); 1 of only 2 true hotspots of continental aquatic diversity in Europe (Neubauer et al, 2015); major component of the Drim Basin & source of River Black Drim; extensive paleoenvironmental & paleoclimate archives (Wagner et al, 2017); microclimate supporting relict shoreline wetland & terrestrial biological refugium (Spirovska et al, 2012; Sadori et al, 2016); provisioned human settlements for approx. 8,000 years resulting in extensive archaeological evidence of the link between humankind and wetland habitats.
2	Rare and threatened species	✓	Approximately 50 recorded species threatened according to IUCN Red Lists at global or European level; several endemic species with limited local range; relict flora and plant associations at coastal wetland Studenchishte Marsh.
3	Contribution to biological	✓	Perhaps the most biodiverse lake on Earth when measured by endemism to surface area with minimum 212 world-unique species (Albrecht & Wilke, 2008); adjusted rate of endemism of 36%

	diversity		(Albrecht & Wilke, 2008); major contributor to biodiversity at the Southeast Adriatic Drainages freshwater ecoregion, one of the most important areas globally for density of fish taxa with 8 species for every 104 km ² (Hales, 2015).
4	Support critical lifecycle stages or in adverse conditions	✓	212 endemic lacustrine species supported a priori through every stage of their life-cycle; freshwater lake that never freezes in winter, providing refuge for wintering birds; refugium for various relict fauna & flora through glacial extremes and post glacial drying (Spirovska et al, 2012;); moulting site for small, isolated Balkan <i>Mergus merganser</i> population among others such as <i>Fulica atra</i> and <i>Mycrocarbo pygmaeus</i> ; ancient lake that has provided a relatively stable environment avoiding major extinction episodes over tens of thousands of years of environmental flux (Wagner et al, 2016; Jovanovska et al, 2016).
5	Regularly hosts >20,00 waterbirds	✓	International Waterbird Counts from 2010-2019 demonstrate that Lake Ohrid provides habitat to over 20,000 waterbirds both on average overall and in 2 out of 3 years.
6	Regularly supports >1% of waterbird population for a biogeographic region	✓	Populations of <i>Netta Ruffina</i> , <i>Mycrocarbo pygmaeus</i> , and <i>Mergus merganser</i> all consistently cross the 1% threshold for relevant biogeographic regions according to International Waterbird Count data between 2010 and 2019.
7	Significant and representative fish population	✓	Of 21 native fish taxa, 7 are endemic to Lake Ohrid: <i>Salmo ohridanus</i> (Steindachner 1892); <i>Salmo aphelios</i> (Kottelat, 1997); <i>Salmo balcanicus</i> (Karaman, 1928); <i>Salmo letnica</i> (Karaman, 1924); <i>Salmo lumi</i> (Poljakov, Filip & Basho, 1958); <i>Barbatula sturanyi</i> (Steindachner, 1892); and <i>Gobio ohridanus</i> (Karaman, 1924). 8 other species are either endemic to the Western Balkans or representative species of the Southeast Adriatic Drainages biogeographic region: <i>Alburnus scoranza</i> , <i>Barbatula sturanyi</i> , <i>Barbus rebeli</i> , <i>Cobitis ohridana</i> , <i>Pachychilon pictum</i> , <i>Pelasgus minutus</i> , <i>Rutilus ohridanus</i> and <i>Scardinius knezevici</i> .
8	Fish spawning grounds	✓	Almost the entire littoral zone of Lake Ohrid has significance for spawning fish, including Studenchishte Marsh. Since several species are endemic either to Lake Ohrid, the Western Balkans or the Southeast Adriatic Drainages biogeographic region, the importance of these areas is heightened.
9	>1% population of non-avian animal populations	✓	In addition to the 7 endemic fish taxa, the entire populations of 182 faunal taxa are contained in Lake Ohrid, its springs and Studenchishte Marsh including 56 gastropoda, 33 ostracoda, 23

			tricladida, 9 amphipoda and 4 porifera among others (Albrecht and Wilke, 2008).
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IV. Valorisation

One point consistently reinforced by MRK is the need for an expensive valorisation study prior to Ramsar nomination for Lake Ohrid. Macedonian guidelines introduced in 2012 outline valorisation as a requirement for protected status at national level, although the wording in the Law on Nature Protection is ambiguous for international designations.

Alternative mechanisms such as for natural rarities and ecological areas also seem to exist (MoEPP, 2018) and the Ministry of Environment and Physical Planning has chosen not to avail itself of aforementioned provisions in the Law on Nature Protection to place the Studenchishte wetland under temporary protection while valorisation is carried out.

Certainly, existing data is sufficient for a successful Lake Ohrid nomination as a Wetland of International Importance from the point of view of the Ramsar Convention Secretariat, incorporating Studenchishte Marsh as part of the site. At Ramsar level, there is no requirement for a separate, Studenchishte-oriented study, and, according to Macedonian Ramsar Committee in an email received by Ohrid SOS on November 8th 2017, it had included Studenchishte when placing Lake Ohrid on the Shadow List for the Ramsar Convention in 1994.

Therefore, it is confusing that MRK refuses to proceed with the nomination process for Lake Ohrid including Studenchishte unless obscure data categories for the latter specifically can be filled, although deeper institutional opposition appears to be a factor:

“With regard to the revalorization of Studenchishte Marsh, it is because there is no data for some important faunal groups. (For example, birds!? mammals!? dragonflies!? butterflies...) Like that it [Ramsar nomination] will stay as only Lake Ohrid! If the situation remains like this, the marsh cannot be included with the lake — the lack of data would create suspicion in some institutions and negate the whole process. Because one part is unserious the whole thing will be that way?” (email received by Ohrid SOS from Branko Micevski on November 21st 2017)²³

²³ All punctuation is the work of the Macedonian Ramsar Committee.

F. Conclusions

Lake Ohrid wetlands are an essential component of the superlative natural phenomena which underpin the Ohrid region's world heritage status. From water filtering to the provision of spawning grounds for fish, their services to humankind, flora, and fauna in general demand the utmost efforts towards their protection and revitalization. In spite of this, they have been permitted to functionally reduce to a 63.97-hectare area named Studenchishte Marsh on Lake Ohrid's east coast (Spirovska et al, 2012; Apostolova et al, 2016; Society of Wetland Scientists, 2018), which continues to be usurped and neglected, facing huge pressure for development in recent years (MoEPP, 2018). Much of this degradation has occurred during the 4 decades of UNESCO designation.

Protecting and rehabilitating Studenchishte is vital not only for its relict, rare and endemic species and the spawning/nesting facilities it can provide, but also because it is a cost-free, natural buffer against eutrophication in a region with few monetary resources where wastewater infrastructure routinely falls into disrepair (see [Chapter 5](#)). Indeed, its importance is steadily growing because rising temperatures increase the need for its nutrient-holding capacity (Matzinger et al, 2007); and the opportunities for wetland restoration in the vicinity of Struga are likely to be eliminated by road construction (World Heritage Centre/ICOMOS/IUCN, 2017). Even if some way is found to (re)construct wetlands in this or other locations in the Ohrid region as part of an advanced water management policy, a blueprint will be required. Only Studenchishte can fulfil this role.

Nonetheless, progress regarding Studenchishte Marsh and Lake Ohrid coastal habitats in general is unlikely to result unless special areas for their protection are designated, preferably within the framework of the Ramsar Convention, for which the location passes multiple criteria. These do not have to contradict with the Republic of Macedonia's understandable desire to advance its tourism industry as they can be adapted into the simultaneous function of sustainable visitor attractions (see [Annex 6](#)). Although the government has taken a step in this direction by accepting a related initiative from Ohrid SOS/EDEN in March 2018, both the lack of movement since that date and erratic behaviour of the Macedonian Ramsar Committee have raised fears that no decisive further action will be taken. This would echo the experience of many previous years.

Serviceable conservation of the Ohrid region's Outstanding Universal Value will require serious preservation of its coastal wetlands. To this end, almost every opportunity has already been lost and the World Heritage Committee has proved ineffective at preventing the slide. Now, a single chance still remains at Studenchishte Marsh. Neither the Republic of Macedonia nor UNESCO can afford to forego it this time.



Although Studenchishte Marsh has been strongly degraded by incremental urbanization, usurpation for agriculture, inappropriate solid waste disposal, and the disturbance of its connection to Lake Ohrid, it remains the final fully functioning marsh system in the Ohrid region world heritage site, providing significant landscape, habitat and biological diversity alongside key ecosystem services. As yet, it lacks an appropriate level of recognition or protection.



Chapter 3: Pathway to Destruction

Summary

- ❖ Neglect and ill-treatment of habitats making construction and urbanization more likely
- ❖ Marginal habitats and ecotones undervalued
- ❖ Construction being justified on grounds that land is degraded anyway
- ❖ Habitat decline an excuse to avoid nature protection
- ❖ No tourism strategy; unprofessional approach to creating one

Abuse of Lake Ohrid's natural and semi-natural landscapes from illegal and uncontrolled construction; other habitat modification; and the dumping of construction and other waste have had a well-documented negative impact on its biodiversity and ecosystems (Watzin et al, 2003; Kostoski et al, 2010; Apostolova et al, 2016). This has been dramatically observed in the populations of nesting and wintering birds (Spirovska et al, 2012), the latter of which has dropped from 79,000 in 1989 to just 10,000 in 2010, associated in part with eutrophication and reed belt losses (IUCN, 2017). It may also be influencing changes in the fish community that is referenced in the Ohrid region's Outstanding Universal Value statement (Kostoski, 2010; Talevski et al, 2010) and detrimentally affecting other species, including probable local and even total extinctions (Albrecht and Wilke, 2008; Spirovska et al, 2012).

Such biodiversity loss rarely serves as an inspiration to prevent further deterioration or rehabilitation of habitats. Instead, a void is created which developers attempt to fill with more concrete, according to the following stages:

1. A disinclination to create and enforce nonporous nature protection laws, ameliorate the impact of their contravention or establish protected areas leads habitat quality to enter a downward spiral characterized by reed burning; illegal or poorly planned urbanization; and dumping of waste. Rare or unique species/habitats are lost or replaced by more cosmopolitan flora and fauna that are not deemed to be of conservation interest.
2. Developments and construction projects are proposed, often without project outlines, sizes or capacities available in the public realm.
3. Strategic Environmental Assessments consider current habitat conditions and socio-ecological behaviours to be absolutely representative; ignore natural succession processes; and falsely conclude that construction will either have no significant additional negative consequences for the natural world or present an upgraded alternative to the status quo, i.e. illegal tipping and unregulated construction.
4. New developments are actioned and become a source of anthropogenic pressure towards other habitats, which enter the same cycle of degradation.

This pathway to destruction is evident from Strategic Environmental Assessments for the A3 express road in National Park Galichica as well as tourism complexes in Gorica, and Sveti Stefan, all of which have looked to excuse large-scale construction on the grounds of degraded habitat status and/or existing practices such as illegal dumping and unplanned urbanization (Evidence 6). Only the elevated remaining biodiversity and beauty of National Park Galichica combined with concerted UNESCO and NGO pressure were able to prevent the first of these examples from actualization. The project at Gorica has a high chance of completion, while that at Sveti Stefan is already underway. Former marshlands at Struga are another important case: Rehabilitation was proposed in the Republic of Macedonia's 2004 National Biodiversity Strategy with Action Plan but never undertaken. Now infrastructure projects are planned for the area with little opposition from environmental consultants (Ministry of Culture, 2018b).

Disincentives to nature protection are correlated with the pattern. In a region with a growing history of prioritizing urbanization and tourism expansion over conservation of natural world heritage values, interests are better served by allowing habitats to fall into disrepair as a precursor to facilitating

construction projects than by designating protected areas and rehabilitating damaged natural landscapes. After all, it is much harder to approve hotel construction in a thriving natural area than one that is falling into disrepair. As such, ambivalence to urban encroachment upon and neglect of various locations within the Ohrid region (Evidence 7A, 7B, 7C and 8) increases their vulnerability to larger developments.

This is already manifesting at Studenchishte Marsh, which, despite an intense, continuing contribution to regional biodiversity and important ecosystem services, is habitually overlooked for high-level protection (see [Chapter 2](#)). When pro-development decision-makers recently attempted to drain the area and replace it with a mega-project, its depreciating biological status was commonly cited as a legitimizing factor. Again, its strong remaining natural values alongside a firm citizen reaction were able to postpone development on this occasion. However, such emergency action will not necessarily be repeatable if the wetland is allowed to degrade much further.

To close the pathway to destruction, various measures are required:

- proper enforcement of laws and regulations, especially at National Park Zones of Strict Protection and Zones of Active Management;
- sufficient punitive power within legislation to deter transgressions;
- designation of specialized in-site protected areas (including wetland, seasonal and lacustrine spaces) at locations of core importance;
- establishment of related buffer zones for these protected areas;
- consideration of natural history, especially recent natural conditions and the potential to restore them, both during Strategic Environmental Assessment procedures and when identifying new protected areas;
- awareness for the ecological contribution of seemingly marginal habitats;
- continuous species monitoring; and
- revitalization of degraded habitats, particularly along the coast

Evidence 6

Quotations from Strategic Environmental Assessments document how chronic inaction by local and national authorities smoothly transitions to justification for further habitat corrosion. Combined with construction-permissive environmental consultants (see [Chapter 4](#)) and the neglect demonstrated in Evidence 7 and 8, similar conclusions can soon be expected for other high-value or potentially high-value nature locations.

A) Public Institution National Park Galichica Draft Amendments to the Management Plan for National Park Galichica for the Period 2011 – 2020. Strategic Environmental Assessment (SEA), Citrus Partners (2015)

Plans for an A3 express road in National Park Galichica envisaged by the Republic of Macedonia were eventually cancelled, illustrating UNESCO's vital influence in securing favourable outcomes for natural habitats in the Ohrid region.

Nonetheless, it is important to remember how sub-optimum conditions in the world heritage site were a factor in related Strategic Environmental Assessment conclusions both that, because of ongoing urbanization, a no-change scenario would represent a danger to Outstanding Universal Value not so dissimilar to the situation with an express road; and that the sacrifice of a 281-hectare forest was inconsequential, partly because it was already degraded. In other words, the disincentive to permitting huge infrastructure had been substantially reduced by the failure to implement laws and ecology-conscious management plans over the previous years.

Chapter 6.2: No-Change Scenario (selected from pages 174 & 175)

“The introduction of the Ski Centre and A3 Expressway (particularly the Pestani to Albanian border section) may result in an increase of disturbance to animals and represent barriers in the landscape which could affect wider ranging animal movements. The ‘no change’ scenario would generally mean less disturbance and the current movements of wider ranging mammals being unaffected. However, the increase of urbanisation along the lake shore has resulted in unmitigated impacts which could potentially be affecting animal movements to the lakeshore.”

“In summary, the ‘no-change’ scenario would result in loss of economic and tourism development opportunities to the region and local communities, however this scenario would avoid detrimental effects on the environmental quality, biodiversity and ‘natural beauty’ of the Park as a protected area, including the OUV associated with the World Heritage Site designation. Even with the ‘no-change’ scenario, the risks of incremental urbanisation of the lake shore along the Ohrid to Peštani section remain, as does the need for PINPG to finance the management of the Park’s resources by forestry activities. So even with the ‘no-change’ and the ‘with projects’ scenarios, urbanisation and forestry pressures remain potentially the greatest threat to the Park.”

Chapter 4.2: A3 Expressway Ohrid – Pestani Project/ Table 8.2: Summary of Project Impacts Assessed at the “SEA Level” – A3 Expressway Ohrid – State Border (Pages 17 & 249)

“The main impacts of this scheme and proposals are [...] Destruction of part of oak-hornbeam forest communities along coastline. However this type of forest is widely distributed in Macedonia and is heavily modified / degraded along the Ohrid coastline. Further assessment of this habitat type is required at a project level to determine mitigation and any offsetting measures required.

[...]

Strategic Concern/Impact: Loss of *Querco-Caprinetum orientalis macedonicum* (Oak-Hornbeam Forest), and indirect impacts on surviving forest alongside roadway. Total area impacted estimated at 281 ha (most of which is affected by Ohrid-Peštani Project). Predicted SEA-Level Residual Effect: No residual effect of a significant nature, even where forest area is destroyed, as Oak-Hornbeam forests are common in Macedonia and are not considered a key or distinctive or protected habitat.”

B) Strategic Environmental Assessment for UPVNM [Urban Plan for a Non-Urban Area] for Part of TK Gorica, Plot 2, in Cadastre Area 4, Municipality of Ohrid (2018) Enviro Resources, Skopje.

Adjacent to Studenchishte Marsh on Lake Ohrid’s east coast, Gorica is currently targeted for a large yet vaguely defined tourism complex including a port. In a strongly deficient Strategic Environmental Assessment for the proposal (see [Chapter 4](#)), developers are given the green light to construct on the 44.5-hectare area in part due to its current degraded condition and the risk of it becoming a site for illegal construction. The implication from the assessment is that the land in question will either continue to be a dump for various forms of waste (Evidence 7A) or be lawlessly usurped for buildings anyway, so the construction of a massive tourism complex should be considered a positive step forward.

Word for word, the logic mirrors the 2016 *Strategic Environmental Assessment for Local Urban Planning Documentation for GP1, for the Purpose of a Hotel (Hotel Complex, Purpose B5) at KP 2617/1 and KP 2618/1, Cadastre Plot Konjsko (Tourism Complex Sveti Stefan), Municipality of Ohrid*, which was conducted for the hotel currently under construction at Sveti Stefan (Evidence 1D). This also took advantage of existing coastal degradation practices to conclude that proceeding with legal shoreline construction is a method of preventing illegal building and fly-tipping rather than a threat in its own right²⁴.

Chapter 5: Project Non-Implementation Scenario (page 53)

²⁴The phrasing in the two documents is identical. To avoid repetition, only the quotations from the Gorica SEA are included here.

“When preparing the planning documentation for the Urban Plan for a Non-Urban Area (UPVNM) for part of TK Gorica in Plot 2, Cadastre Area 4, Municipality of Ohrid, the option of non-implementation for the planned action was considered, i.e. leaving the area in its original state.

In the particular case that the plan is not actualized, the following outcomes are envisaged: [...]

- **Deterioration of environmental parameters [...]**
- **Intensive pollution with waste material (solid, household and other waste) and illegal dumpsites [...]**
- **Intensive pollution of ground-waters and soil.”**

Chapter 6: Alternatives and Factors for the Selection of Alternatives (page 54)

“The following are expected in case that the planning solution for the analysed area is not realized: [...]

- **Usurpation of the area with illegal, unplanned and inappropriate activities, and with that degradation of the landscape diversity of the area;**
- **Unplanned and disorganized modification of the area which will negatively impact environmental parameters.”**

C) Expert Opinion on the UNESCO Recommendations by Civil Engineering “Macedonia” (CEIM) JSC Skopje

Included with the annexes to the November Progress Report provided to the World Heritage Centre by the Republic of Macedonia is a report from Civil Engineering “Macedonia”, which is intended to answer various UNESCO concerns about plans for the A2 road and railway in the Ohrid region. Its justification for avoidance of World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Recommendation 2 for wildlife crossings of at least 2-meter diameter illustrates the attitude to biodiversity loss in the Republic of Macedonia and the reason why it will be extremely difficult to reverse the decline of flora and fauna in a local context due to the total lack of future thinking.

“With this we conclude that hydrotechnical solutions, i. e. 46 pipe culverts (with a function of animal crossings) of which 39 BCC have dimension <P1000 mm, 1 BCC <P1500 mm and 6 AB BP L = 5.00 m, satisfy the needs of the dominant terrestrial fauna represented by small mammals, reptiles and amphibians (defined in the Draft Biodiversity assessment made by CEIM). It should be noted that due to the anthropogenic pressure of the habitats in the region and the trend of conversion of natural habitats to agricultural land which from the aspect of biodiversity has

no significant importance, as well as the large number of construction waste, communal, electronic and other types of waste indicates the bad ecological status of the landscape, and hence the diversity of faunal species.

For the RECOMMENDATION of UNESCO " ... at least one of the pipe culverts every kilometer with a diameter of two meters", we consider it unnecessary since these dimensions apply to large mammals that are not encountered in this part."

Evidence 7

A



GORICA: The photos above were taken in October 2018 and display how Gorica has become a site for illegal waste disposal, a situation that has been continuing over many years. The neglect has resulted in a Strategic Environmental Assessment that describes the area as "degraded and amorphous" and opens it to development on the grounds that leaving such non-urbanized land is an invitation to pollution, dumping and unplanned construction. Under more ecologically conscious management, the same area could well return to the habitat where regionally rare plants, butterflies and nesting birds could once be observed (Spirovska et al, 2012).

B

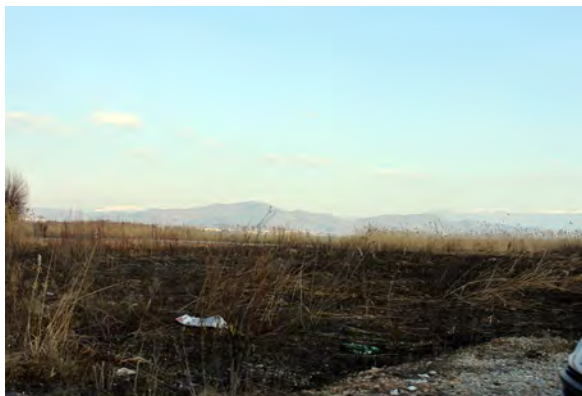


SVETI NAUM: *The Zone of Strict Protection at the Springs of Sveti Naum has been subject to incremental encroachment over the course of several years as illustrated above. In theory, the only permitted activities are scientific research, trail-walking and the placing of signs. If the usurpation is indulged much longer, the chance arises for a future Strategic Environmental Assessment legitimizing resort construction on the grounds that it is a method of forestalling such unplanned development. One aborted attempt to build a tourism complex in the vicinity of the springs has already been averted. It would be no surprise to see another.*

C



FEB 2019: *Reed belts burn amid construction rubble in the Municipality of Struga just prior to the spring nesting and spawning season. The cause as reported by the local fire brigade was arson. (SOURCE: Monitoring, Protection and Sustainable Use of the Reed Belt of Lake Ohrid)*



FEB 2019 (cont'd): The aftermath of reed-burning – construction work starts at one blackened location after two consecutive reed fires in less than a week. State Environmental Inspector Igor Trajkoski visits the site (Struga to village of Kalista) 7 days after the second incident, following two reports by Ohrid SOS and media pressure. His investigation concludes that reeds burned in several places, yet without damage to the in-lake reed-belt; hence, there is no need for further action. For instances of this kind, he refers future complaints to other inspectorates, explaining that the construction activities are not within his remit.



FEB 2019 (con'd): In opposition to State Environmental Inspector Trajkoski's conclusion that reed burning had not taken place in-lake and was therefore of little interest from the perspective of his office, eye-witnesses claim that water-based reeds had in fact been destroyed in the alleged arson incident. Photos certainly demonstrate that the damaged reeds go right up to the present shoreline and are part of the ecotone that spans the littoral and coastal zones.



MAR 2019: *Where reed habitat existed just weeks ago, a wall expands as the land is compacted and covered with rubble to prepare it for construction. Expect future SEAs for adjacent areas to conclude that construction is acceptable because natural values are already degraded.*

A. Tourism Strategy

No formal, documented tourism strategy for the Ohrid region currently exists. Its absence results in an ad hoc approach to planning whereby proposals for new developments and activities misalign with conservation of the oligotrophic waters, unique species and exceptional natural beauty that underpin Lake Ohrid's designation as a world heritage site under criterion vii of the Operational Guidelines for the Implementation of the World Heritage Convention.

Recommendation 7 of the 2017 World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Report requests the Republic of Macedonia to resolve the vacuum with the creation of a new OUV-based strategy, which is described as a priority. This has not been completed and attempts to resolve the issue have been beset with difficulties.

The latest draft version, which did not include the Municipalities of Struga or Debrca, was supposedly ready by the end of 2016, but it was only after the local elections in October 2017 that it was taken into consideration. However, the drafting process lacked transparency: No public consultation was undertaken and NGOs had to apply pressure in order to provide opinion on the document. Eventually, Mayor Stojanoski of the Municipality of Ohrid decided that the strategy was unsuitable and sent it back for revision. No update on the topic has been given since.

At the time of this draft, in February 2018, Ohrid SOS identified several weaknesses that need to be resolved for any future tourism strategy to effectively protect the Ohrid region:

1. The draft strategy was prepared by unqualified individuals and lacked a multidisciplinary approach: The team was mostly comprised of students and young graduates from the Faculty of Tourism in Ohrid. According to one of the key partners in preparing the strategy, the reason for lack of representatives from scientific or other relevant institutions (e.g. Hydrobiological Institute) was that participation was voluntary, i.e. unpaid. Attending only one meeting was enough for an individual or institution to be listed as a contributor, which undermined thorough participation, as did the exclusion of the National UNESCO Committee, the Ministry of Culture, and the Ministry of Environment and Physical Planning. The deficit of expertise is clearly reflected in the quality of the output.
2. Literature cited for the proposed tourism strategy was very poor. Much high-level research has been conducted on the nature and culture of the Ohrid region, yet was not considered. Notable omissions were the studies completed by Peter Burns on the potential impact of climate change on tourism (2014); Matzinger's extensive work on the dangers of eutrophication over the coming years (2004, 2006, 2007); the IUCN's World Heritage Outlook (2014); Kostoski et al's thorough description of threats to Lake Ohrid (2010); and Spirovska et al's investigation of wetlands (2012). At the same time, the Management Plan for the Ohrid Region was used as a reference despite its rejection by the World Heritage Committee.
3. The strategy was too broad and general to achieve conservation objectives. Outstanding Universal Value of the Ohrid region was not suitably incorporated and the conclusions of the Reactive Monitoring Mission did not seem to have been sufficiently regarded. No clear guidelines for the tourism approach were put forward; visions for new hotels at attractive locations (including ski-pistes) appeared to be simple extensions of current tourism policy; increasing visitor volume was a primary objective; hunting was put forward as a tourism branch to pursue despite widespread concern over loss of both biodiversity and species populations in the region; and environmental protection as a whole was not given due thought. As such, the draft strategy could not be expected to guide Ohrid Municipality to wiser management and development of its world heritage resources or to achieve sustainability in these terms.
4. The strategy did not clearly define market segments; target consumers were defined too vaguely (e.g. "the pickiest of tourists"); and it was not based on any prior research. As such, it was unable to provide grounded guidelines or lead to viable decisions. The core issue of seasonality whereby huge volumes of visitors descend for a short period in summer was not addressed, such as by identifying niche markets, and the core competitiveness of the region was neglected. These oversights resulted in random and unstrategic conclusions.
5. Harmonious implementation on a regional level could not be achieved as the strategy was not prepared for the entire UNESCO area, but the Municipality of Ohrid only.



Chapter 4: Destructive Strategic Environmental Assessments

Summary

- ❖ SEAs empowering destruction rather than ameliorating environmental impact
- ❖ Environmental assessments display low quality (lack of data, outdated info etc.)
- ❖ Lack of evidence provided for conclusions, esp. economic
- ❖ Bias towards construction and urbanization common
- ❖ Insufficient analysis of species and habitats
- ❖ Cumulative impacts still not calculated

A. Purpose & Delays

Strategic Environmental Assessments (SEA) for the Ohrid region are not always written for the purpose of analysing environmental impacts. Rather, the primary goal often seems to be facilitation of coastal or urban transformation, which is expedited through a variety of conclusions relying upon a selective informational base; lack of supporting data/research/figures; and a clear bias towards construction. One recent assessment even provides positive opinions for a tourism complex despite offering no plans or details for precisely what this complex entails (see [Chapter 4, Section B.I](#) below), thereby supplying a *carte blanche* to almost any form of tourism-based construction.

Enablement of the substitution of the World Natural and Cultural Heritage of the Ohrid Region with concrete is also smoothened by the Republic of Macedonia's continued delay in producing an SEA for the cumulative impacts of all proposed infrastructure and major projects, which was requested in urgency by World Heritage Committee Decision 40 COM 7B.68 in 2016, not completed, and then restated by Recommendation 3 of the World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission in 2017. Deadline for completion of the evaluation was set for February 2018, yet Macedonia's November Progress Report to UNESCO explains that "procedure for initiation of the preparation of the SEA" has not yet been finalized.

There are several possible reasons for the glacial pace of activity, none of which is suggested by the November report: a) such an SEA would necessitate transparent revelation of all planned projects for the world heritage property; b) cumulative impacts are likely to be significant, hence forestalling project completion in certain cases; and c) subsequent SEAs for individual proposals would have to include the results of the cumulative SEA to be considered credible.

Incidentally, although the November Progress Report cites political complications as a factor slowing down the assessment of cumulative impacts, since World Heritage Committee Decision 40 COM 7B.68 in 2016, at least 5 SEAs for individual projects have been produced in the Municipality of Ohrid alone, including three since the February 2018 deadline. In other words, such documents can be prepared within a much shorter timeframe when decision-makers are motivated by goals other than conservation.

Table 5: List of SEAs for individual projects that have been completed with single public consultation meetings by the Municipality of Ohrid since World Heritage Committee Decision 40 COM 7B.68 in 2016²⁵

- 1. SEA for LUPD for GP1 of KP 2440/3, Cadaster area Konjsko, Ohrid Municipality for construction of buildings with purpose A4 – temporary accommodation.**

Date: January, 2017 (size: 3760 m2)

- 2. SEA for LUPD for G1 for construction of buildings with purpose A4 – temporary accommodation on KP 2509/1, 2510/2, 25/1, 2542,2522, 2523, 2524, 2549, 2550, 2551, 2552, 2553, 2554, 2557, 2558,2559 and 2560/5, Cadaster area Konjsko, Ohrid Municipality**

Date: September, 2017 (size: 1.34 ha)

²⁵In addition to these completed SEAs, several other decisions for SEAs have also been issued by the Municipality of Ohrid. Moreover, the details in Table 5 do not include any SEAs that have been made by the Municipalities of Struga and Debrca.

3. SEA for LUPD for construction of buildings with purpose A4 – temporary accommodation on KP 3134, 3135, 3136, Cadastre area Elsani, Ohrid Municipality

Date: July 2018 (size: 0.1746 ha)

4. SEA for UPVNM for part of tourist complex Gorica, planning area 2 in cadaster area 4, Ohrid Municipality

Date: July 2018 (size: 44 ha)

5. SEA for planning document LUDP with purpose G3 – Mechanics in KP 1141/5, Cadastre area Leskoec, Ohrid Municipality

Date: October, 2018 (size: 0.23 ha)

B. SEA Shortcomings

Oversights and weakly supported conclusions appear in supposedly international-class environmental assessments for the Ohrid region (Ohrid SOS, 2017) but many SEAs are far from even these standards. The following summary overviews some of the shortfalls from total avoidance of eutrophication pressures to an absence of details for potentially affected species²⁶. SEA excerpts to support these conclusions are taken from two essentially identical reports compiled by a Skopje-based environmental consultancy firm named Enviro Resources. Even though the company was responsible for provision of a positive opinion for a notorious mega-resort project that was previously proposed at ecologically sensitive Ljubanishta and displays obvious methodological weaknesses in its work, Enviro Resources continues to be trusted to complete environmental assessments for tourism complexes and other construction in the Ohrid region.

I. Non-Inclusion of Plans

Not all SEAs contain the plans for which they provide opinions. For example, a 2018 Enviro Resources assessment for a tourism complex at Gorica does not offer any indication on the number or size of constructions envisaged for the 44-hectare development, their human capacity, their precise intended use, or their exact position in relation to the lake or its coastal habitats, concluding regardless that sustainable development will certainly be empowered. Containing disembodied references to a port, it fails to specify where this particular coastal modification will be placed, how much of the shore it will occupy or how many boats it will service. During the public consultation, Enviro Resources, represented by its director, stated that planning documents were not at the company's disposal at the time of preparing the SEA even though Macedonian regulations assume that assessments are performed based on actual planning documents. Despite these obstacles, Enviro Resources nonetheless formed many positive conclusions about the amorphous development, such as the following on the impact to landscapes:

“Realization of this plan is expected to have positive impacts and effects on the whole surrounding area from the perspective of sustainable use, improved

²⁶ Similar comments were submitted as part of the public consultation process for the proposed tourism complex at Gorica, which are presented in [Annex 4](#).

organization, infrastructure, improved services in the locale as well as spatial arrangement based on the principles of sustainable development and maximal respect for environmental norms and standards.” – (Enviro Resources, 2018).

This leads to serious concerns about the role and credibility of SEAs in the Ohrid region.

II. Wastewater & Eutrophication

Eutrophication is regularly overlooked for adequate discussion in SEAs, despite the huge danger elevated nutrient inflow poses to the Outstanding Universal Value of the world heritage property, i.e. its oligotrophic waters and irreplaceable species within (Matzinger, 2007). The process is strongly linked to urbanisation, especially in combination with substandard wastewater treatment.

Some SEAs misrepresent the issue: Assessments for projects at Gorica (Enviro Resources, 2018) and Sveti Stefan (Enviro Resources, 2016) overview the history of the wastewater system in the Ohrid region, but each conveniently discontinues its discussion at the beginning of the 21st century when Germany’s KfW Bank financed improvements to the sewerage system.

Had these analyses continued beyond this date, however, inadmissible details would have emerged such as the KfW’s own 2011 evaluation of its wastewater project, which concluded sustainability to be “unequivocally poor” and stated, “Due to system overloading, untreated wastewater is regularly discharged into the lake and the river during rainy weather.” (KfW Entwicklungsbank, 2011) The view of the Japan International Cooperation Agency that sewerage overflows may be entering Lake Ohrid directly up to 100 days per year would also have necessitated incorporation, as would opinions of wastewater management company ProAqua that an ecological catastrophe is about to occur as a result of poor system functionality (see [Chapter 5](#)).

Ignoring these awkward details enables environmental consultants (at the cost of their credibility) to conclude,

“For the protection of Lake Ohrid from the waste waters there is a functioning sewerage treatment system” (Enviro Resources, 2016)

and

“Having in mind that construction of sewerage infrastructure is envisaged within the plan, there is a guarantee that waters will be protected from pollution.” -- Enviro Resources (2018).

The fact that such new sewerage infrastructure will be connected to a wastewater system on the point of collapse (see [Chapter 5](#)) appears not to require further thought at the SEA level. Neither is mentioned the ever-growing environmental threat to Lake Ohrid from the interplay between climate change and nutrient inputs (Matzinger et al, 2007), despite the irreversible ecological damage and loss of the tourism receipts that are likely to occur if severe algal blooms results from over-development.

III. Distorted Discussion of No-Change & Alternative Scenarios

SEAs are required to contain chapters for alternatives. Frequently, however, these supply no details of different policies or land-uses that could be attempted, instead characterizing any outcome other than construction developments, often aimed at mass tourism, as environmental degradation through land usurpation, rogue waste disposal and general abuse.

In consequence, they are indistinguishable from chapters on no-change scenarios, which, as seen in Evidence 6, place large-scale developments in opposition to illegal land-use activities, inferring that the former is a solution to the latter. SEAs do not consider that actions such as fly-tipping may simply be displaced or even accelerated by new-build projects. Nor do they discuss habitat revitalisation or other economic approaches as an alternative to the construction of whatever new building or project that they happen to be assessing at the time.

Far from the in-depth analysis of the opportunity cost in environmental terms, the required SEA sections for no-change and alternative scenarios thus become soap boxes for the virtues of concreting the lakeshore and fulfilling the desires of unidentified investors, such as the following, which appeared in a chapter entitled *Alternatives and Factors for the Selection of Alternatives* in the environmental assessment for the hotel at Sveti Stefan, which is pictured in Evidence 1D.

“When preparing the planning documents, an alternative solution of non-implementation in which the environment is left only under the influence of natural factors was considered. In this circumstance, it is anticipated that the current condition of the area would remain unchanged and that its economic passivity would continue.

In the case of non-implementation of the planning solution for the analysed area, it is expected:

- **the current socio-economic status of the population in the wider area and further to stagnate;**
- **the trend of outmigration to more developed urban centres and further to continue;**
- **the value of the land to decrease;**
- **usurpation of the area with illegal, unplanned and inappropriate activities, and with that degradation of the landscape diversity; and**
- **unplanned and disorganized modification of the area which will negatively impact environmental parameters**

Realization of the planning solution with the chosen purpose [hotel construction] in the area will enable use of the favourable geographic location, favourable microclimate conditions, and the excellent setting in regard to traffic connections with the local residential areas; growth in the attractiveness of the area through the construction of contents that will fit the landscape and improve the tourism offer as well as the lives of the local population.

Realization of this plan allows the location to grow as the only spatial and functional entity that can bring a large contribution to the local and national economy, simultaneously having also the goal of motivating the interest of different investors for the realization of the proposed program of tourism development as synchronized with the current economic tendency of the country.” (Enviro Resources, 2016)

IV. Ecosystem Services

No attempt in any SEA is made to contemplate or quantify ecosystem services, leading to insecure economic conclusions in which major potential costs (such as from eutrophication) are overlooked and natural habitats regarded as “economically passive” (Enviro Resources, 2018).

V. Species Lists

Investigations of species that may be present in locations identified for construction or impacted by the operation of new-build developments are often absent from SEAs, even when there is recorded evidence of nationally protected taxa. For example, the SEA for a tourism complex at Gorica (Enviro Resources, 2018) makes no mention of the 9 protected bird and 2 protected butterfly species for which there are documented sightings at the location. This undermines monitoring processes. Moreover, no consideration is given to how spawning or other life-cycle behaviours may be affected directly or indirectly by foreseen activities (such as boat traffic), even when these are likely to occur in the shallow water zones where much of Lake Ohrid’s ichthyofauna reproduces.

VI. Disbalanced Perspective on Law

While continuing lawlessness is envisaged for non-implementation or alternative scenarios, the propensity for developers and business owners to circumvent or actively ignore legal infrastructure during construction, operation, or future expansion phases of their enterprises is never mentioned. The current legislative framework is typically stated but its adequacy and efficacy is not objectively questioned in terms of its ability to secure favourable ecological outcomes when developments are permitted.

VII. Appetite for Construction

SEA documents are distorted towards construction-favourable conclusions, lacking objectivity and at times reading more like business plans than research into potential environmental impact. The following, for example, is an excerpt from a subsection titled *Water Quality*, nested within a *Description of the Current Environmental Condition in the Planning Area* as part of a chapter named *Characteristics of the Area and Present Environmental Condition* for the aforementioned hotel at Sveti Stefan. The excerpt appears to be more focused on evaluating suitability for sun-based tourism than determining environmental conditions per se.

“The important characteristics of the area, part of the Lake Ohrid coast from the village of Racha to the hotel complex Metropol, are as follows:

- **west-facing with strong insolation in the afternoon hours;**
- **medium-thick vegetation;**
- **absence of streams or springs;**
- **existence of suitable grounds for construction.”**

-- (Enviro Resources, 2016)

VIII. Sustainability

Recent SEAs are replete with references to sustainability yet remarkably fewer specifics of what that concretely means in a local context beyond usage of solar energy and recycling, the latter of which is still at a rudimentary stage in the Municipality of Ohrid. Some go so far as to suggest that opportunities for sustainable development in the Ohrid region will be foregone²⁷ if the respective resorts which they analyse are not actualized (Enviro Resources 2016, 2018), yet offer little detail about what exactly makes these projects fertile beds for sustainable development.

No details of the business plans behind these resorts are provided; and no market research documents inform how the constructions will help the Ohrid region to target specific visitor demographics that can withdraw pressure upon the regional environment.

Freed from the complications of supplying evidence in support of their conclusions, SEAs are therefore empowered to make unqualified statements:

“Tourism development understands conservation of the environment because tourism cannot develop under conditions in which ecosystems have been deteriorated.” (Enviro Resources, 2018)

In making such statements, environmental assessments ignore potent evidence from the local context that the tourism industry is developing at the cost of huge damage to Lake Ohrid ecosystems in a manner that is far from sustainable (Kostoski et al, 2010; IUCN 2014/2017; World Heritage Centre/ICOMOS/IUCN 2017).

IX. Irresponsible Conclusions about Non-Natural Habitats

SEAs display no cognizance of how anthropogenic modifications in the Ohrid region, particularly on the shore, can empower non-native taxa or disbalance in-lake ecology towards more cosmopolitan species. The recent SEA for Gorica even optimistically opines that a port will provide new habitat for lacustrine fauna. It does not, however, expand its argument to explain which taxa will be empowered by this new concrete home; how their good fortune may affect other species that are

²⁷ See chapters titled *Situation with Non-Implementation of the Planning Document* in relevant SEAs (Enviro Resources, 2016 & 2018).

not so well adapted to human stressors; or the anticipated long-term effects of changes to the habitat balance.

“When excavating the lake bed for implementation of the works, the water will cloud for a limited time. Particles disturbed in the process will settle to the bottom and are not expected to impact the living world of the lake. Organisms that inhabit this area may be covered by the sediments and suffer negative effects as the port is constructed because the majority of them are sedentary. The concrete part of the port that will be in the water will, in a very short period, become a base from which new communities of organisms will grow.” -
(Enviro Resources, 2018)

X. Omission of Natural History

SEAs frequently present an ahistorical portrait of the locations they discuss. Therefore, former wetlands²⁸ or coastal habitats where construction waste is illegally disposed are perceived as dumping sites rather than locations where natural values can be regenerated (see [Chapter 3](#)). Thus, threats to Outstanding Universal Value from development projects proliferate while opportunities to restore it disappear.

XI. Monitoring

Species-level monitoring is infrequent and intermittent in the Ohrid region. Hence, baseline data is absent to evaluate and ameliorate the impact of developments upon the natural world. With one or two exceptions, SEAs do not seek to address this weakness, failing even to identify case-specific keystone species that could be used to gauge ecological effects.

XII. Economic and Societal Benefits of Projects

Strategic Environmental Assessments offer wildly hyperbolic descriptions (which can be seen in quotations listed previously) of how the economic and demographic ills of South West Macedonia will be transformed by the projects they are assessing. This would be supportable if such conclusions were backed with figures that could be checked and analysed or any other high-quality informational base, but none is ever submitted. In consequence, habitats can be sacrificed for construction on the basis that increased prosperity for citizens is an overwhelming public interest without any evidence to justify this view. Taken in combination with the aforementioned ignorance of ecosystem services and the omission of economic losses that may accrue if eutrophication escalates beyond control, SEAs are therefore heavily weighted in favour of urbanization and coastal transformation.

“[Construction of the tourism complex] will not only affect an emigration decrease, but will also be a positive stimulus for demographic development and long-term increase of the birth-rate. The investments in this project would mean better living standards and quality of life, as well as attracting more

²⁸The proposed A2 highway through former wetlands at Struga is a case in point, as demonstrated in the annexes to the November Progress Report (see Evidence 6C).

investments from the business sector i.e. building beneficial and sustainable economic environment.” - (Enviro Resources, 2018)

C. Conclusions

By definition, the ecosystem services of the World Natural and Cultural Heritage of the Ohrid Region are of Outstanding Universal Value to humankind across generations. Therefore, especially stringent Strategic Environmental Assessments are required as an essential part of protective infrastructure.

Scandalously, the present situation is the precise opposite. Consistent with the prevailing institutional attitude toward almost any measure that will ameliorate environmental damage (see [Chapters 1, 2, 3](#)), analysis of the cumulative impact of the multiple projects planned and occurring in the world heritage property has been avoided for years. At the same time, identikit SEA reports are completed for individual proposals, routinely overlooking important environmental considerations such as wastewater and species-level impacts in order to speed urbanization or other construction processes. In some cases, even the most basic information such as the size and quantity of proposed buildings is absent while supposed benefits to a sustainable economic future are invariably exaggerated without any corroborative sources, notably figures, business plans or market research.

This situation can be improved by

- stronger licensing guidelines for environmental consultants in the Ohrid region;
- an accountability mechanism whereby environmental consultants can be held responsible if negative ecological outcomes result from negligent SEAs;
- revised minimum guidelines for what SEAs must contain, including full plans for the maximum extent of proposed developments, realistic eutrophication considerations, and species-level detail;
- a completed cumulative impact assessment as criterion for the lifting of a genuine moratorium on coastal transformation;
- translation of Ohrid region SEA documents into English to facilitate UNESCO oversight; and
- systematic monitoring of biological as well as chemical parameters.

Where appropriate, these measures should be codified by law ([Annex 2](#)).



Chapter 5: Wastewater

Summary

- ❖ Wastewater system neglected for years
- ❖ Sewerage system on point of total collapse
- ❖ Restorative steps finally being taken
- ❖ Purple waters flowing into Lake Ohrid on one occasion
- ❖ Eutrophication risk to increase

A. OUV & Water Quality

Many of Lake Ohrid's unique species have evolved in-lake, which is to say in the exceptionally clear, oxygen-rich waters that derive from its low-nutrient inflows. Changes to these conditions therefore risk disrupting the environmental and ecological balance to which they are adapted (Matzinger, 2004), irreversibly damaging the Ohrid region's Outstanding Universal Value.

Comparisons between areas under strong anthropogenic pressure and less impacted zones suggest this process may already be underway (Matzinger, 2004, 2007; Lorenschat, 2014). An added danger is that non-native species known to be present in the lake may become invasive if the specific local conditions that empower natives and endemics are eroded.

Crucial to ceasing and reversing the damage to Lake Ohrid are measures that will limit nutrient inputs, especially as climate change intensifies (Matzinger et al, 2007). Such measures would include stalling urbanization; lake-friendly agricultural practices; reconfiguring from mass to sustainable tourism; wetland rehabilitation; and a fully functional, well-maintained wastewater system.

Evidently, none of these has been taken to date with wastewater issues causing particular consternation due to the dilapidated state of relevant infrastructure; its capacity; maintenance; and the frequency with which untreated water is entering the lake (KfW Entwicklungsbank, 2011; JICA, 2012). Such concern prompted World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Recommendation 13:

“Improve the central wastewater treatment system for all settlements in the Lake Ohrid basin, and enable education and training of relevant staff to build their technical capacities.”

B. Post-Reactive Monitoring

According to the Reactive Monitoring Mission Report Annex 7, improvements to wastewater were expected by December 2018, but again no action that actually prevents regular polluted inflows to the lake had been taken by that stage. Instead, the February and November Progress Reports merely put forward different excuses for the extended process (Ministry of Culture 2018a, 2018b), thereby reaffirming that elections and political considerations are prioritized over basic environmental needs in the Ohrid region.

Inactivity has manifested in a steadily worsening situation encapsulated in these two quotes reported by Ohrid News on June 5th 2018 from senior managers at MJP ProAqua, the company responsible for wastewater infrastructure and operations in the Ohrid region:

“The condition of the sewerage system has been brought to collapse. Some of the untreated and polluted waters are flowing directly into the River Drim and Lake Ohrid, which represents an ecological catastrophe with enormous consequences to the environment and human health.” — Jeton Shakiri, Head of RE Kolektor (the sewerage management unit of MJP ProAqua).

“We took over the sewerage system in a catastrophic state. When I came into the position of director for ProAqua, the treatment plant at Vranista was non-functional for 8 months. We successfully managed to fix it, but it is now no longer functioning again, so we can only treat polluted waters with chemicals.” — Vladimir Aleksijoski, Director MJP ProAqua.

Since then, the Record from the 107th Session of the Government of the Republic of Macedonia held on December 11th 2018 does state that a decision has been made to create an enterprise for treatment of wastewater in the Ohrid region with finances allocated for that purpose. This was reconfirmed by Prime Minister Zaev during his February 2017 visit to the Ohrid region.

While a welcome advance in the direction of solving this key issue, a full 18 months have passed since the Reactive Monitoring Mission Report was issued²⁹ and work on the solution has still only reached the stage of enterprise formation. During that time, as observed in Chapter 1, several projects that will put added strain on the wastewater system have stepped forward and there are few signs that the tourism industry has reoriented its model from maximization of visitor numbers.

Patently, the speed of future development risks outpacing remedial work on the wastewater system, even though the latter is already deemed by the World Heritage Centre/ICOMOS/IUCN (2017) to have “insufficient carrying capacity” for present-day use. This shadows previous experience from the region (Matzinger, 2004). Furthermore, once the wastewater system has been renewed, its long-term maintenance is essential to avoid the backsliding that has been witnessed over recent years.

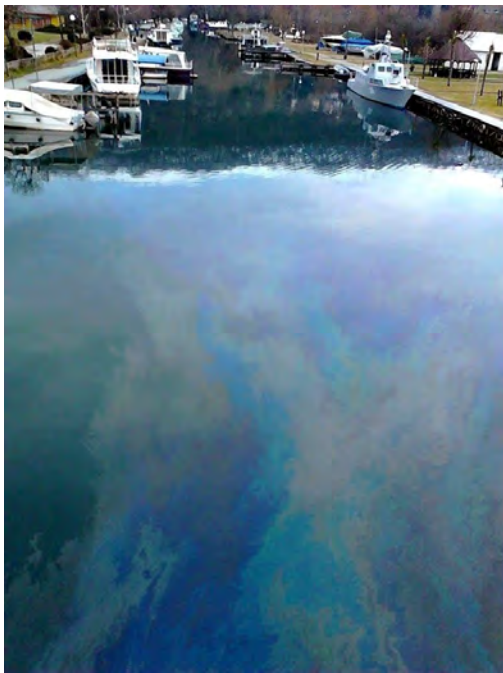
C. Other Concerns

Beyond sewerage, further potential fray to the Outstanding Universal Value of the Ohrid region has emerged from unknown substances flowing into Lake Ohrid. In one instance, this was due to the sinking of a boat and accompanying fuel release that took place in Studenchishte Canal, which is habitat for 14 of Lake Ohrid’s native fish species, including some of the endemics referenced in the Ohrid region’s Outstanding Universal Value statement. Although less dramatic, day-to-day maintenance of boats at the location also leads to pollution. As Studenchishte Canal serves as a de facto marina, motor oil is often poured in to the waters as a result of poor handling or simply during the replacement procedure. Additionally, dumping of waste oil next to the canal is common.

²⁹As noted previously, the Japanese International Cooperation Agency (JICA) raised the alarm 6 years before.

Another incident on December 14th 2018 saw the waters of the River Grasnica, which flow directly into Lake Ohrid, turn purple. As quoted by *Ohrid News*, the relevant national inspector was not initially able to determine either the type of liquid that had entered the river or its source, but did conclude that it had arrived by way of the wastewater system. Since then, no public explanation has accounted for the incident.

A



B



C



D



Clockwise from top right: A. Fuel glimmers on the surface of Studenchtishte Canal; B. Oil for the maintenance and operation of boats in the vicinity of Studenchtishte is often improperly stored and discarded; C. A mystery substance causes an Ohrid river to run purple; D. The sinking of a boat sees yet more fuel release in Studenchtishte Canal.

D. Conclusions

Although it is one of the most serious pressures upon the Ohrid region with potential impacts not only for world heritage but also for public health and tourism revenues, securing the local wastewater system still seems to fall a distant second priority to urbanizing the lakeshore in the Ohrid region.

After several years of warnings from diverse sources, sewerage continues to fall into disrepair, and, although authorities seem to have finally reached the stage of taking action with the promise of funds for wastewater renewal, 18 months have already passed since the government takeover of sewerage management in July 2017. On the ground rehabilitation is yet to begin. Concurrently, plans abound for infrastructure, hotels and tourism complexes.

Positive environmental outcomes cannot be expected from this dynamic unless an operational wastewater system of suitable capacity is considered a stable precondition for any future urban and coastal transformation. Meanwhile, stronger sanctions may discourage other forms of pollution, provided that genuine efforts are made to identify the source. It is also clear that an alternative to Studenchtishte Canal needs to be found for boat-mooring. However, much care and attention needs to be given to this matter as previous suggested locations for a Lake Ohrid marina have focused on the ecosystemically vital Studenchtishte Marsh (see [Chapter 2](#)). In addition, they seem to have aimed at providing capacity for a large number of boats, vehicles whose environmental impact is an increasing concern at Lake Ohrid (Kostoski et al, 2010).



Chapter 6: Solid Waste

Summary

- ❖ Inappropriate disposal of trash continuing in world heritage property
- ❖ National Park Galichica still suffering fly-tipping incidents
- ❖ Landfill clean-up undermined by repeat dumping
- ❖ Public awareness shows signs of improvement

One of the few points of optimism in the Ohrid region in the past two years has been public-participation activities that have seen literally hundreds of citizens volunteer to clean the lake-shore and city of Ohrid with support from the municipality. Underwater missions completed by divers have also sought to address environmental damage from ghost nets and trash that has settled on the lake bed, bringing both publicity and positivity to the solid waste issue.

Nonetheless, illegal dumping persists in various locations around the world heritage site, markedly in National Park Galichica. At the same time, copious construction waste still locks high-value habitats away from the species they should contain (Evidence 7A). As explained in Chapter 3, this landscape degradation has become a convenient way to relativize the ecological impact of new-build developments and underestimate the biological capacity of coastal areas.

Part of the problem results from disposal charges that discourage citizens from managing solid waste in a responsible manner, combined with a continuing awareness deficit³⁰ and weak control systems that do little to deter environmentally irresponsible behaviour.

Evidence 8

A



B



The above photos were supplied to Ohrid SOS from various locations within the Ohrid region world heritage site in November and December 2018. Picture A originates from a location near Trpejca in National Park Galichica. B, C and D lay between the villages of Racha and Upper Konjsko.

³⁰The aforementioned strong participation at shoreline cleaning events suggests that consciousness in these terms may be growing.

D



DECEMBER 2018: Location near the entrance to the city, right of the road Skopje – Ohrid towards the Lake.

A. Landfill Maucker

Maucker, the infamous illegal landfill near the entrance to Ohrid, was cleared and repaired as stated in the November Progress Report. Solid waste of 16,000 square meters was flattened and covered with good quality soil just as the report claims. However, the content of the waste is various, not just construction debris. Moreover, recent evidence received by Ohrid SOS in December 2018 revealed that dumping activities were ongoing at the site, refuting the authorities' assertion that it would "prevent future deposition of debris".



Landfill Maucker, photos taken in February 2019



Chapter 7: Hydropower

Summary

- ❖ Fish kill occurred in Studenchishta Canal in November, hydropower the suspected cause
- ❖ Ecological parameters additional to current law required for safer dam management
- ❖ Lake level measurements unreliable
- ❖ Environmental assessment for hydropower needed, esp. since more hydropower planned
- ❖ Pumping and aeration equipment not installed at key areas

A. Fish Kill

From November 19th to November 21st 2018, an estimated 500 to 600 kilos (Prof. Dr. Trajce Talevski, personal communication) of the South West Balkan endemic fish species *Alburnus scoranza* suffocated in Studenchishte Canal. The presumed cause was a drop in the Lake Ohrid water level to furnish hydropower facilities on the River Black Drim, which led to an oxygen shortage in the canal and accompanying fish deaths. As the incident unfolded, various issues were brought to light.

B. Warnings

Although the lake level was within legal parameters during the fish kill incident, three red flags ought to have alerted and motivated preventative action from AD ELEM, the power company responsible for discharge of waters for hydropower dams along Lake Ohrid's only outflow:

- Studenchishte Canal is regularly used by fish as a winter sheltering spot, so environmental assessments — it is unclear whether any have been conducted — should have identified the risk and put in place mitigation measures;
- Professor Doctor Trajce Talevski, a well-known expert specialized in ichthyofauna at the Hydrobiological Institute Ohrid, had tagged AD ELEM through his personal Facebook page on October 29th, stating, “A large number of plasica [*Alburnus scoranza*] have entered Studenchishte Canal. These may die due to a lack of oxygen.”; and
- Hydrobiological Institute Ohrid had held a meeting about the issue on November 8th, ten days before fish started dying.

Despite the warnings and the commonly known seasonal function of Studenchishte Canal, AD ELEM did not take significant steps to avoid the tragedy (see [Chapter 7, Part E](#)). By contrast, ProAqua, a company that was extracting drinking water from springs that feed Studenchishte Canal, responded to the same alerts by moving its operations to another location when informed of the environmental risk.

C. Law

Detrimental environmental outcomes of hydropower are supposedly mitigated by a law outlining the maximum and minimum levels to which Lake Ohrid's water is permitted to fall or rise, i.e. 693.1 meters above sea level (a.s.l.) at lowest and 693.75 at highest. This is the control measure reaffirmed by the Republic of Macedonia in answer to the World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Report Recommendation 15: “Develop and implement appropriate measures to stabilise the water level of Lake Ohrid, including regular monitoring and control of discharge of lake waters into the Crn Drim river by Macedonian power plants company ELEM.”

As demonstrated by the November fish kill, this legal mechanism is insufficient to prevent negative environmental externalities from dam operations. Water levels were within legal parameters when

tragedy hit Lake Ohrid's *Alburnus scoranza* population, indicating that species movements and ecological conditions are also required criteria for power production companies to reduce the stress upon Lake Ohrid ecosystems.

D. Measurement Mayhem

Theoretically underpinning the law that delineates acceptable parameters for maximum and minimum levels of Lake Ohrid's water are daily measurements, which are undertaken independently by two entities: the power company AD ELEM and the Hydrometeorological Institute of the Republic of Macedonia. Again, this is part of the control methodology put forward by Macedonia in response to World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Recommendation 15.

The fish kill incident at Studenchishte Canal demonstrated emphatically that this is not working. Throughout November, a discrepancy in the measurements can be observed (Evidence 9) with the power company gauge routinely reading higher than that of the Hydrometeorological Institute. At its most extreme, this difference is 6 centimetres, which adds up to several million cubic meters over the entire surface of the lake. This has never been explained.

Evidence9

A) The picture below displays the level of Lake Ohrid in meters above sea level as measured by the Republic of Macedonia's Hydrometeorological Institute

	Nov 13	Nov 14	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
ОХРИД - Ез.Охрид "О" kota 693.17 мнм	693.24	693.25	693.25	693.24	693.24	693.24	693.24

B) The second picture displays the level of Lake Ohrid in metres above sea level as measured by the Republic of Macedonia's Hydrometeorological Institute from 20th November 2018 (left) to 26th November (right).

	Nov 20	Nov 21	Nov 22	Nov 23	Nov 24	Nov 25	Nov 26
ОХРИД - Ез.Охрид "О" kota 693.17 мнм	693.24	693.24	693.25	693.26	693.26	693.27	693.28

C) Measurements of Lake Ohrid's water level by the power company AD ELEM, which operates hydropower dams on the River Black Drim and is responsible for controlling Lake Ohrid's outflow, show routinely higher figures than those for the Hydrometeorological Institute. The difference reaches as much as 6 cm on 22nd November 2018, just after the fish kill incident.

30.11.2018 693,35 м.н.в.	29.11.2018 693,36 м.н.в.	28.11.2018 693,35 м.н.в.	27.11.2018 693,33 м.н.в.	26.11.2018 693,31 м.н.в.	25.11.2018 693,31 м.н.в.	24.11.2018 693,31 м.н.в.	23.11.2018 693,31 м.н.в.
22.11.2018 693,31 м.н.в.	21.11.2018 693,29 м.н.в.	20.11.2018 693,27 м.н.в.	19.11.2018 693,25 м.н.в.	18.11.2018 693,25 м.н.в.	17.11.2018 693,25 м.н.в.	16.11.2018 693,25 м.н.в.	15.11.2018 693,26 м.н.в.
14.11.2018 693,26 м.н.в.	13.11.2018 693,26 м.н.в.	12.11.2018 693,26 м.н.в.	11.11.2018 693,26 м.н.в.	10.11.2018 693,26 м.н.в.	9.11.2018 693,26 м.н.в.	8.11.2018 693,26 м.н.в.	7.11.2018 693,26 м.н.в.

E. Pumping and Aeration

Pumping and aeration equipment could have alleviated the oxygen deficit and staved off the fish kill had any been put in place beforehand. In the three weeks that separated Prof. Dr. Trajce Talevski's first warning to AD ELEM and half a tonne of death at Studenchishte Canal, none was provided. The only suitable equipment in reasonable proximity was found to be non-functional as the fish began to suffocate.

F. Drim Basin Director

On October 18th 2018, almost exactly one month prior to the mass death of *Alburnus scoranza* as Lake Ohrid levels began to drop, Dejan Panovski, Project Officer for the GEF Drin Project, seems to have anticipated an impending debate about the impact of falling waters upon Lake Ohrid's ecosystems, tweeting from his personal Twitter account:



'Most probably another panic about the level of Lake Ohrid will happen again soon, alarms about an eco-catastrophe, politicization of the issue, expert "analysis" and so on. Look, it's "emptying" already.'

Considering Mr Panovski's position as a cornerstone of Drim Basin management and the acute need for public awareness of threats to Lake Ohrid and the River Drim in general, it is not known what interests were served by his publicly belittling and sowing doubts about the authenticity of warnings with regard to the potential undesirable

effects of water resource management for hydropower, not least since such concerns have been raised variously by the World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission (2017),

IUCN independently (2017) and Prof. Dr. Trajce Talevski of the Hydrobiological Institute (Deutsche Welle, 2017)³¹.

G. Conclusions

The death of 500 to 600 kilos of the Western Balkan endemic fish species *Alburnus Scoranza* likely occurred at least in part as a result of exploitation of Lake Ohrid's water resources for hydropower, the second time since 2017 that serious risks have been taken with the lake's ecosystems for this purpose (Ohrid SOS, 2017).

On one hand, the disaster was entirely predictable both from the seasonal patterns of Lake Ohrid's ichthyofauna and expert warnings that first appeared three weeks beforehand. On the other, the incident could have been alleviated by provision of functional pumping and aeration equipment. These had not been put in place.

Lessons learned include that legal provisions for the lake level alone will not be sufficient to prevent unwanted environmental consequences from hydropower at Lake Ohrid. These must be accompanied by other criteria based upon ecological monitoring, which should be identified by a new, high-quality environmental assessment for hydropower operations with action plan, including viable mitigation measures to be implemented immediately. Understanding that new plans for more hydropower installations on the River Black Drim have now arisen (see [Chapter 1](#)), this is a matter of some urgency.

Relatedly, the current system of monitoring water levels is run by the very company whose behaviour it is intended to oversee and is thus prone to manipulation due to conflict of interest. The system requires credible independent quantifications of the lake level, but these have been compromised by under-resourcing of the Hydrometeorological Institute.

18/10/2018	Project Officer Dejan Panovski of the GEF Drim Project looks to pre-empt warning of environmental fallout from lowering Lake Ohrid water levels via his personal Twitter account by calling into question the motives and conclusions of people who raise such warnings.
29/10/2018	Prof. Dr. Trajce Talevski of the Hydrobiological Institute Ohrid publicly raises the alarm that large numbers of <i>Alburnus scoranza</i> entering Studenchtishte Canal are at risk of dying from a lack of oxygen, calling power firm AD ELEM to take steps to increase Lake Ohrid's water level.
8/11/2018	Amid growing concern about how the sub-optimum level of waters in Studenchtishte Canal may lead to a mass suffocation, Hydrobiological Institute Ohrid holds a meeting to discuss how to avert the potential crisis.
19/11/2018	Fish begin to die at Studenchtishte Canal, which they had originally entered as a winter shelter, in a suffocation episode lasting 2 days. No pumping or aeration equipment is available to relieve the tragedy. 500-600 kilos of <i>Alburnus scoranza</i> lose their lives.
12/12/2018	Analysis of lake level figures published by both AD ELEM and the Hydrometeorological Institute Ohrid reveal a divergence in measurements of 6 cm, a massive quantity of water when taken over the entire surface. The reason for the discrepancy is unknown.

Table 6: Timeline of events leading to the mass fish kill in Studenchtishte Canal in November 2018

³¹Mr Panovski has a history of seeking to discredit the non-institutional environmental movement in the Ohrid region during his previous role as Bilateral Secretariat (Ohrid SOS, 2017) although he was also one of the few members of the previous ruling party to oppose proposals to drain Studenchtishte Marsh.

ХОТЕЛСКИ КОМПЛЕКС Б5
КП бр.2696/1 КО Елшани Општина Охрид

Одобрение за градба : Уп.1.бр.20-3852

Инвеститори : Никола Толевски и Дебој Инженеринг Охрид

Градител : Беса Инг дооел увоз-извоз Охрид

Проектант : дооел Аданда Плус Охрид

Основен проект број : 08-15/1

Декември 2016 год.

Chapter 8: The Systematic Block

Summary

- ❖ Documents obscured from public
- ❖ Delays used as a tactic to disempower nature conservation
- ❖ Public consultation procedures not followed
- ❖ Institutional responsibilities tangled and confused
- ❖ Independent body to guarantee public access to information non-functional
- ❖ Opportunities for politicization still abound
- ❖ Improvements in terms of threats and falsely composed news reports

Although the atmosphere of threats, smears, fake news and media control that was previously conjured to discredit and discourage civil society from criticism of the Ohrid region's environmental trajectory (Ohrid SOS, 2017) has decreased over the past two years, authorities continue to obstruct conservation of Lake Ohrid's natural values with a suite of tactics to disempower NGOs, citizen initiatives and concerned individuals. These include fixing the composition of influential bodies or ensuring that they persist in a state of dysfunction; controlling the flow of information to prevent access to key documents; and failing to respond to information requests, criticisms and comments, many of which are submitted as part of official public consultation processes.

A. Wrong People in the Right Places

In November 2018, when the Republic of Macedonia stated that it had revised the Commission for Management and Coordination of the Activities Related to the Natural and Cultural Heritage³² of the Ohrid Region (CMNCHOR) (Ministry of Culture, 2018a), one may have expected this body to have been reinvigorated with conservation-oriented personnel in order to provide checks and balances upon strategies and plans for the world heritage property.

Unfortunately, the process by which it was finalized on 1st February 2018 was demonstrative of the politicization that has eroded efforts to preserve the Ohrid region's Outstanding Universal Value for several years. NGO representation was selected by recommendation as opposed to open application; civil society had no influence on the selection process; CSOs whose work is related to the Ohrid region world heritage site were not informed of the procedures that drove revision of the commission; and many of the individuals chosen for CMNCHOR were either linked to figures who had supported the plans for regional mega-projects that had been threatening the world heritage site in the recent past or had failed to oppose such developments. Given that one of the main roles for the CMNCHOR is to review planning documentation, this is a serious concern.

Improvements, such as greater presence of nature-oriented representatives, are envisaged from codification of the CMNCHOR's composition when the revised Law on Management of the Natural and Cultural Heritage of the Ohrid Region is adopted in the near future, but weaknesses in the current draft for the law predict that shortcomings will persist. Under the version presently proposed, four places on the commission (renamed to become a council) are reserved for representatives of local and national authorities, who are likely to be voting upon plans that they themselves have originated. One of the roles reserved for experts is to be supplied by the Ministry of Transport, despite its tenuous link to world heritage management and unsavoury record in pushing ecologically reckless plans for the Ohrid region; and the representative directly appointed by the government of the Republic of Macedonia is automatically defined as the president of the body, curtailing its independence.

³²The Commission for Management of the Natural and Cultural Heritage of the Ohrid Region appears to be sometimes referred to as the Commission for Management and Coordination of the Activities Related to the Natural and Cultural Heritage in the Republic of Macedonia's progress reports.

Moreover, although two spaces on the commission are reserved for civil society, provisions in the law allow the selection process for these members to be filtered, and the potential for politicization of other positions on the council such as representatives from National Park Galichica and the National Museum remains high. Thus, the independence of the new commission is far from guaranteed and conflict of interest is embedded within.

B. Information Provision, Public Consultations & Complaints

Information surrounding plans for the Ohrid region is opaque and difficult to access. Even in a recent Strategic Environmental Assessment for a tourism complex at Gorica, plans were not supplied and the envisaged size or number of buildings was not disclosed (see [Chapter 4](#) and [Annex 4](#)). The Republic of Macedonia's November Progress Report displays the same failings: Despite its great emphasis on the fact that only 8 requests for the preparation of planning documents have been accepted by CMNCHOR, no details of what these requests entail were provided (see [Chapter 1](#)). Thus, few people outside a closed group of decision-makers know what is being planned for the Ohrid region or how far it has progressed.

Similarly, official requests submitted to institutions and responsible persons as complaints or in request for information are far from certain to receive replies. When they do, these often arrive outside the legally mandated time-period and contain insubstantial detail. Further enquiries result in silence even when they make reference to violations of law.

Moreover, responsibilities are splintered between multiple institutions, so that the specific entity with jurisdiction over a given environmental concern is difficult to identify. In one instance related to tree-cutting, every single institution contacted about the matter referred it to another, indicating that the authorities themselves are lost in the administrative maze. For a long time, the only mechanism for contacting the Environmental Inspector for the Ohrid region world heritage site was a cell phone number that never answered calls nor responded to messages. An email address has now been supplied although it remains to be seen whether it will ever be truly interactive. Inspectorates for the Municipality of Struga manifest similar aloofness, with that for urbanization and construction displaying no contact details whatsoever.

Public consultation processes for developments and other matters face many obstacles: The system for announcements of consultation meetings is fragmented and unpredictable, so concerned citizens cannot be certain of knowing when/where they are scheduled; dates and timeframes for responses are not always in compliance with the law and subject to abrupt revision; and officially tabled comments are not always acknowledged with a response. SEAs are only available during public consultation processes and then removed from the internet. Final versions of these important reports are rarely if ever available. Such mechanisms seek to weaken voices for the conservation of natural habitats and ecosystems in the Ohrid region and discourage their participation in orienting regional development.

Issue	Company/Institution	Details
<i>SEA for LUDP for G1 with purpose B-5: hotel complex on KP 2617/1 and 2618/1, Cadastre area Konjsko (tourist complex St. Stefan), Ohrid Municipality.</i>	Enviro Resources	<p>Public consultation held on April 4, 2016</p> <p>Ohrid SOS comments submitted on April 13, 2016.</p> <p>No response received, hotel now under construction.</p>
<i>Lagadin General Act</i>	Constitutional Court of the Republic of Macedonia	<p>NGO Star Lagadin with Ohrid SOS in February 2018 submitted complaint to the Constitutional Court for evaluation of the Lagadin General Act</p> <p>The case has not been put on the agenda.</p>
<i>Agreement Decision for Project: Establishing a System for integrated waste management in the South-West Region</i>	State Commission on Decisions in Administrative Procedure and Labor Disputes in Second Instance	<p>Ohrid SOS submitted a complaint to the State Commission on March 30, 2018.</p> <p>Two enquiries followed with no response to either.</p>
<i>SEA for UPVNM for part of tourism complex Gorica, planning area 2 in Cadastre area 4, Ohrid Municipality</i>	Enviro Resources	<p>Public consultation held on July 12, 2018</p> <p>Ohrid SOS submitted comments on August 10, 2018.</p> <p>Reply received on December 14, 2018 stating that response was impossible within legally mandated 30-day deadline due to lack of final planning documents or comments from all relevant institutions.</p>
Documentation on the 8 urban planning documents approved by the CMNCHOR as stated in the November Progress Report	1. Ohrid Assembly Members 2. Municipality of Ohrid, Urbanization Department 3. Struga Assembly Members 4. Municipality of Struga Urbanization Department	Request sent on February 2 nd , no response after 30 days. Legally mandated deadline passed.
All previous urban plans concerning	Municipality of Ohrid	Request sent on February 6 th 2019, no

Lagadin prior to General Act on Village of Lagadin		response after 30 days. Legally mandated deadline passed.
Documentation on the 8 urban planning documents approved by the Commission for the Ohrid region (CMNCHOR) as stated in the November Progress Report	Commission for the Management of the Natural and Cultural Heritage of the Ohrid Region	Requests sent on February 4 th Response received within legal timeframe!
Dec 14 th inspector's report on River Grasnica pollution (see Chapter 5)	State Environmental Inspector at Municipality of Ohrid	Request for investigation report requested on February 14 th 2019. No response at the time of writing almost four weeks after the request

Table 7: Comments and complaints have been submitted by Ohrid SOS to Macedonian institutions regarding several urbanization issues. Many other requests for public information and documentation have resulted in no response.

C. Commission for Public Access to Information

To ensure the legally mandated supply of information from institutions to the public and rectify any mishaps, a Commission for Public Access to Information has been established in the Republic of Macedonia. In theory, this should eliminate conflicts between civil society and authorities in relation to the provision of documents and other material, but, in practice, it was unable to undertake its responsibilities from May 2nd 2018 to approximately January 2019 due to the resignation and non-replacement of its president, which, in accordance with Macedonian law, left it unable to function. Up to then, the commission had operated with 3 members instead of the legally defined 5. Hence, the safeguard underpinning public access to information was rendered totally obsolete for over six months.

When the commission was finally reconvened, the first contact Ohrid SOS received was a refusal to uphold its complaint about the Second Level Commission within the Ministry of Transport's failure to respond to a request for information related to Lagadin. The reason provided for the refusal was a minor discrepancy in terminology.

Evidence 10

The letter here-presented was sent to Ohrid SOS from the Commission for Public Access to Information. It details how the commission had fallen into disrepair from May 2018 due to a lack of president.



КОМИСИЈА ЗА ЗАШТИТА НА ПРАВОТО ЗА СЛОБОДЕН
ПРИСТАП ДО ИНФОРМАЦИИТЕ ОД ЈАВЕН КАРАКТЕР

Бр. 08-448

Скопје, 17.10 2018 година

До:

Активистите на Граѓанската иницијатива „Охрид SOS“

ohridsos@gmail.com

ПРЕДМЕТ: Известување

ВРСКА: Ваше Барање бр.08-448 од 16.10.2018 година

Во врска со Вашето Барање, заведено во Комисијата за заштита на правото за слободен пристап до информациите од јавен карактер под бр.08-448 на 16.10.2018, со кое барате информација во врска со постапувањето на Комисијата по Вашата Жалба заведена во Комисијата под бр.08-448 од 31.07.2018 година Ве известуваме за следново:

Согласно член 31 од Законот за слободен пристап до информации од јавен карактер („Службен весник на Република Македонија“ бр.13/2006, 86/2008, 6/2010, 42/2014, 148/15, 55/2016 и 64/2018), Комисијата за заштита на правото за слободен пристап до информациите од јавен карактер е составена од претседател, негов заменик и три члена, кои функцијата ја извршуваат професионално со мандат од пет години и со право на повторен избор. Претседателот, заменикот и членовите на Комисијата ги именува и разрешува Собранието на Република Македонија по предлог на Комисијата за прашања на изборите и именувањата. Согласно член 33 од истиот Закон, Комисијата работите од својата надлежност ги врши на седница, а работи и одлучува со мнозинство од вкупниот број членови.

Комисијата подолг временски период функционираше со претседател, негов заменик и еден член. Откако на 2 мај 2018 година, Собранието на Република Македонија ја прифати оставката на претседателот на Комисијата, до сега Комисијата има само заменик и еден член, што значи нема мнозинство од вкупниот број членови и според тоа не може да работи и одлучува.

Со оглед на наведеното, Ве известуваме дека по Вашата Жалба бр.08-448 од 31.07.2018 година, Комисијата се уште не постапила бидејќи истата е поднесена во периодот кога недостига законски предвидениот број на членови на Комисијата, неопходен за донесување на полноважни одлуки.

Кога ќе се исполнат законски предвидените услови за работење и одлучување на Комисијата, ќе продолжи со вршење на работите од нејзина надлежност и ќе постапи по предметната Жалба.

Секретар на Комисијата
Јорданка Стојкова

Подготвил: Цветан Станоски
Контролирал: Јорданка Стојкова
Одобрил: Ајден Ибраими

Заменик претседател,
Блерим Исени



D. Systematized Delays

Engagement of civil society is further disrupted by the plodding pace of institutional administration, and the chronic practice of stating measures on paper but not fulfilling them. On one occasion, Ohrid SOS waited 45 days to receive a response simply to say that its enquiry should be readdressed to another institution. Authorities were therefore ensured more time with less accountability.

Action plans and strategies offer similar respite from scrutiny. By stating that protection or conservation is in the process of being planned or prepared, pressure for real-world action is relieved from decision-makers and more time opened in which the status quo, i.e. overdevelopment of the Ohrid region; unsustainable exploitation of its natural resources; and degradation of local habitats, can be preserved. This is evident from both the February and November Progress Reports

alongside various biodiversity strategies (see [Chapter 2](#)). It is a key component of the pathway to destruction documented in [Chapter 3](#).

E. Conclusions

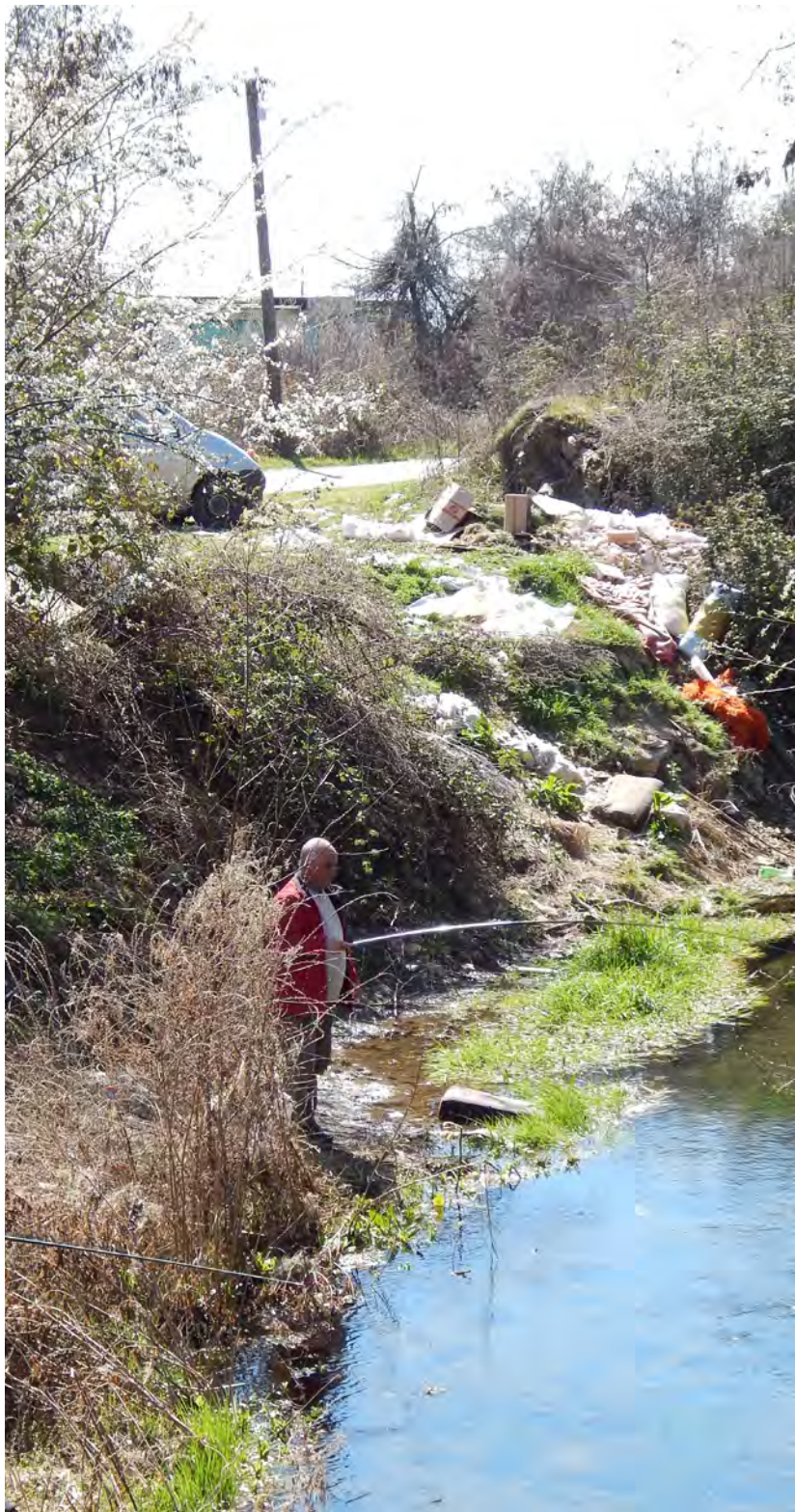
When discussing the development of the new Law on the Management of the Natural and Cultural Heritage of the Ohrid Region in its November Progress Report, the Republic of Macedonia claims to be “introducing a genuine participative approach for the management of the property with active inclusion of the local communities and civil society organizations” (Ministry of Culture, 2018b).

While a decrease in aggressive authoritarian behaviour is a welcome improvement in the direction of such a participative approach, passive tactics of obstruction remain systematic: Checks and balances are reduced to impotency; information is withheld in full or in part; complaints go unanswered; announcements are obscured; public consultations for deficient SEAs are partially implemented; appointment processes lack openness and transparency; delays are weaponized; and a labyrinthine jurisdictional architecture enables intricate evasion of responsibilities. As a result, oversight of decision-making processes is still severely compromised.

A genuine participative approach can only emerge if these failures are resolved. Required measures include

- simplified and centralized platforms for information requests and complaints;
- a single portal where all Strategic Environmental Assessments, public consultations and related documents for the Ohrid region are announced with an option for automatic email notifications;
- clear, streamlined jurisdictions for environmental and planning responsibilities;
- upgraded complaints and accountability procedures;
- establishment of authentically independent bodies for oversight of decision-making processes;
- accountability for missed deadlines;
- objective achievement indicators for action plan items; and
- genuine incorporation of civil society in public consultation procedures.

Final Thoughts & Recommendations



The fortieth anniversary of Lake Ohrid's designation as a UNESCO World Heritage Site will pass with muted celebrations in 2019. The landmark, which should be a celebration of the property's incredible capacity to enrich the human experience and natural world, will more realistically be accompanied with regret that its ecosystems are degraded and degrading (Kostoski et al, 2010; Ohrid SOS, 2017); huge swathes of its wetlands and pristine coast have been lost (Apostolova et al, 2016); its unique iconic species such as Ohrid trout are slowly disappearing (Jordanova et al, 2016), while other Balkan endemics suffocate to fuel hydropower (see [Chapter 7](#)); trash is choking its mountainside (see [Chapter 6](#) & Ohrid SOS, 2017); the birds no longer fill its skies (IUCN, 2017); water is supplied from sewage overflows (JICA, 2012); local municipalities are queuing plans for the urbanization of its shore, cementing its 50m green belt grey (see [Chapter 1](#) but also Evidence 7C); the clarity of its waters is being lost (Matzinger, 2006); urbanization is still seen as integral to development; and the authorities with the greatest responsibility to reverse this sad decline are more interested in generating the appearance of taking action than the reality of doing so. Whether formally acknowledged by the World Heritage Committee or not, it is difficult to deny that the Ohrid region is world heritage in danger.

The government of the Republic of Macedonia has attempted to present a rather divergent picture in its February and November Progress Reports in 2018. While these give the appearance of an engaged and responsible authority, close reading reveals that many crucial measures recommended by the World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission are at a rudimentary stage of completion. Certainly, they do not seem to be outpacing parallel proposals to build more resorts, hotels, hydropower facilities, residential areas, ports, pontoons, poultry farms, artificial beaches and other developments that, though known to exist, remain publicly undisclosed.

Reflected in both progress reports is the propensity for Macedonian institutions to agree to ameliorative environmental action; make movements towards primary phases such as preliminary documents or action plans; and then cease activity. This tactic for releasing pressure while avoiding substantive action has been practiced for years and is strikingly evident in the case of protected status for Studenchishte Marsh and Ramsar designation for Lake Ohrid (see [Chapter 2](#)) but also in the extended failure to complete an SEA for cumulative impacts to the world heritage site from the many planned projects within its boundaries (see [Chapter 3](#)); the yet unfinished management plan for the Ohrid region; the snail-like pace of wastewater renewal (see [Chapter 5](#)); the absence of a sustainable tourism strategy (see [Chapter 3, Section A](#)); the misapplication of law ([Chapter 1, Section C, D and E](#)); and the endless dragging of feet with regard to a moratorium on coastal transformation, which has never truly been implemented (see [Chapter 1](#)).

Various excuses from the political situation to local elections are put forward to explain the lethargy, yet each amounts to a simple de-prioritization of world heritage conservation. Taken together with the seemingly orchestrated block on public access to information and participation in the orientation of future development (see [Chapter 8](#)), the impression that emerges is one of decision-makers that have failed to grasp the responsibilities inherent in preserving Outstanding Universal Value for present and future generations, whose interests are yet to synchronize with its protection. The most recent vision for the Ohrid region from the Republic of Macedonia's prime minister and new revisions to laws related to urbanisation firmly indicate that this is so (see [Chapter 1, Section D](#)).

The efficacy of the World Heritage Committee in halting this slide is undetermined. Although it has been instrumental at preventing further deterioration of the site by requesting cancellation of the A3 express road and ski-resort, nothing has resolved the chronic threats which drive the “creeping biodiversity crisis” that scientists had identified to be afflicting the site by 2010 (Kostoski et al, 2010). Indeed, the World Heritage Committee has continually failed to recognize the grave force of wetland destruction or recommend measures for the rehabilitation of this core habitat. It has also been weak in the face of coastal urbanization, most notably throughout 2018 when its request for a moratorium was being ignored, and seems unable to prevent abuse of the property from overfishing, illegal construction, the subsequent legalization of illegal buildings, pollution, infrastructure development, and exploitation for hydropower, stressors which have been continuing for decades now.

Nonetheless, the situation would likely be even more deleterious without UNESCO designation, which remains the most appropriate mechanism for protection of the Ohrid region, and opportunities still exist to reverse the decline. To confirm this impression, reaction at World Heritage Committee level is expected to be up-scaled and several national and local actions implemented.

Recommendations

A wide range of thoughtful activities is required to reverse the decline of the Ohrid region’s Outstanding Universal Value. Suggested on the ensuing pages, these range from direct measures on the ground to systematic steps that will link companies and decision-makers to the consequences of their actions. They are designed to augment the current recommendations from the World Heritage Centre, ICOMOS and IUCN that have been incorporated within World Heritage Committee Decision 41 COM 7B.34.

Several of these suggestions have already been submitted to relevant authorities as part of public consultation procedures.

I. Urbanization & Habitat Loss

- Moratorium to be publicly announced on all coastal and urban transformation until
 - a. wastewater rehabilitation is underway;
 - b. illegal constructions are removed from Lake Ohrid’s 50m green belt zone;
 - c. a review of the connections between urbanization and nature protection laws has been conducted;
 - d. the Commission on Public Access to Information has been refunctionalized;
 - e. a high-quality Strategic Environmental Assessment for cumulative impacts has been completed;
 - f. a central platform for the public dissemination of all development plans for the Ohrid region is established.

- Moratorium trigger to be inserted in law so that all coastal and urban transformation within the Ohrid region world heritage property will be legally bound to halt with immediate effect at any time in the future if
 - a. any construction occurs within Lake Ohrid's 50m green belt;
 - b. significant quantities of untreated wastewater are found to be entering Lake Ohrid;
 - c. sharp declines in the numbers of locally identified keystone species³³ or taxa listed as threatened according to global, European or local IUCN Red Lists are evidentially linked to construction practices or urbanization strategy;
 - d. monitoring of keystone species is discontinued;
 - e. coastal modification or increases in the people-capacity of existing buildings exceeds a certain, UNESCO-defined amount within the current year or within the past five years;
 - f. total urbanization has reached a certain, IUCN-defined percentage of the lakeshore; and
 - g. significant divergence between activities and the Management Plan for the Natural and Cultural Heritage of the Ohrid Region is observed, including delays.

- Provisions in the new Law on Management of the Natural and Cultural Heritage of the Ohrid Region to enable a streamlined process of protected area designation within the boundaries of the world heritage site;

- Special in-lake and seasonal protection zones to establish disturbance free spawning and wintering areas for native Lake Ohrid fish, including sizeable no-take areas;

- The impact of boats to be assessed and limitation controls implemented, including identification of a minimum-impact site for mooring dislocated from Studenchishte Marsh;

- All further encroachment upon the coastal area surrounding the Springs of Sveti Naum to cease and a high-quality environmental impact study to review the effects of current practices in the area, including mitigation measures;

- Protected area no-go zones for large projects, including infrastructure, to be enshrined in Macedonian law in line with Motion 26 from the 2016 IUCN World Conservation Congress.

II. Wetland Protection

- Studenchishte Marsh to be designated a Monument of Nature with a minimum 63.97-hectare surface area in 2019;

³³ Keystone species are to be identified by the Hydrobiological Institute Ohrid and National Park Galichica.

- 63.97-hectares at Studenchishte Marsh to receive immediate temporary protection until the Monument of Nature designation is finalized;
- Measures for wetland revitalization, including Studenchishte Marsh, to be conducted according to the Society of Wetland Scientists' *Declaration on the Protection of the Lake Ohrid Ecosystem*;
- Lake Ohrid including Studenchishte Marsh to be nominated as a Wetland of International Importance under the Ramsar Convention in 2019;
- The Macedonian Ramsar Committee to be restructured with a fully open, fair and documented procedure of application for key positions.

III. Legal Measures

- A review and reorganization of legal infrastructure to be undertaken with the intention
 - a. to identify and rectify anomalies and loopholes that undermine nature protection legislation in the Ohrid region with particular reference to the interplay between urbanization laws (Law on Construction, Law on Physical and Urban Planning etc.) and the Law on Nature Protection, Law on Waters, and Law on Management of the Natural and Cultural Heritage of the Ohrid Region;
 - b. to ensure the legal effectiveness of nature protection measures such as Lake Ohrid's 50m green belt zone;
 - c. to simplify and clarify legal architecture to promote user-friendliness for the average citizen, including streamlining of jurisdictions.
- The latest, consolidated versions of all laws to be clearly identified and available to everybody online at a single-point platform;
- Alignment of all strategic and planning documents with the Management Plan for the Ohrid Region based on proper application of sustainability principles and incorporation of scientific research.
- Legislation to require any person, including any legal person and without limitation intended to include financiers, investors, designers, tour operators and constructors and any legal person owned or operated by the same, whose action or non-action results in a substantial impact upon the natural and/or cultural heritage of the world heritage site, to compensate all costs of remedy of any damage caused, irrespective of whether the said action occurs within or without the boundaries of the site.

IV. Wastewater & Solid Waste

- Renewal, expansion and maintenance of the wastewater system to be an on-going precondition of future coastal and urban transformation in the world heritage site;

- Financial and technical support to be extended to the Republic of Macedonia for the purpose of renewal of the Ohrid region wastewater system;
- Financial conditions for the repayment of support to be tied to long-term maintenance of the wastewater system so that terms become more strict if it is allowed to fall into disrepair due to human negligence;
- Stricter punishments for illegal tipping to be accompanied with more citizen-friendly methods of disposal for large quantities of waste;
- The site for the replacement of the Bukovo Landfill to be defined outside the Lake Ohrid watershed.

V. Hydropower

- A high-quality environmental assessment to analyse both current hydropower practices and those likely to result from new hydropower plans for the River Black Drim, including cumulative effects;
- Mitigation measures to be implemented based on the results of the environmental impact study;
- Functional aeration and pumping equipment to be installed at Studenchishte Canal with immediate effect and regular regime of performance testing;
- Functional, independent measures of Lake Ohrid's water level to be put in place;
- Ecological indicators to inform hydropower operations alongside lake levels.

VI. Institutional Accountability

- Public records to be made detailing the activities, discussions and decisions at meetings of the Municipalities of Debrca, Ohrid and Struga, including related councils, in the same style as the official records released for the sessions of the national government;
- A legally competent body to be identified which can take on a centralized responsibility for directing any complaint or request for public information or to the correct entity/institution;

- Objective performance indicators to be established for management figures in important bodies related to the protection of the Ohrid region with scaled remedial provisions for failure including dismissal in extreme cases;
- Mechanisms for complaint leading to possible removal of any public functionary to be legally enshrined with clearly defined and publicly available guidelines on how to animate the process;
- The work of the soon-to-be-formed council provisioned in the new Law on Management of the Natural and Cultural Heritage of the Ohrid Region to be publicly documented and its members subject accountability to citizens, whose formal complaints can escalate to dismissal of council members under appropriate circumstances.

VII. Public Consultation & Access to Information

- A single-point internet-based platform to be opened upon which all plans, documents, environmental assessments, strategies, changes to urban plans, procedures for legalization of illegal buildings, and details of public consultations related to coastal and urban transformation of the Ohrid region must be permanently placed to have legal validity, including an opt-in automatic email notification service;
- A reset provision to be inserted in law to ensure that, when public consultation regulations have been infringed, procedures return to the steps before the infraction.

VIII. Strategic Environmental Assessments (SEAs)

- Upgrades to legislation and guidelines covering SEAs for the Ohrid region to require thorough basic standards including
 - a. full, mapped project plans and capacities;
 - b. complete lists of species recorded at project development sites;
 - c. complete lists of species at risk of indirect impact;
 - d. consideration of cumulative impacts in combination with other current and proposed projects;
 - e. eutrophication risks;
 - f. robust figures and up-to-date data to conclusions;
 - g. citations and other sourced material to support ecological conclusions; and
 - h. incorporation of ecosystem services, including in no-change and alternative scenarios.
- Legal provisions to be designed that can retrospectively punish the publishers of Strategic Environmental Assessments if serious ecological damage results from negligent failure to identify risks;

- The system of licencing permission for the conductors of SEAs to be reinforced with more stringent ecological education requirements;
- A transparent system for disqualification of incompetent SEA conductors to be developed with a fair and balanced complaints mechanism;
- SEAs to be produced in both Macedonian and English to increase oversight;
- Draft and final versions of SEAs to be made permanently public via the internet.

Considering that authorities in the Republic of Macedonia have not yet demonstrated sufficient willingness and urgency to complete the World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission recommendations within required deadlines, completion of the above suggestions faces greater likelihood of success under the auspices of the *List of World Heritage in Danger*.



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Annex 1: Declaration on the Protection of the Lake Ohrid Ecosystem

The Declaration on the Protection of the Lake Ohrid Ecosystem

Final Resolution adopted at the 13th Society of Wetland Scientists
Europe Chapter Meeting

Ohrid, Republic of Macedonia, 1-3 May 2018



The 45 SWS Europe wetland conference participants in Ohrid, Macedonia, from over 18 countries and representing a wide range of expertise in wetland science, green technology, policy and management, acknowledge the timely moment in which we have gathered here; and, have come to agreement on the following issues:

Recognizing the unique magnificence of the region with the two connected lakes (Ohrid and Prespa), in terms of overall biodiversity, number of endemic species of many plant, animal and microbial groups, excellent water quality and relatively undisturbed mountainous landscapes in the transition between Central Europe, the Mediterranean and the Balkan peninsula;

Recognizing the unrivalled length of time of undisturbed development of Lakes Ohrid and Prespa, spanning at least 1.6 million years, which (1) has led to layered sediments with unique thickness enabling studies of climate and evolution in these systems for their entire lifetime, which is unique in the world and (2) has led to a large number of endemic species of plants, animals and microbes in these systems;

Recognizing the excellent current condition of Lake Ohrid with its low nutrient water quality and inflow of very healthy water from the surrounding mountains, which is, however, threatened by polluted inflows from increasing human populations of local residents and tourists and from agricultural use of former floodplains in the catchment of the Lake, which dates back only a few decades since these floodplains were drained and the course of the river Drim and other water courses were strongly modified, bringing polluted water into the Lake.

Recognizing the deteriorating status of the very last intact marsh on the shores of Lake Ohrid, Studenchishte Marsh. The wetland area remaining is only a minor part of the much larger wetland system which used to be here 50 years ago but which has suffered from (1) building development, (2) encroaching drainage and agricultural use, (3) dumping of building materials and other wastes; (4) creation of a plant nursery, (5) recent road construction along the Lake shore, compromising the ecological integrity between the Marsh and the Lake, which are vital for the long-term sustainability of the system;

Recognizing the critical importance and high value of the remaining part of Studenchishte Marsh in terms of *inter alia* (1) species diversity of plants and animals, with some communities (e.g. *Caricetum elatae*) being very rare in the region at large; (2) the presence of undisturbed peat layers with a thickness of several meters, which have developed over at least 4000 years and are particularly rare in Macedonia and (3) the very last fully functioning marsh ecosystem along the lake with a unique species composition and set of wetland ecosystem services such as water quality improvement, carbon storage, flood retention and some other functions (spawning of fish species from the Lake) that could be revitalized by reversing some of the recent modifications;

Recognizing that Lake Ohrid does have a protection status following its inscription as a UNESCO World

Heritage program, however, this has not been sufficient to halt the fluxes of polluted water into the Lake and does not provide any explicit protection of the valuable Studenchishte Marsh;

Recognizing that the Lake Ohrid system, including Studenchishte Marsh, is of key importance as the core resource on which economic development through sustainable tourism can be achieved, so that the protection and revitalization of this ecosystem must be the number one priority for regional development.

Therefore, call upon the Macedonian authorities from the national to the local level to substantially enhance the status of protection of Lake Ohrid, including Studenchishte Marsh and its catchment through existing legislation and instruments. This should also be achieved by designating the Lake system as a Wetland of International Importance under the Ramsar Convention. Macedonia is a Contracting Party of the Ramsar Convention and SWS has information that the designation would be welcomed by the Ramsar Secretariat in Gland, Switzerland, and that this designation can be based on the information that is currently available;

Therefore, in addition, call upon the urgent development and implementation of an action plan to protect Studenchishte Marsh and to revitalize it as much as possible. This should include *inter alia*: the local replacement of the current hard boundary with the Lake with a wooden walkway allowing direct water flows and ecological exchange between the Marsh and Lake; the cessation of dumping; and the encroachment of agricultural activities. The enlargement of the surface area of the marsh towards its original extent should be the long-term goal. Removal of solid wastes and rewetting of agricultural areas should be carried out with great care. Current land users should be compensated in the best possible way;

Therefore, call upon a substantial revision of the water management practices in the cities and rural villages around the Lake to prevent discharges of polluted water into the Lake; this should be part of a long-term plan including the use of wetland restoration and constructed wetlands to improve water quality and funding opportunities should be investigated from appropriate organizations, e.g. the EU and the World Bank;

Therefore, call upon the city government of Ohrid to develop multiple nature tourism attractions in the area to increase revenues by offering more diverse options and extending the tourist season; this could be achieved by developing locations such as Studenchishte Marsh as a nature park with facilities such as a visitor and environmental education center, a nature trail with boardwalks and wildlife watching buildings. Culturally important sites such as Biljanini Springs and the archeological monuments around it could also become part of this attraction and would give visitors an interesting experience where they can learn about the unique nature, culture and history of the region.

We thank the Governments of Macedonia and Ohrid, the St. Clement of Bitola University in Ohrid, the St. Cyril and Methodius University in Skopje and Ohrid SOS for hosting and contributing to the 13th SWS Europe meeting.

Signed on behalf of all participants in Ohrid, Macedonia on 3 May 2018 by Matthew Simpson, Keith Edwards, Matthew Cochran and Jos T. A. Verhoeven.



Annex 2: Law on World Heritage, Ohrid SOS Comments

Below is a translation of the comments submitted by Ohrid SOS to the Ministry of Culture of the Republic of Macedonia in reference to the proposed new Law on the Management of Cultural and Natural Heritage of the Ohrid Region.

Subject: Comments to the Draft Law on the Management of the Cultural and Natural Heritage of the Ohrid Region

To: Ministry of Culture of the Republic of Macedonia

By: Ohrid SOS Civic Initiative

Date: December 17, 2018

Contact: ohridsos@gmail.com

Tel. 078 272 664

Ohrid SOS Civic Initiative remarks on the procedure for adoption of the Law on the Ohrid Region. Although Ohrid SOS participated as a witness in the Supervisory Hearing on the Law on Management of the World Natural and Cultural Heritage of the Ohrid Region, it was not formally informed by the law proposer on the initiation of the consultation procedure.

Further, the draft law was published on the Ministry's website on November 27 with a commenting deadline set for December 17, which is not in accordance with the legally guaranteed 30-day-deadline, thus denying the right to the public to participate actively and informedly in the process.

Considering the above-mentioned, but not limited to it, we require that after the deadline expiration, the proposer organizes at least one public hearing on the Draft Law on the Ohrid Region.

In addition, we submit our comments, i.e. requests for amendments and additions to the law.

1. Article 1, paragraph 2, line 5 to be replaced by the following:

Enhancing the tourism offer by promoting the authentic cultural and natural heritage of the Ohrid region solely according to the principle of sustainability.

2. Article 5 provides for specific protection measures and management regime, but does not specify the scope of those measures and does not explicitly foresee the moratorium as a measure. Given the fact that the Ohrid region is at risk of being transferred to the List of World Heritage in Danger as a result of mismanagement, a moratorium should be one of the measures.

Article 5 should be expanded by requiring the Council for the Ohrid Region to monitor the implementation of the special protection measures and the management regime

referred to in paragraph 2 of the same article. Additionally, the Council is to be able to independently adopt a plan for emergency measures for the preservation of the natural and cultural values of the region if it is seen fit.

3. In Article 6

Paragraph 3 is to be amended and read:

Authenticity is the degree of presence / preservation of the original or primary shapes (form, conception, materials, components, systems, use and function, traditions and techniques, location and placement, as well as other internal and external factors) with which the outstanding universal value of cultural and natural heritage is confirmed in a credible way.

Paragraph 4 is to be amended and read:

Integrity is the overall coherence and completeness of the physical characteristics and processes through which the structure acquires its meaning, that is, the untouched nature of the natural heritage with the diversity of habitats and the species and cultural heritage and its properties.

Paragraphs 7 and 8 imprecisely define the natural heritage holders, i.e. it is not clear whether there is a hierarchy of right holders when there is an overlap between institutions, for example local government vs private or public institutions; local authority vs legal and natural persons; central vs local government.

4. In Article 8

Paragraph 2, a serious remark concerning **item 4**.

The involvement of the minister, that is, the Ministry of Transport and Communications (MTC), on any basis, entails a conflict of interest. MTC is a proposer and implementer of urban projects that are a major threat to the Ohrid region according to the World Heritage Committee and IUCN, as well as many domestic and international researchers of Lake Ohrid. An external collaborator from this sector can be hired as needed in a consulting capacity, but not as a member of the Council with the right to vote. The UNESCO status implies the guarantee of the authenticity and integrity of the natural and cultural heritage, which is not in the field of expertise of urban planners. This role is already satisfied/covered with the expert in the field of cultural heritage.

Paragraph 2 to specify the selection of external members, as follows:

- external associates - each institution to choose external associates according to the adopted Rulebook on the manner, procedure and criteria for selection of external associates and determining honoraria.

- for representatives from the civil sector - the Council to make the selection by way of open application and depending on the previous work in the field of protection of the natural and cultural heritage. Organizations should be informed electronically in a timely manner.

Paragraph 8 we propose "three times in a row" to be replaced by "three times".

Rationale: The existing formulation allows a member of the Council not to attend even 2/3 of the sessions, yet to retain this important function.

Paragraph 8 should regulate the initiation and the very procedure for dismissal of the president, deputies, and members of the Council for the Ohrid Region. The public should also be given the right to initiate the dismissal procedure.

5. Article 9 does not provide for the manner in which the decisions of the Council will be adopted.

6. Article 12, paragraph 3, to be amended with:

The Draft-Management Plan is published on the Ministry of Culture website and remains available until it is replaced with the final version of the Management Plan.

7. Article 14, paragraph 2. The annual report shall include objective, quantitative, and independently determined measures: data on the number of cases of discharge of wastewater into the lake; results from the monitoring of selected key species; results of measuring water quality in several representative locations of various depth, etc.

Article 14 to be amended:

Paragraph 4: and civil society organizations;

Paragraph 5: and it must be published on a website;

Paragraph 5: must put in place a public hearing;

Paragraph 5 should set a deadline for submitting comments;

Paragraph 8 the final version of the Annual Report to be published.

Explanation: in view of the fact that very often important planning documents, strategies and laws are left in the so-called draft form, although these are final versions.

8. Article 22, paragraph 2, to be amended with:

A) Prohibit the implementation of activities that do not comply with the Management Plan.

This clause is contained in Articles 20 and 21 relating to the inspection control in the area of natural and cultural heritage, but it is absent in the Scope of the Inspector for Construction and Urban Planning.

B) Order the removal of the object if it is an illegally built object.

9. Article 24 to be amended with:

Any legal entity and natural person without limitation, including financiers, investors, project developers, tour operators, construction companies and the responsible person in the legal entity whose action or lack thereof results in a significant impact on the natural and/or cultural heritage in the Ohrid region.

10. Article 24, paragraph 1 shall be replaced by:

A fine in the amount of at least 10,000 Euros in denar counter-value shall be imposed for a committed misdemeanor to the legal entity if:

Explanation: The maximum fine of 15,000 Euros included in the bill is a negligible amount for big companies, investors, etc. and does not constitute an appropriate penalty. That amount is essentially small compared to the extent of the damage that can potentially be inflicted especially on the natural heritage.

11. Article 25 to specify who will be in charge of the evaluation of damages done.

This is because some cases may require an expert, multi-sectoral assessment. The assessment report to be made publicly available and published on the website.

In Article 25, paragraph 7, five years to be replaced by ten years.

Explanation: Long-term records are indispensable for serious violators of the law.

12. With regard to Articles 24 and 25, the compensation claim for the damage incurred should be amended.

The legal entity or the natural person will reimburse the entire damage regardless of whether the actions for the damage occurred within or outside the boundaries of the UNESCO property. If there is no agreement between the parties concerned for the compensation of the damage incurred, it will be determined by an independent expert whose costs will be covered by the legal entity or the natural person who is charged with the damage.

13. Article 28, paragraph 2, to comply with recommendation 6 in accordance with Decision 41COM7B.34 of the World Heritage Committee's 2017 session and to read:

Until the Natural and Cultural Heritage Management Plan, OUV-based Urban and Coastal Master Plans and the Tourism Strategy have been adopted, effective protective juridical regulations have been approved and effective control mechanisms are established within the boundaries of the Ohrid

region from Article 7 of this Law, a temporary suspension of any coastal and urban transformation enters into force, as well as the implementation of plans, programs and projects that foresee coastal and/or urban land transformation or incorporation of illegally built facilities due to the possibility of conflict with the protection regime.

Additional Suggestions for Amending the Law on the Management of the Ohrid Region

1. The Ministry of Environment and Physical Planning, regardless of the Law on Nature Protection, within the UNESCO property, to have the right to designate a protected area for water or land surface of any category without valorization if there is sufficient data and documented evidence to verify the natural value of the protected area.

2. The legal entity in charge of discharging water from Ohrid Lake to the River Black Drim shall be responsible for providing, maintaining and working with appropriate equipment, at locations determined by the Council for the Ohrid region, in order to ensure water supply with a satisfactory level of oxygen that will disenable death of any species endangered by its activities.

3. (1) In addition to the legislation, the Strategic Environmental Assessments (SEAs) that apply to any part of the UNESCO property must contain at least the following: design of the entire project; plans and foreseen capacity; a full list of species that would be affected by the project along with their status of protection and endangerment at national, European and international levels according to the IUCN [Red List]; clearly defined alternatives; estimates of cumulative impacts in combination with other existing and/or planned spatial or urban projects; quantitative estimation of ecosystem services in no-change, alternative, and project implementation scenarios; evaluation of the existing status of the wastewater system in the Ohrid Region and the connection with the proposed project; detailed data on the monetary justification of the economic arguments for the performance of the project; clearly listed sources/references in support of claims about the environmental impact of the project.

(2) The Ohrid Region Council shall be responsible for giving an opinion that is binding on the SEA report. The Council has the right to disqualify an SEA preparation company for the Ohrid region for a period of 10 years from the adoption of the decision on any SEA that has essential shortcomings and omissions regarding the preservation of the Outstanding Universal Value (OUV) of the natural and/or cultural heritage.

4. In order to assess the effectiveness of the Ohrid Region Management Plan, the Hydrobiological Institute (HBI) and Public Institution National Park Galichica (PINPG) will identify key species according to their:

A) Representativeness of the status of the natural heritage of the Ohrid region;

B) Importance to natural heritage ecosystems;

C) Monitoring availability.

Populations of these species will be quantified and monitored by HBI and PINPG at least once a year, and the report will be published together with the Annual Report of the Council for the Ohrid Region. The selection of species will be revised every 10 years.

5. The draft law does not include provisions for a moratorium in any future cases or indicate which institution will have the authority to declare a moratorium.

6. A moratorium shall be proclaimed for some or all types of projects related to increase in the existing size of or construction of new buildings on a large scale within the boundaries of the UNESCO site and enter into force immediately if:

- a) unfiltered sewage water (determined by quantity and/or other parameters, e.g. number of days in the year etc.)³⁴ is drained directly into Lake Ohrid;
- b) construction activities are undertaken within 50 meters of the highest water level from the shores of the lake or in areas of strict protection or active management zones contrary to existing regulations (laws and by-laws);
- c) there is a significant reduction in the populations of key species within the boundaries of the property or species that are categorized as endangered according to the national, European or international IUCN Red Lists in cases whereby it [population reduction] is related to urban activities and/or urban strategies;
- d) the monitoring of key species (outlined in point 4) is discontinued;
- e) issued building permits exceed an area of ____ hectares in a given calendar year or ____ hectares³⁵ in the last 5 (five) years;
- f) total urbanization has reached or exceeded ____%³⁶ of the coastline;
- g) significant gaps in the implementation of the Ohrid Region Management Plan are identified;
- h) it has been established that execution of activities has brought natural and cultural heritage in the Ohrid region under threat.

³⁴ Parameters are determined by expert evaluation.

³⁵ Ibid.

³⁶ According to UNESCO recommendations.

The moratorium will be in force until all necessary steps are taken to overcome the reasons for these phenomena, for which the Council has the role of appraiser and the final decision.

7. Due to the exceptional importance of the issues related to the only World Heritage Site in Macedonia and the necessity of informing the public, we propose the law to oblige the Ministry of Culture to put into operation a UNESCO-dedicated website. It should contain all relevant information and documents available for downloading in Macedonian and English, and be up to date. Also, on-line registration should be enabled for real-time information to be received [by interested parties].



Annex 3: Ramsar Letter to Ministry of Environment and Physical Planning



CONVENTION ON WETLANDS
CONVENTION SUR LES ZONES HUMIDES
CONVENCIÓN SOBRE LOS HUMEDALES
(Ramsar, Iran, 1971)

Mr Vlatko TRPEVSKI
Director Nature Department
Ministry of Environment and Physical Planning
Bul. Goce Delcev 18
1000 SKOPJE
Macedonia

Gland, 1 July 2018

Dear Director Trpevski

Ramsar Site lake Ohrid and Studenchishte marshes

We have been informed about the outcomes of the successful international conference of world-renowned wetland scientists who gathered in the town of Ohrid on 1-3 May 2018. Lake Ohrid and its shoreline marshes, and notably Studenchishte, the last remaining sizeable marsh on the Macedonian side, form a unique ecosystem of outstanding value to human societies. The lake and its marshes provide sustainable services to the urban and rural communities along the lake shores, based on the supply of good quality water and by supporting a rich biodiversity upon which fisheries and local agriculture depend. Lake Ohrid and its marshes constitute a unique scenery for a stunning natural landscape and its cultural heritage which constitute a definite attraction for national and international visitors and tourists. This natural capital will provide benefits, as long as it can be preserved and used in a wise way.

We are happy to learn that your Government is taking measures to prevent the water quality from deterioration through pollutant inflows and to provide the remaining Studenchishte marsh with increased protection from drainage, pollution and land degradation. We are confident that the available knowledge, and the most recent studies by Macedonian and international experts provide sufficient information, data and understanding to allow you to nominate "Lake Ohrid and Studenchishte marsh" for listing as a "Wetland of International Importance" (Ramsar Site) under the Convention on Wetlands.

We remain at your disposal to provide guidance and to help you with the submission of the information needed for the listing of the area. Please do not hesitate to contact us, should you have specific concerns or questions.

Sincerely yours

Dr Tobias Salathé
Senior Adviser, Europe

cc: Alexandar Nastov, Ramsar National Focal Point in Macedonia
Prof. Jos Verhoeven, Society of Wetland Scientists

Ramsar Convention Secretariat – 28 Mauverney – CH-1196 Gland – Switzerland-Suisse
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Annex 4: SEA Gorica Tourism Complex, Ohrid SOS Comments

August 10, 2018

**To: Municipality of Ohrid
Sector for Urbanization**

Sector for Environmental Protection

Applicant: Civic Initiative Ohrid SOS

Subject: Comments on the Draft Strategic Impact Assessment Report for the environment for UPVNM for part of TC Gorica, planning area 2 in CA Ohrid 4, Municipality of Ohrid

In accordance with the Aarhus Convention and the Law on Environment, we politely request a response to the here-submitted comments to the abovementioned Strategic Impact Assessment Report within the legally mandated deadline at the following e-mail address: ohridsos@gmail.com.

Respectfully yours,
Activists of the Ohrid SOS Civic Initiative

I. GENERAL ASSESSMENT

1. The SEA Report for TC Gorica, Planning Area 2 in OH Ohrid 4, reads more like a teaching aid than an assessment of environmental impacts. Namely, the subject of evaluation is treated generally, without specific data on the projects whose impact should be assessed, nor specific data on natural characteristics, species, and habitats et cetera. It does not carry out an impact assessment, but only gives unspecific directions for possible impacts of an unknown project based on a so-called existing condition that has been defined according to either outdated data or none at all.

The scope for the SEA as indicated in point 1.6 does not correspond with the contents of this document at all, i.e. the report does not address negative impacts; and treats them minimally from the point of view of biological diversity, even then only stating it for the wider region, and not for the area covered by the plan for TC Gorica.

2. This document does not act objectively from the aspect of the impacts of projects within TC Gorica, but actively lobbies for the benefit of the business sector in the direction of greater urbanization to the extent that it considers non-urbanization of the area harmful and nature inadequate because, if the space is not urbanized, "the environment would remain only under the influence of natural factors".

3. The concept of sustainability is not properly understood, and the report does not demonstrate reliably how the plan for TC Gorica can contribute to the sustainable development of the region.

4. The SEA uses outdated statistical data for the description of the status quo in the region and the Municipality of Ohrid as follows: data on migration movements (2002); and air pollution (2006 and 2007). There is no data on water quality; quantities of solid waste; or the condition of the Bukovo landfill. Information on the current situation of the wastewater treatment plant and sewerage in general is completely absent. The dates for data on climate and microclimate conditions are not given. Several key threats to the region have been missed, such as eutrophication and uncontrolled urbanization et cetera. There is a lack of fundamental data to assess the conclusions of this SEA Report in order for them to be considered reliable from any aspect.

5. This report does not take into account the cumulative environmental impacts of the project envisaged along with existing urbanized areas in the Ohrid basin, as well as with other planned urbanization activities, such as at North Gorica; the plan for Plot 3 in KO Ohrid 4, individual hotels in Konjsko; or housing facilities for which building permits have already been issued et cetera.

6. This report does not consider individual and cumulative impacts to the Outstanding Universal Value of the landscape according to the criteria of UNESCO.

7. The text has largely been copied from previous Enviro Resources SEA reports, which is testament to its consulting firm's lack of seriousness when drafting a document of vital importance for the approval of urban activities.

In general, we consider this report to be extremely unprofessional, inadequate, and unsuitable for the SEA standard required by the Ohrid Region with its exceptional biodiversity and endemism. As such, we evaluate that it can not be accepted as an SEA Report.

II. NOTES and QUESTIONS

PROJECT TC GORICA

The SEA for Plot 2 in TC Gorica in OH Ohrid 4 lacks basic data for the planned project: The quantity of land to be used is not known. Our estimate, according to the single map in the document, is that it incorporates about 45 hectares, which is now a grassland with private and state-owned trees. It is not known how much of this area will fall to construction plots; what will be the size and the capacity of the accommodation facilities (hotels, weekend houses etc.); how many visitors are expected; or what the size of residential buildings will be et cetera.

We require all maps, architectural and other plans to be provided in electronic format, alongside the abovementioned information.

STUDENCHISHTE MARSH

Although Studenchishte Marsh is mentioned in two places in the report, its boundaries are not defined, nor is it clearly explained why the wetland is included.

Moreover, the source used by the SEA for the number of species in Studenchishte Marsh was not specified, and it is not in accordance with the *Integrated Study on the State of the Remains of Studenchishte Marsh* (Spirovska et al., 2012), especially for reptiles. Another disagreement with the integrated study is the protection category: Spirovska et al recommend protecting Studenchishte as a Monument of Nature (IUCN, Category III), while in the SEA it is listed as a Nature Reserve (IUCN, Category IV). Ohrid SOS submitted a request in 2017 for proclaiming Studenchishte Marsh as a Monument of Nature that, in March 2018, was adopted by the Government of the Republic of Macedonia, which obliged the competent institutions to start the procedure.

From the information in the SEA for TC Gorica, it can be concluded that the plan for this area prevents the designation of a buffer zone around Studenchishte Marsh, which should be protected as a Monument of Nature, although it is known that the construction of a tourist complex will increase anthropogenic pressure. The SEA provides no analysis of how the implementation of TC Gorica will affect the wetland. It also does not foresee any measures to mitigate the impact, even though it can also be concluded with high probability that urbanization in its immediate vicinity will have harmful effects.

1. Why is Studenchishte Marsh mentioned in the SEA?
2. Why has a buffer zone for a protected Studenchishte Marsh area not been foreseen?
3. What will be the impact of construction at TC Gorica on Studenchishte Marsh?

4. Explain the disagreement between the SEA and the Integrated Study by Spiroska et al in relation to the category of protection.

PORT

The SEA mentions a port for which, again, no data are given on the location, size, capacity, type of vessels, or whether these vessels will be additional to the existing number in the lake et cetera, although it is mentioned that the harbor may increase in size in the future. During the public hearing, port construction was denied, which raises questions about the planned project itself and the validity of the conclusions in the report.

1. It is not foreseen how modification of the littoral zone from port construction may empower non-native and cosmopolitan species.
2. The impact of vessels on the fish population is not considered at all ([Kostoski et al., 2010](#), [IUCN 2018](#)).
3. The damage that the coast and the littoral zone will suffer as a consequence of permanent artificial waves created by long-term vessels has also been totally overlooked.

Consequently, the conclusion of the SEA that underwater concrete will become a habitat for species does not specify what kind of species and how that will affect the ecological balance in this part of the lake.

1. In which exact location or possible locations is the port planned?
2. How many vessels will be anchored there; what type of boats; how big will they be; will they increase the existing number of vessels in the lake?
3. Given that the port is set to expand, what is the maximum capacity that it might reach?
4. Why does the SEA neither take into account any of the negative effects of boats on the fish population nor contain measures to reduce them when extensive literature exists on the topic?
5. How will port construction impact the composition of species and their populations?

FLORA AND FAUNA

One of the aims of the SEA is to provide a solid basis for the conservation of flora and fauna populations. However, this report does not provide quantitative data on the natural values of Gorica habitats or a list of species for the location, even though biological diversity of the Ohrid region is known to be of global importance.

Several species from the Republic of Macedonia's List of Strictly Protected Species and the List of Protected Species have been recorded at Gorica. The Lists of Birds of the National Park Galichica (Vasic, 2009) finds at least nine protected taxa from this area including *Tachybaptus ruficollis*, *Podiceps cristatus*, *Cygnus olor*, *Netta Ruffina*, *Aythya ferina*, *Aythya fuligula*, *Fulica atra*, *Larus ridibundus*, and *Garrulus glandarius*. At the same time, in the [Fauna of Butterflies \(Papilionoidea\) in](#)

[the National Park of Galichica, Republic of Macedonia](#), Krpac et al place at least two strictly protected taxa at Gorica: *Lycaena dispar* and *Parnassius apollo*.

In order to obtain credible SEA conclusions, an assessment of mammals (especially bats), amphibians, reptiles, flora and insects (especially odonata and coleoptera) that exist in Gorica is necessary. What is more, the failure to provide an assessment based on species disenables any monitoring, reduction or neutralization of harmful effects on the environment.

In parallel, it is established that disturbances in the coastal zone and pressure from eutrophication has potentially negative consequences for lake species. This can occur in places remote from Gorica, such as due to wastewater overflow during torrential rains or from the increased traffic to and from the planned port. The proximity of the project to Studenchishte Marsh is similarly worrying regarding the potential noise, light, waste, urban convergence and other harassment especially during species' breeding periods. The SEA demonstrates a low level of awareness of potential hazards to flora and fauna and consequently does not present advice to mitigate them.

1. Why does the SEA not present a list of species that are located in the Gorica area where urbanization is predicted to take place even though data for protected flora and fauna there exists?
2. Having this in mind, can the conclusions of the SEA be considered complete and correct?
3. Why is no possible impact on flora and fauna of the plan for TC Gorica elaborated beyond the boundaries of the planning area, such as at Lake Ohrid and Studenchishte Marsh?

EUTROPHICATION

[Matzinger et al](#)(2007) elaborate the process of eutrophication that occurs in the Ohrid region. They warn that in the years to come, phosphorus intake to the lake should be decreased by 50% in order to avoid serious ecosystem disorder. The reason for the estimation of 50% is due to the interaction of nutrients and the temperature rises as a result of climate change. Since then, various sources indicate this worrying situation, including the [UNESCO Reactive Monitoring Mission report](#) from 2017.

Despite the potentially catastrophic environmental and economic consequences of Lake Ohrid eutrophication, some of which would be irreparable, the SEA completely omits the issue, which is especially worrying given that the predicted urban project for Gorica has the potential to increase the intake of nutrients in the lake as well because of

1. land use change;
2. increased people volume;
3. the catastrophic condition of the wastewater treatment system; and
4. damage to Studenchishte Marsh.

Numerous literature warns that a large degree of eutrophication will have significant negative consequences, including for the tourism industry, which is directly dependent on the cleanliness and clearness of the lake water.

1. Why has the risk of eutrophication been completely neglected in this SEA, when it is known to be one of the biggest dangers for Lake Ohrid, its ecosystem and people, and for which there is an abundance of expert literature?
2. How can the SEA conclude that urbanization of Gorica will only bring economic profit, seeing as eutrophication has not been analyzed as a factor?
3. Why do the climate change scenarios in the report omit the pressure from eutrophication even though the [*Third National Plan for Climate Change: Tourism and Climate Change*](#) (Burns & MoEPP, 2014) recognizes it as a risk to lake tourism?
4. Why is the risk of eutrophication not treated as a threat to human health?
5. Given the increased number of visitors expected, the state of wastewater system and its [lack of] sustainability, do you expect eutrophication pressure to increase or decrease after the realization of TC Gorica?
6. Do you not consider that the no-change and alternative scenarios should be adapted by including a) no change in pressure from eutrophication; and b) reorientation of tourism priorities in order to reduce this pressure through smarter strategies to attract visitors?

REDUCTION OF THE IMPACT ON BIOLOGICAL DIVERSITY

Regarding mitigation, the SEA does not offer many measures. Positive is that it envisages compensation with native species for tree losses in the green coastal belt. However, the report does not specify the methodology under which the loss of habitats during construction will be calculated and the habitat itself compensated under the principles of no net loss or net gain. Accordingly, the report does not offer reliable and accurate mechanisms by which natural resources can remain the same or improve should this project be realized.

1. Under what methodology do you think compensation should be made to biodiversity in Gorica?
2. Why has the report failed to compile or propose a compilation of core data to demonstrate that no net loss is a possible outcome; or to offer any related calculations?
3. Why does the SEA not consider the concept of additionality, according to which damage to the environment should be offset by advancement or expansion of habitats in other locations?

WASTEWATER AND TREATMENT SYSTEM

As stated in the last [*IUCN Report for the Ohrid region \(2017\)*](#), "The property struggles with effective waste management, including solid waste and wastewater. The wastewater treatment plant has recently been renovated, but major deficiencies in the system due to the plant's low carrying capacity cause leakages of wastewater directly into the lake." The leaks are also discussed in a [report by the Japan International Cooperation Agency](#) (JICA), which states that they are most likely to occur

during rainfall or at least 100 days per year. Another important source is the [KfW bank's evaluation](#). The bank financed partial reconstruction of Ohrid's wastewater system and notes that "untreated wastewater is regularly discharged into the lake and the river during rainy weather." The whole project is assessed by the financier as "weak", i.e. the bank evaluates it as 4 (on a scale of 6, where 1 is the highest rating), which falls into the category of an unsuccessful project. The sustainability of the project is also evaluated with grade 4 (on a scale of 4), i.e. "unsatisfactory". The KfW report estimates that ProAqua [the wastewater company for the Ohrid region] can hardly function, either financially or technically, that its activities are ineffective, and that infrastructure is not maintained. In 2011, when the report was made, the situation with wastewater management was expected to deteriorate.

Thus, it is not surprising that ProAqua's upper management recently released a troubling statement that the main treatment plant in Vranishta had not been functional for months, which is to say almost a year to the present time of writing.

In addition, we also know that the wastewater system covers only part of the coastal area, i.e. the Lake Ohrid watershed (from Struga to Pestani). Individual purification stations in a few coastal areas alone are not an appropriate replacement for disconnection with the sewerage system; are not maintained; and are in a disastrous condition.

It's amazing that the drafters of this SEA report are not fully aware of these publicly available sources of information; nor with the statements of key people; and present only historical data about the sewerage system. In that way, they completely overlook analysis of one of the biggest threats to Ohrid Lake. If this omission is not deliberate, the competence of Enviro Resources to produce high category reports such as SEAs is in doubt.

1. In the light of the abovementioned, how could these important documents be ignored when assessing the current situation?
2. According to the indicated documents and the statement by ProAqua management, how can the SEA conclude, as on p. 73, that connection of TC Gorica to the wastewater system is a guarantee that it will not affect the quality of the waters?
3. Understanding the current alarming condition of the sewerage system, how can a large-scale urban development that will significantly contribute to an increase in pressure on the wastewater system be justified? Do not you think that, under such conditions, in terms of environmental impact, it is irresponsible to approve an urban project of 45 hectares?
4. On page 67, it is mentioned that the sanitary wastewater from the vessels in the port will be pumped into the wastewater system. Will this not additionally burden the sewerage system with a larger volume of wastewater and contribute to frequent spillages? Where has such a system been applied beforehand in highly sensitive environments such as Lake Ohrid?

INDICATORS

Envisaged indicators do not provide data on the key species according to which environmental conditions would be followed. No species were identified for monitoring as a necessary measure

despite their obvious importance for analysis of the project. Although water and environmental quality indicators have been provided, there are no precise locations where the monitoring would be carried out. Therefore, we consider that the danger of obtaining inaccurate data and neglecting warning signs is very high.

LEGALIZATION, PLANS FOR MANAGEMENT AND MORATORIUM

The SEA report repeatedly reiterates that the planned projects for Gorica will be carried out in accordance with numerous Macedonian laws, strategies and plans, stating that they will provide a framework of protection that will prevent degradation of natural heritage and biodiversity. However, we note that this report does not evaluate the said plans and regulations, which is its main function, but only specifies them.

In fact, the conclusion of this report is in conflict with the findings of higher quality surveys from more qualified institutions such as the UNESCO Reactive Monitoring Mission, according to which management plans, legal regulations and control mechanisms in the Republic of Macedonia are insufficiently functional. Further, the IUCN in its own report for the World Natural and Cultural Heritage for the Ohrid Region, the World Heritage Outlook Report 2017, concludes that, although a legal framework exists, "enforcement seems to be weak". The report states that management bodies lack capacity and that implementation of regulations is "relatively poor". Taking for example the plans for beach modifications and the existing development policy for the Lake Ohrid region, the IUCN estimates that there is "a lack of understanding of the meaning of World Heritage protection". At the same time, the Reactive Monitoring Mission report states that the law prohibiting construction of permanent buildings within 50 m. of the lake's highest water level is routinely violated.

As a consequence of these and other problems, Recommendations 6 and 7 of the UNESCO Reactive Monitoring Mission report sought finalization of all relevant planning documents, such as the Ohrid Region Management Plan, which would be accompanied by an environmental impact assessment (by definition including a public hearing) and the declaration of a "moratorium on any coastal and urban transformation within the World Heritage property, at least until all relevant planning documents (Management Plan, OUV-based Urban/Coastal Master Plans etc.) have been prepared and adopted, effective protective juridical regulations have been approved, and effective control mechanisms are established." This was also confirmed in Decision 41 COM 7B.34 of the World Heritage Committee in Krakow in 2017, which requires "the State Party to fully implement all the recommendations of the 2017 mission". To date, neither the management plan nor the moratorium is in force, and no measures have been taken to improve the legal framework.

1. From the aspect of nature and the environment, how can it be considered that the plan for Gorica has firm basis from the perspective of the protection of nature and the environment when it has been adopted before the finalization of the management plan (together with SEA) in accordance with Recommendation 7 of the Reactive Monitoring Mission (ICOMOS/IUCN/World Heritage Center)?

2. Why does the SEA Report fail to assess the economic, environmental, sociological and environmental risks in the actual context of the dysfunctional legal framework for the region?
3. What is the opinion of the document authors on the compatibility of the legislation governing the protection of nature and the environment on one side and legislation regulating other aspects? Has that been evaluated in respect to the Gorica plan and how?
4. What consultation has been made between the Municipality of Ohrid on one side and UNESCO and the IUCN on the other with regard to the creation of the TC Gorica plan in order not to make the same mistakes that led the latter institutions to the conclusion that beach projects can compromise the state of World Heritage conservation ³⁷ (UNESCO/ICOMOS /IUCN, 2017)?
5. To what extent do you consider the laws that regulate protection of the Ohrid region to be effective? How can the same laws that failed to protect the region from status as a candidate for the List of World Heritage in Danger, suddenly now prevent nature degradation in the case of the TC Gorica project?

RISKS TO UNESCO STATUS

Further urbanization of the coastline and the continuation of urban projects against the recommendations of the UNESCO World Heritage Committee's Decision 41 COM 7B.34, which includes a moratorium on coastal and urban transformations within the World Heritage Site, risks inscription of the Ohrid region on the World List of World Heritage in Danger, one step before loss of UNESCO status.

1. Why are the risks to the Ohrid region's UNESCO status not analyzed by the SEA?
2. Please explain how both the new plan for urbanization in Gorica and continued urbanization in general correspond with the OUV of the Ohrid region when they are in direct contradiction with World Heritage Committee requests?

SUSTAINABILITY

Throughout the report, the SEA constantly reiterates that the project for TC Gorica is in line with the principles of sustainability. Sustainability is bi-directional: on the one hand, it arises from rational exploitation of natural resources to ensure that they will not disappear in the long run; while, on the other, it implies supplying the market with the products/services it requires in a given period of time, thereby creating a sustainable business in the long run. The information provided in the Gorica SEA does not fulfill either criterion.

Apart from the use of solar energy, a passing mention of the green belt and recycling (requiring improvement from the Municipality of Ohrid, which is not assured), the SEA does not attempt to demonstrate how the Gorica plan will guarantee that natural resources in the Ohrid region will not

³⁷"Considering that a significant number of beach development projects are planned that could affect the state of conservation of the Ohrid Lake and its surroundings, resulting in increased pressure on property, the Mission recommends that the State Party provide further information on the extent of beach development to the World Heritage Center. "

be exhausted or how it differs from the existing model of tourism development that has already been recognized as a serious threat to biodiversity and the region's World Heritage status. This project, by promoting further urbanization, will affect the increase of known threats to the region, such as urbanization, transformation of land and water, eutrophication, overfishing, environmental disruption and water pollution, and thus promotes the trend of bad practices.

Initiating additional urbanization, which this report is de facto propagating, in such a critical regional situation, when the UNESCO status has yet to be evaluated; when the wastewater system is incomplete and dysfunctional; and the problem with the regional landfill is unresolved, is in contradiction with the principles of sustainable development.

Therefore, we believe that the SEA should present detailed, specific and quantitative explanations of how the mistakes of the past will be overcome by the TC Gorica project. The SEA does not explain how market research has been carried out to confirm that it offers sustainable products/services sought by consumers. In this context, at least two approaches can be applied:

- identification of low-impact consumer segments; creation of an appropriate tourism offer; and proper marketing towards the defined target groups; or
- determining which sustainable products/services (IUCN, 2018) would be attractive to existing visitor segments and creating them accordingly.

As long as the SEA does not elaborate the methodology for selecting the business model that is being promoted through this project, its conclusions that the plans for Gorica are sustainable are completely unfounded.

1. What market research was done to define a sustainable tourist offer in Gorica?
2. Which consumer segments will be targeted by this project and to what extent?
3. If such a survey has not been done, do you consider that there is a great danger of project mis-implementation negatively affecting the very image of sustainable development as a promoted concept?
4. Can you identify individual criteria by which the TC Gorica plan is assessed as consistent with the principles of sustainable development? Who made the analysis and where can it be found?
5. In the *Impact on Landscape* section, the SEA states that "one of the most important ways of controlling the spatial development of tourism is by determining the carrier capacity³⁸ of the tourism area". Has this been done for the Ohrid region? What is the result? And how does TC Gorica fit into it? If it has not been completed, how has a positive decision been given for the realization of this plan if it is not known whether it exceeds the carrying capacity limit?
6. The SEA briefly mentions the potential for fishing tourism. When the pressure on Lake Ohrid's endemic species is known, especially Ohrid trout, belvica and carp, why has an assessment of the sustainability of this type of activity not been made?

³⁸The term *limits of acceptable change*, is increasingly being used, which is at the core of the concept of *carrying capacity*; analyses should be made on that line. <http://www.oneplanetnetwork.org/sites/default/files/iucn.pdf>

7. Do you think it is irresponsible to promote fishing tourism when, according to expert assessment, the Ohrid trout is on the verge of extinction, and measures to prevent this process have not yet been undertaken?

BUILDING THE CAPACITIES OF THE LOCAL POPULATION

[The IUCN's *Tourism and Visitor Management and Protected Areas*](#) from 2018 presents guidelines for sustainable management of protected zones, whereby capacity building for the local population has been recognized as a key component for harmonization between tourism and the objectives of nature protection.

1. Why has IUCN literature not been consulted at all in the preparation of the SEA, especially considering that the project envisaged is in the UNESCO area, when the IUCN is its advisory body and the leading authority for protected area management?
2. How will the jobs created by this project strengthen the capacities of the local population for the purpose of creating sustainable tourism products? What help will be offered to local residents?

SOCIO-ECONOMIC BENEFITS

Although the SEA provides many socio-economic benefits from the TC Gorica project, none of them has been quantified through monetary projections. The conclusions are not supported by references, and for those that are presented, strong evidence exists to claim the opposite.

For example, the claim that the emigration from the Ohrid region will be halted as a result of the urban development of Gorica is not substantiated by any analysis of emigration factors or the mechanisms through which the urbanization of the coastline will solve them. Certainly, different drivers can be assumed for the current emigration trend such as low wages, educational aspirations, connection with larger conurbations, lack of employment opportunities according to the level of education, high unemployment, social distrust, politicization, nepotism, corruption and substandard social and health systems. The SEA makes no clear distinction as to which combination of factors is the cause of the rapid outflow from the Ohrid region, but suggests that the construction of a new tourism complex will motivate the locals to stay in the region. On the other hand, paradoxical to the viewpoint in the SEA, the marked trend of resettlement coincides with the rapid increase in tourism numbers for Macedonia, especially in the Municipality of Ohrid during the last 10 years, indicating both that the connection between the two cannot be easily concluded and that the reasons for emigration and its correlation with tourism need to be determined by an appropriate research methodology.

At the same time, the SEA estimates that the urbanization of Gorica will affect the birth rate. However, World Bank Worldwide data on the number of per-capita visitors and the CIA's natural growth figures reveal that some of the highest-visitor-per-capita countries are also those with the

lowest fertility rates. In other words, the conclusions presented in the SEA give the impression that they are not grounded in proper research.

Furthermore, the SEA predicts that this project will affect the education of new professional staff without explaining how this will happen, even though it is well-known that the tourism industry is labor intensive and jobs for the most part require low vocational training. The ecosystems of the Ohrid region already offer a huge, untapped potential for research, including in the modern fields of biomedicine, evolution, climatology and biomimicry, which are innovation driven and where large investments have been made. Thus, it is unclear how increasing the pressure on these ecosystems would increase educational potential at expert level.

Even more concerning is that, as one of the advantages of the Gorica project, the SEA lists attractiveness to investors. The report does not provide data on the investor(s), although, from the public hearing, the impression was given that interested parties do exist. The assessment of the environmental impact of the project cannot be considered reliable as long as the developer and the management firm is unknown. The report lacks a categorization of investors, and neither the method by which they will be attracted nor the criteria by which they will be selected is presented. This is very worrisome having in mind the previous potential investors to the Ohrid region, to which belongs the now already discredited Subrata Roy, whose vision of Ljubanista (which, by the way, was approved by the drafters of this report [Enviro Resources] for Gorica) would have unequivocally caused catastrophic environmental damage if realized. Therefore, it is necessary to fulfill checks and to determine whether and to what extent interested companies have previous management experience for projects in areas of similar environmental importance; what ecological practices they apply; and their performance in the field of sustainable tourism et cetera.

Moreover, further coastal urbanization can deter investors who want to create tourism products in the domain of the natural and adventure tourism segments, making the region less attractive to entrepreneurs who would initiate sustainable development in the true sense of the word.

Objectivity and accountability is scarce among the economic advantages listed by the SEA:

- Serious potential [costs such as those related to eutrophication](#) are not foreseen.
- Ecosystem services are not included at all in the economic analysis.
- Nature protection measures are not budgeted.
- The benefits for the local population from the taxation on profit associated with the Gorica project are without any forecasts.
- How the profits of the project's investors will reach the local community on a sufficiently large scale to make a significant difference to their lives is not explained.
- An overview of the types of jobs and the level of pay that the project will provide is not presented.

These are key issues, especially since the business plans for the previous major projects for Ohrid (the ski center and tourism development zones) were based on low-cost labor and land, and preferential taxation to attract foreign investment.

For the economic claims presented in the SEA to be taken seriously, they should be a) quantified; b) analyzed in the context of ecosystem services; and c) involve costs such as those related to eutrophication and nature protection.

1. Why are none of the economic claims in the SEA referenced?
2. How are economic conclusions reached without any kind of calculation or quantitative indicators?
3. Which segment of investors are being or will be targeted with the Gorica plan? What benefits are being used to attract investors (exemption from taxes and other duties, cheap labor, favorable land prices etc.)?
4. At which price will state and private land be sold?
5. What [promotional] materials are being used to attract investors and where can they be found?
6. What is the income prediction from the operation of TC Gorica? What percentage is expected to remain with the investor and how much in the region/state?
7. In the *No-Change Scenario* section, it is said that project non-realization will result in reduced budget revenues. How much tax is this project expected to bring into the Republic of Macedonia's budget and what guarantees exist for it?
8. How many visitors are expected in TC Gorica and which consumer demographics are targeted?
9. How many jobs are expected to open with this project? From which categories will they come and what will be the salary for the employees of each category?
10. Why is any calculation of ecosystem services omitted despite their clear economic relevance?

NO-CHANGE SCENARIO

The SEA report incorrectly establishes a causal link between the plan for TC Gorica and threats to the biodiversity of the Ohrid region. Building on this faulty thesis, it both concludes many benefits from the realization of this urban project that lack evidence backed by research and completely misrepresents the situation without implementation.

Namely, the report implies that failure to implement the TC Gorica project will lead to intense pollution; illegal landfills; illegal construction (indicated in project alternatives, but referring to no-change); and environmental degradation et cetera. Furthermore, it suggests that the development of the tourism industry is a solution to these problems because maintaining a healthy ecological environment is of interest to visitors, that is, to tourism.

Unfortunately, the report does not indicate details of the co-operation through which tourism will take responsibility for the protection of the environment and nature, while past experience suggests that exactly the opposite will occur. The development of tourism in the Ohrid region has contributed to a rapid increase in anthropogenic pressure. Unlike the link [as put forward in the SEA] between an unconstrained natural landscapes and pollution, there is numerous evidence that confirm the causality of the latter [tourism with anthropogenic pressure].

In a thorough review of threats to the Ohrid region, which is presented in [Kostoski et al \(2010\)](#), tourism and recreational zones are recognized as a factor with the highest level of impact. The latest [IUCN report from 2017](#) talks about how the transformation of the coastline, both illegal and legal, leads to greater anthropogenic pressure on the lake that runs parallel with an increased amount of wastewater and solid waste. Further, it points out that tourism "has already a visible tendency to overstretch the thresholds of sustainability". In other words, these findings, which are based on thorough, modern research by experts in the field of limnology and nature protection, indicate a direct disagreement with the theses presented in the SEA that the tourist expansion along the coast will contribute to an improvement in the environmental condition of the Ohrid region.

Therefore, understanding that the numerous pressures on the natural heritage and biodiversity of the Ohrid region arise from the tourism industry and not from undeveloped land in Gorica, replacing the former with the latter will very likely worsen the environmental situation. Given the extensive data for the region, there is no reason to believe that the proposed plan for Gorica will mean improving the system of environmental protection. A much more realistic conclusion is that problems such as illegal construction, pollution and waste dumping will increase with the uptick in people volume and displace to elsewhere in the region, probably also in places that contain natural values of global significance. Threats to the natural wealth indicated in the SEA are not actually due to the lack of an urbanized area, but to an ineffective legal system, and non-implementation of laws and strategies etc. which has been explained at length above.

As these threats rise upon an increasing number of habitats, the endangering eutrophication pressure and the destabilization of the lake ecosystem, [so will increase the costs](#) for the Republic of Macedonia, which again casts doubt on the thesis presented in the SEA that, only with urbanization will Gorica have economic value for the region. On the contrary, provoking threats at an even higher level can fuel the economic risk, which will require an enormous amount of public finances to overcome.

1. Why does the SEA fail to analyze the ecological impact of tourism in the Ohrid region to this day?
2. On which evidence do the SEA conclusions differ radically from those of the IUCN?
3. On what basis are the pollution, wastewater and construction of landfills connected with Gorica?
4. How large is the risk, with the urbanization of Gorica, of increasing anthropogenic pressure and displacing illegal activities?

ALTERNATIVES

It seems that the developer of this SEA Report has not understood the requirement for alternatives to the planned solution, instead continuing with and misrepresenting the no-change scenario.

In fact, there are many alternatives to the proposal for TC Gorica:

1. One would be to reorient the tourism strategy beyond coastal summer activities, and more towards cultural heritage, which has a greater potential to generate revenue year-round and creates less pressure on the already sensitive nature.
2. Another alternative would be to increase the natural qualities of Gorica as a buffer zone for Studenchishte Marsh as a place for rehabilitation of species populations, and, based on such intensified natural resources, create an appropriate tourism offer.
3. Focus on the regional economy by investing or attracting investments into research of world-unique species and ecosystems with a view to developing bio-inspired products (derived from biomimics, biomedicine, environmental studies throughout [natural] history and even applied arts et cetera). As it is, all the research of potentially high value done in the Ohrid region goes outside of Macedonia.
4. Focus on the development of an offer that will not be understood exclusively through new accommodation facilities, which will utilize the natural and cultural heritage of the Ohrid region and encourage more expenditure from a smaller number of targeted visitors that may not necessarily be in the summer period.

Certainly, there are other alternatives, and not all require an increase in urbanization and construction of Lake Ohrid's shore.

1. What do the authors of this report think that a section on alternative scenarios should contain?
2. Why are no kind of analyzed alternative scenarios put forward by the report?

SUGESTIONS FOR ADDITIONAL LITERATURE

There are many reports and papers that are extremely important for the completion of a well-grounded SEA for the Ohrid region, which, surprisingly, have not been consulted by the draft document. Their omission in the evaluation of the Gorica project's impact questions the SEA's credibility and the conclusions it draws.

This applies, but is not limited, to the following works:

1. Spirovska et al (2012) [*Integrated Study on the State of the Remains of Studenchishte Marsh and Measures for its Revitalization*](#).
2. Kovachevic, B. (2015) [*SEA Report for Changes and Additions to the General Urban Plan for Ohrid \(2014-2024\)*](#).
3. Ministry of Environment and Physical Planning (MoEPP) (2014) [*Fifth National Report to the Convention on Biological Diversity of the Republic of Macedonia*](#). Skopje, Republic of Macedonia.
4. Burns, P. (2013) [*Third National Report to the United Nations Framework Convention on Climate Change, Assessment of Vulnerability to Climate Change and Plan for Tourism Sector Adaptation*](#).
5. Kostoski, G, et al (2010) [*A freshwater biodiversity hotspot under pressure – assessing threats and identifying conservation needs for ancient Lake Ohrid*](#).

6. Matzinger, A. et al (2007) [Eutrophication of ancient Lake Ohrid: Global warming amplifies detrimental effects of increased nutrient inputs.](#)
7. Japan International Cooperation Agency (2012) [Data Collection Survey for Lake Ohrid Environmental Improvement.](#)
8. Society of Wetland Scientists (2018) [Declaration on the Protection of Lake Ohrid Ecosystem, SWS European Chapter](#) (Macedonian version: [here](#)).
9. KfW Bank (2011) [Ex-post Environmental Brief, Macedonia: Environmental Protection – Lake Ohrid.](#)
10. World Heritage Centre/ICOMOS/IUCN (2017) [Reactive Monitoring Mission Report for the Lake Ohrid Region.](#)
11. IUCN (2018) [Tourism and Visitor Management in Protected Areas.](#)
12. IUCN (2014) [World Heritage Outlook, Natural and Cultural Heritage of Ohrid Region.](#)
13. IUCN (2017) [World Heritage Outlook, Natural and Cultural Heritage of Ohrid Region.](#)

Annex 5: EBRD Strategy, Ohrid SOS comments

In July 2018, Ohrid SOS submitted recommendations to the European Bank of Reconstruction and Development (EBRD) as part of public consultation processes regarding its new draft strategy for the Republic of Macedonia. The bank has previously attempted to finance a large-scale infrastructure project, the A3 express road Ohrid to Pestani, in the Ohrid region world heritage site.

Suggestions by Ohrid SOS are intended to improve the EBRD's environmental performance in Macedonia generally and the Ohrid region specifically, thereby preventing a recurrence of the mistakes of the past.

To date, although the bank has remained in email contact with Ohrid SOS, neither the draft strategy nor a response to Ohrid SOS's comments has been received.

24. July, 2018

Subject: Recommendations towards the EBRD's strategy for the Republic of Macedonia

Submitted by: Citizens' Initiative Ohrid SOS

Dear EBRD representatives,

Although Ohrid SOS is unable to attend/In addition to Ohrid SOS's attendance at the public consultation for the EBRD's review of its Republic of Macedonia strategy on 24th July 2018, we hereby submit 15 recommendations, which we believe are necessary for the bank to fulfil both its Environmental and Social Policy and ethical responsibility to the country.

The Ohrid SOS recommendations emerge from the following pre-considerations:

- a) The Republic of Macedonia is one of the most species rich countries in all of Europe, containing a disproportionately high volume of world-unique flora and fauna alongside regional endemics and numerous other taxa¹. The full extent of its natural values has not yet been investigated and discoveries of species new to science are not uncommon.
- b) Ecosystem services emerging from Macedonia's ecological resources are substantial in terms of air and water filtration, erosion prevention, flood defence, food provision, eutrophication buffering, research, recreational opportunities, energy provision, carbon sequestration, health and medicine, technological innovation and others, yet remain unquantified and even, in some cases, unrealized to date. The EBRD has a responsibility to protect and enhance such ecosystem services both for present and future generations.
- c) The Republic of Macedonia contains several known and suspected refugium areas¹ which harbour a wide variety of species during times of environmental—particularly climate—flux. As global temperatures rise due to climate change, ensuring the ecological integrity of these areas as well as migration routes to and from them may be essential to the survival/adaptation of species on a local, regional or even worldwide scale. EBRD strategy must incorporate this opportunity.
- d) Compared to the wealth of biodiversity in Macedonia, protected area coverage is low, with several areas known to meet preconditions for designation yet failing to achieve it due to a suite of awareness, institutional, financial, political and legislative shortcomings. Mount Jablanica and Shar Planina, for example, have been waiting 15 and 20 years respectively² for recognition as national parks despite overwhelming evidence to justify their designations. The vast majority of ecologically important areas identified by the Macedonian Ecological Society under the [MAK-NEN framework](#) also lack formal protection.
- e) Those protected areas that do exist in Macedonia are undermined by human and financial resource shortfalls; politicization; inappropriate management; political intransigence; poorly

¹ Ministry of Environment and Physical Planning (2003) [Country Study for Biodiversity of the Republic of Macedonia \(First National Report\)](#), Skopje, Macedonia.

² Ministry of Environment and Physical Planning (2014) [Fifth National Report to the Convention on Biological Diversity of the Republic of Macedonia](#), Skopje, Macedonia.

- integrated economic and environmental strategies; environmentally deficient decision-making by international financial institutions; legislative gaps; and sub-standard application of existing laws³. It is therefore wholly unrealistic to expect neutral environmental outcomes from large-scale infrastructure projects within their boundaries or in close proximity to them.
- f) When projects with impacts on high value natural environments have taken place in Macedonia, mitigation measures have been poorly implemented⁴, including within the framework of EBRD projects⁵, while reforestation attempts for other purposes have also been badly designed. More robust strategic boundaries are therefore necessary to determine when, where and how mitigation and biodiversity offsets can be applied in the country.
 - g) Mismanagement of hydroelectric dams in the Republic of Macedonia is evident⁵ with seemingly little sanction on the behaviour of power companies, even when their actions are thought to endanger Lake Ohrid⁶, one of the most biodiverse inland waters on Earth. Meanwhile, the Ministry of Environment and Physical Planning has raised concern about the economic benefit relative to the environmental cost of small hydropower units⁷ and other countries are dismantling dams to reconnect rivers⁸. The effectiveness of mitigation such as passageways for fish migration is debatable; Macedonia already suffers adverse effects from river fragmentation⁹; and dams are often placed in/planned for species rich or refugium areas⁴. In consequence, the EBRD must rethink its energy strategy.
 - h) Due to a culture of politicization and corruption, there is widespread concern in the environmental community about the independence of certain ecology experts. Strategic mechanisms are therefore required to guarantee the integrity of opinions and data sourced for EBRD policy planning and environmental assessments.
 - i) As highlighted by both Boskov Most in National Park Mavrovo and the Citrus Partners LLP SEA for National Park Galichica, Strategic Environmental Assessments in the Republic of Macedonia are not yet adequately calibrated with real-world conditions, leaving their conclusions speculative and risking widespread degradation of natural resources. For example, Citrus Partners completely omitted drainage of an entire wetland at Studenchishte Marsh from its cumulative impact assessment for road and resort plans in National Park Galichica despite the fact that both loss of the marsh and the road/resort project would have all impacted Lake Ohrid simultaneously. Likewise, both the Bern Convention¹⁰ and UNESCO⁶

³ Ibid, but see also International Union for the Conservation of Nature (IUCN) (2017) [IUCN Conservation Outlook Assessment 2017: Natural and Cultural Heritage of the Ohrid region](#), Gland, Switzerland; and PrespaNet (2017) [Transboundary Prespa—Review of Conservation Efforts](#), Agios Germanos, Greece.

⁴ Ministry of Environment and Physical Planning (2014) [Fifth National Report to the Convention on Biological Diversity of the Republic of Macedonia](#), Skopje, Macedonia.

⁵ Vejnovic (2017) [Broken rivers: The impacts of European-financed small hydropower plants on pristine Balkan landscapes](#), Save the Blue Heart of Europe Campaign, EuroNatur European Heritage Nature Foundation and Riverwatch, Radolfzell, Germany.

⁶ UNESCO, ICOMOS and IUCN (2017) [Reactive Monitoring Mission Report Natural and Cultural Heritage of the Ohrid Region \(Former Yugoslav Republic of Macedonia\)](#), World Heritage Centre, Paris, France.

⁷ Ministry of Environment and Physical Planning (2016) [Draft National Strategy for the Protection of Nature \(2017-2017\)](#), Skopje, Macedonia.

⁸ Schiermeier, Q. (2018) [Europe is demolishing its dams to restore ecosystems](#), Nature Journal (news section).

⁹ PrespaNet (2017) [Transboundary Prespa—Review of Conservation Efforts](#), Agios Germanos, Greece.

¹⁰ Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) Standing Committee (2015) [Recommendation 184 on the planned hydropower plants on the territory of the Mavrovo National Park \(Former Yugoslav Republic of Macedonia\)](#), Strasbourg, 4 December 2015.

have highlighted the need for more robust cumulative impact evaluations in other contexts related to the bank's activities. Highlighted by the Citrus document for National Park Galichica, other noteworthy SEA oversights include failures a) to gauge political will, awareness, application of law and previous experience with mitigation measures as indicators of likely environmental outcomes; b) to understand how methods applied in other countries may not satisfactorily transfer to the local context for a variety of socio-politico-ecological factors; c) to calculate ecosystem services for zero-change scenarios over multiple timescales; d) to provide thorough, quantified monetary forecasts when economic benefits are put forward in justification for projects; and e) to realize how climate change may affect both impacts and mitigation, especially in terms of locations for biodiversity offsets. These oversights disenable informed decision-making by the Republic of Macedonia's people.

- j) Public consultations are deficient in the Republic of Macedonia. Invitation processes are haphazard and do not ensure timely notification to and participation from relevant NGOs¹¹. Likewise, Ohrid SOS comments to the aforementioned Citrus Partners' SEA were substituted with another document and thereby totally omitted from the consultation. No explanation was offered by any of the relevant parties for the omission; no method of resubmission was provided; and no clear mechanism to escalate was in place. Meanwhile, the domestic legal framework is often inaccessible to CSOs due to prohibitive costs, capture of judicial instruments to facilitate private or party political interests, and a dearth of specialists in relevant fields of law. As such, the bank must take greater responsibility to ensure that full stakeholder and public opinions are incorporated within planning decisions for projects that it will finance.
- k) By its own tacit admission¹², the EBRD has made mistakes with the Republic of Macedonia in the past, notably at Boskov Most in National Park Mavrovo. These have been compounded by the UNESCO-blocked attempt to finance the A3 express road through National Park Galichica. Such aborted projects have been wasteful of public, bank and CSO resources. Any repeat of controversial infrastructure plans for protected, species rich, or key habitat areas is therefore undesirable on all sides.

¹¹ The 2018 consultation for the EBRD strategy is a case in point. Despite Ohrid SOS's prominent involvement in a recent environmental conflict with the bank, the organization only received notification (indirectly) on July 17th for a meeting one week later. The scheduled time during work hours is also inconvenient for volunteer organizations or working members of the public.

¹² The European Bank for Reconstruction and Development's [*Strategy for the Former Yugoslav Republic of Macedonia*](#) approved in 2013 refers to the need "to take account of lessons learned in the areas of biodiversity assessment and cumulative impacts, as well as public consultation". In other words, some of the points raised here should already have been addressed yet remain unresolved.

RECOMMENDATIONS

For the purposes of avoiding future degradation of ecological processes, conserving the conditions of life for the Republic of Macedonia's unique flora and fauna, and maximizing ecosystem services for the country's people, the recommendations below will therefore be essential components of the EBRD's domestic strategy:

1. All EBRD-financed projects must adhere to [Motion 26 from the IUCN's World Conservation Congress, Hawai'i 2016](#), which a) establishes the 6 IUCN Protected Area Management Categories as no-go zones for environmentally damaging infrastructure and industry development; b) requests development banks to refrain from investing in or funding activities "within, or that negatively impact protected areas or any areas of particular importance for biodiversity and ecosystem services that are identified by governments as essential to achieving the Aichi Biodiversity Targets"; and c) urges a public commitment to these principles from financial institutions.
2. Adherence to the above-mentioned Motion 26 must be extended to incorporate de-facto protected areas within the Republic of Macedonia whose biodiversity, habitats or rare species are known beyond reasonable doubt to fulfil criteria for designation within one of the 6 IUCN Protected Area Management Categories, but which lack formal recognition. In particular, this should apply to Mount Jablanica and Shar Planina.
3. Areas likely to act as important refugium zones during the current period of climate change, including but not limited to high mountains, specific areas of river valleys, and the tectonic lakes, must also be identified; their integrity maintained; and the migration routes to and from them secured.
4. EBRD-financed projects should be cognizant of MAK-NEN, [an inter-connected series of proposed protected areas compiled by the Macedonian Ecological Society](#) and based on movements of the Eurasian Brown Bear. All reasonable steps should be taken to avoid disruption of these areas and to guarantee their meaningful connectivity.
5. Due to the intense cultural and ecological significance of UNESCO Lake Ohrid and the need for a science-based approach to its development, the EBRD strategy for the Republic of Macedonia must formally synchronize with the Society of Wetland Scientists' [Declaration on the Protection of the Lake Ohrid Ecosystem](#) for all bank-financed activities in the region.
6. The EBRD strategy must contain clear details of how it is harmonized with the Republic of Macedonia's National Biodiversity Strategy and Action Plan and related nature protection documentation. Areas of actual and potential conflict between the two strategies should be described alongside the steps that will be taken to resolve them.
7. Future Strategic Environmental Assessments (SEA) for bank-financed projects with environmental impacts must include quantified measures over a fixed, rolling time-period of Macedonia's i) previous mitigation/biodiversity offset performance; ii) ability to implement mitigation/offsets long-term; iii) current ecological performance; iv) project compatibility with the National Biodiversity Strategy and Action Plan; v) implementation and effectiveness of environmental law; vi) political will to ensure environmental integrity; and vii) environmental awareness in the public and private sectors. These indicators should function like a credit system, and values that fall below a certain threshold either overall or for certain critical measures (mitigation performance; long-term mitigation ability; and ecological performance, for example) should automatically trigger a declined finance

application. The methodology used to calculate the indicators should be clearly stated within the SEA.

8. Strategic Environmental Assessments must also include thorough financial details when economic gain is used to legitimize environmental impact, including estimated revenues, details of how much said revenue is likely to filter through to local communities, and the mechanism by which this filtering is expected. These must be compiled over various time-scales, including those that stretch inter-generationally. For comparison, robust calculations of direct and indirect ecosystem services under zero-change conditions must also be made over the same time periods. Again, the methodology by which all such estimates are gauged should be clearly stated.
9. Cumulative impacts for SEAs must routinely incorporate all other activities that will simultaneously affect relevant natural resources, even those that fall outside the scope of specific EBRD projects. In the event of non-disclosure or non-incorporation of such activities, the SEA must be deemed invalid and completed again with appropriate public consultation.
10. Climate change must also be factored in to both cumulative impacts and economic forecasts within SEAs¹³. When biodiversity offsets are suggested, consideration must be given to how changing weather patterns may affect their success and appropriateness.
11. The teams comprised to develop Strategic Environmental Assessments should be disclosed and discussed with appropriate CSOs as part of consultation processes. The EBRD must also demonstrate a framework by which the expert data and opinions upon which assessment conclusions are based can be independently audited.
12. Mechanisms for notification of public consultations to CSOs, stakeholders and members of the public must be improved via enhanced visibility, better identification of relevant parties and active invitation to them.
13. Clear, step-by-step guidelines must be established by the EBRD which describe how CSOs and members of the public can pursue and escalate complaints about public consultation processes within the framework of the bank. These should include unambiguous details of both the actions that the bank will take under specific conditions, such as when comments are removed from official processes, and the feedback that CSOs/members of the public can expect to receive.
14. A review of the EBRD's hydroelectric strategy for the Republic of Macedonia should be undertaken by a team of independent experts approved either by the IUCN or WWF and the bank bound to accept their recommendations. In the meantime, non-hydro green alternatives must be prioritized.
15. The bank's strategy must consider both direct investment in natural development infrastructure such as wetland rehabilitation and appropriate reforestation, and entwinement of these opportunities with existing/future investment plans. It must also reconfigure its strategy to prioritize public transport over road-building enterprises. As a precondition to investments or finances for projects that will have indirect ecological consequences, the bank must ensure that appropriate physical and personnel infrastructure for environmental protection, such as effective sewerage and waste disposal systems, is functionally in place.

¹³ Despite citing economic benefits as a justification for projects within National Park Galichica, the Citrus Partners LLP SEA completely failed to consider how climate change may affect the financial stability of a low-elevation ski-resort in southern Europe. This kind of omission does not allow for balanced financial conclusions.



Attached for your reference are Motion 26 from the IUCN; the Declaration on the Protection of the Lake Ohrid Ecosystem; and an Ohrid SOS form by which we respectfully invite you to demonstrate how our recommendations are addressed by the reviewed EBRD strategy for the Republic of Macedonia.

We thank you for your attention and communication on this topic, and anticipate a new era of environmental responsibility from your institution.

Annex 6: Studenchishte Marsh Vision

Revitalization and conservation of Studenchishte Marsh can take many forms, including its establishment as a dual nature-culture tourism attraction with open air museum and boardwalk, thereby fulfilling advice contained within the World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Report to redirect regional tourism towards sustainability.

With input and discussion from Prof. Dr. Jos Verhoeven of the Society of Wetland Scientists, Ohrid SOS has devised a such vision for how this can be designed, progressed and funded. The vision was submitted to the Municipality of Ohrid at its own request in January 2018 alongside the Ministry of Environment and Physical Planning and the Macedonian Ramsar Committee. It is available over the ensuing pages.



**OHRID
SOS**

VISION FOR THE PROTECTION, REVITALISATION AND TOURISM INTEGRATION OF STUDENCHISHTE MARSH, LAKE OHRID'S VITAL COAST-LINE WETLAND



Submitted to Mayor
Stojanoski of Ohrid
Municipality

January, 2018

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PREFACE

This project proposal has been developed in order to recommend an appropriate management concept for Studenchishte Marsh¹ as both a protected area and tourism attraction.

The permanent protection of Studenchishte Marsh and revitalization of areas in which it has been degraded are the only reasonable direction for long-term care of the Ohrid region, implying not only recognition, but appreciation of existing ecosystem services. Besides being of nature, ecosystem services are the cheapest way to ensure sustainable management of the Ohrid region in a wider sense, and, as such, offer a greater guarantee for maintenance of Lake Ohrid's quality into the future.

For successful implementation, this project proposal offers many ideas through the establishment of Studenchishte Marsh as a protected area; its renewal with minimal human impact; the unveiling of its potential for education; awareness-raising of both its value and that of wetlands in general; research; and, most importantly, tourism development that would have a positive socio-economic impact on the region.

In addition, various ways to fund the protection and restoration of the wetland are provided, whose full effectiveness can only be realised within a professional, sustainable management plan. Finally, there is also an action plan with guidelines for successful accomplishment of the project.

The protection of Studenchishte Marsh is not just a matter of preference, but rather a multidimensional issue with far-reaching consequences for the viability of local water-based ecosystems and tourism development of the Ohrid region as natural World Heritage. Its proper management will contribute to tourism development, whose economic returns will in turn fuel improved sustainability in an upward spiral of protection and prosperity.

¹ Studenchishte Marsh is a wetland to the east of the city of Ohrid on the shores of ancient Lake Ohrid in the Republic of Macedonia, consisting of several habitat kinds including alkaline marshes and fens, wet meadows and others. Its peatlands are 5 metres deep and may be as much as 5,000m years old. Alongside supporting Lake Ohrid's water quality, Studenchishte significantly contributes to the biodiversity of a region that is already one of the most species rich in the entire continent of Europe. Relict plants and endemic invertebrates are among its most specialized flora and fauna.

STUDENCHISHTA MARSH: BACKGROUND

According to the General Urban Plan for the Municipality of Ohrid (Figure 1 in the Appendix), the Studenchishta district is divided into four numbered sections with the following areas: 1) 70.53 ha; 2) 19.38 ha; 3) 17.30 ha; and 4) 4.45 ha. Remnants of Studenchishte Marsh can be found in sections 2 and 3, but its largest extent is in section 1.

Studenchishte's boundaries are delineated by Studenchishta River (now Studenchishta Channel) to the north; Racha River to the south; the Lake Ohrid shore to the west; and the regional road Ohrid - Sv. Naum on the east; and, in the map in the Appendix, by the lettered markers: h - Hydrobiological Institute; r - road Ohrid - Sv. Naum; s - Biljana Springs Sports Center; and t - Raca village and tourist settlement (coloured violet).

Studenchishte Marsh is the last significant preserved wetland ecosystem on the Macedonian coast of Lake Ohrid. According to satellite imagery and a 2012 expert study², its surface area is about 63.97 ha (Figure 2 in Appendix), although, in the past, it was much larger. Part of the current area is also occupied by construction and other types of waste, agricultural land that has largely been usurped from the wetland, and buildings (for example, a plant nursery, the headquarters of Public Enterprise Ohridski Komunalec, the Macedonian Navy and the lake police).

Nonetheless, despite partial drainage and compaction, Studenchishte has largely preserved its original character and is an integral part of Lake Ohrid's hydrological ecosystem. Therefore, its characteristics and functions should be considered in the wider context of the lake.

Indeed, Studenchishte Marsh directly influences Lake Ohrid's water quality and thus the oligotrophic status that determines the latter's biological diversity with over 200 endemic species. Despite these well-known qualities and functions, the wetland has not yet received the status of a protected area, although the proposal for its proclamation as a Monument of Nature is decades old. On the contrary, recent times have witnessed attempts at its complete destruction, which would mean a loss of its provisioning, regulating, supporting and cultural functions.

There is also large unrealized potential of Studenchishte for tourism.

² Spirovska, M., et al. 2012. *Integrated study on the state of the remains of Studenchishte Marsh and measures for its revitalization*. Dekons-Ema.Drustvo za ekologshki consulting.

ECOSYSTEM SERVICES: THE NECESSITY TO PROTECT STUDENCHISHTE MARSH AS A PROVISIONER

Wetland ecosystems are estimated to be among the planet's most productive, precisely because of the critical role they perform ([Ramsar, 2012](#)), i.e. their economic value. Although in Macedonia, for the most part, their services have not yet been quantified, their functions are already scientifically established.

For illustration, according to the only economic evaluation of ecosystem services in the country, calculated for the Ezerani wetland near Lake Prespa, revenues over the 20 years from the wetland's renewal were expected to be 6.5 to 9 times higher than the cost of its protection and revitalization ([Ceroni, 2013](#)). The Republic of Macedonia's *Fifth National Report to the Convention on Biological Diversity* further emphasizes that the benefits of ecosystems are already known to exceed the costs associated with their protection ([MoEPP, 2014](#)).

Studenchishte Marsh, although degraded over the years, still contributes significantly to ecosystem services in the region. Its most important function is filtering water by purifying groundwater and buffering nutrients ([Kovacevic, 2015](#)), which directly impacts Lake Ohrid's water quality and clarity, and reduces the risk of eutrophication that is already evident in the littoral zone.

Studenchishte's other significant function is the maintenance of biodiversity. Contributing to species richness at one of the most biodiverse and oldest lakes in the world, the wetland is extremely valuable. Moreover, disturbance of complex ecosystems like these leads to a gradual reduction in their capacity to carry out services.

Studenchishte also contributes to regulation of the microclimate, and, very importantly, controls the concentration of carbon dioxide in the air, which correlates directly to the climate change processes to which the region is estimated to be especially sensitive.

Increasing temperatures as a result of climate change are related to the eutrophication process. Hence, to keep Lake Ohrid in its existing oligotrophic state, phosphorus inputs should be reduced by 50% over the next few years ([Matzinger et al, 2006](#)). Costs related to eutrophication are extremely high, associated with loss of fish stock, water pollution, tourism industry declines and the devaluation of real estate etcetera ([McCrackin et al, 2017](#)). In such a context, the power of Studenchishte Marsh, which is dependent on its size, becomes far more significant.

Wetland ecosystems are sensitive and vulnerable areas, as attested by the serious degradation of Studenchishte Marsh and the drastic reduction in its surface area. Larger surfaces perform larger functions and provide space for many species, determining biological diversity. More importantly, wider areas make wetland systems more resistant to external influences, i.e. deterioration. It must be borne in mind that the size of the protected area will play a significant role in how much and whether Studenchishte Marsh can function and survive at all.

Therefore, it is indisputable not only that the existing wetland area should be placed under protection, but also that those parts of Studenchishte which have been lost should be renewed. According to established methodology for protection of natural areas, borders have been decided for graded management zones at Studenchishte—Zone of Strict Protection; Zone of Active Management; and Zone of Sustainable Use—as shown in the 2012 Integrated Study by Spirovska et al (Figure 2 in Annex). However, the designation does not account for a buffer zone.

Due to the importance of ecosystem services and their correlation with wetland surface area, in some countries, wetland habitats are being extended beyond their natural boundaries and new wetlands are additionally being created. In this context, failing to rehabilitate Studenchishte and placing only a small portion under protection, far reduced from its former natural borders, would mean mere formal protection and paradoxically expose the wetland to a greater danger than it currently endures. That too would mean the Municipality of Ohrid's continuing neglect of both basic principles of sustainable management and planning with clear, long-term goals to develop the region without sacrificing its nature.

Tourism provisioning is one service by Studenchishte Marsh that has so far been completely overlooked, which is to say that, to date, its ecosystem services are totally neglected in the plans and activities of the local government. If the area is not protected to a minimum of the estimated boundaries provided in the 2012 expert evaluation (Figure 2, Appendix), the economic benefits of the natural processes it currently executes and potential tourism development opportunities will be steadily and permanently lost.

Moreover, the economic cost associated with the loss of ecosystem services will constantly accumulate alongside a reduction in possibilities for monetization, because destruction of Studenchishte Marsh is a danger with multiple consequences, whose scope is far wider than their origin. Specifically, it would lead to increased costs of drinking water purification; higher revitalization costs, i.e. to compensate for biodiversity losses; accelerated effects of climate change; and foregone tourism revenue as deterioration in the clarity and quality of lake waters will reduce the market value of Ohrid as a tourist destination ([Keeler et al, 2015](#)).

Research also indicates that destinations with greater biodiversity are more attractive to visitors ([Freytag & Vietze, 2009](#)). Here, Ohrid enjoys an underutilized advantage to which Studenchishte contributes strongly. Therefore, the wetland's economic input must not be ignored even if it remains unused for direct tourism purposes.

Below are the steps are required to implement Studenchishte's protection and revitalization:

- A permanent urbanization ban for the entire area
- Waste removal
- Relocation of the Rasadnik plant nursery and Public Enterprise Ohridski Komunalec, as well as other buildings

- Reconnection and cleansing of water channels between Studenchishte Marsh and Lake Ohrid;
- Rejuvenate natural springs
- Prohibition of agricultural activities
- Limitation of beach capacity from Studenchishta Channel to River Raca
- Banning the placement of platforms in the lake, sand blasting, concreting or paving the coast, and removing the natural substrate
- Prevention of reed removal
- Regulation of motor vehicle access
- Recovery of destroyed marshlands and coastal revitalization including reed belts.

Protection of the full Studenchishte wetland area is especially important from another aspect: Coastal urbanization at Lake Ohrid is unplanned, accelerating and out of control. Construction activities are common in the protected 50m green belt along the lakeshore, and the legalization of previously non-legal buildings is a constant practice. This is why the [2014 World Heritage Outlook](#) from the International Union for the Conservation of Nature (IUCN) concludes that uncontrolled construction is the most serious threat to the coast.

In another guise, the IUCN also serves as an advisory body to UNESCO and was part of the April 2017 Reactive Monitoring Mission to the Natural and Cultural Heritage of the Ohrid Region³. In 2017, it released [another World Heritage Outlook](#) report that evaluates the current situation at Ohrid as of “significant concern” and again highlights that land use regulation is not consistently applied. Unsurprisingly, it also identifies restoration of wetland ecosystems as a potential site need.

Until recently, Studenchishte Marsh was in danger of complete urbanization. However, as explained above, proposals for protection of only a very small surface area would not differ significantly from total urbanization. Unequivocally, partial protection would also mean partial urbanization and the small protected area would not compensate for the harmful effects of drainage and construction in the rest. According to the conclusions of the 2015 [Strategic Environmental Assessment \(SEA\)](#) conducted to assess draft amendments to the General Urban Plan (GUP) for Ohrid⁴ no measure except non-implementation could reduce the direct effects of urbanization upon Studenchishte Marsh and the indirect effects upon Lake Ohrid.

Therefore, the only reasonable solution for Studenchishte Marsh is tourism built on the principles of sustainability, i.e. tourism which “makes optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity ([UNWTO](#)).”

³ Reactive Monitoring is defined in Paragraph 169 of the Operational Guidelines for the implementation of the World Heritage Convention as being “the reporting by the World Heritage Centre, other sectors of UNESCO and the Advisory Bodies to the World Heritage Committee on the state of conservation of specific World Heritage properties that are under threat”.

⁴ The draft amendments were intended to presage drainage of Studenchishte Marsh and reuse of the area for luxury apartments, a sports centre and other recreational facilities.

Harmonization between nature protection and economic gains is undoubtedly possible as outlined in our proposal below.

STUDENCHISHTE MARSH: PROTECTION AND UTILIZATION FOR TOURISM AND EDUCATION

Wetlands are becoming increasingly important to tourism, as confirmed by Ramsar, an international convention for protection of wetlands of international importance, which, in partnership with the World Tourism Organization (UNWTO), formally established focus on the connection between the visitor industry and wetland habitats in 2012.

Wetlands offer enormous opportunities for tourism and contribute to the local economy in developing countries (Ramsar, 2012). In 2012, Ramsar presented [14 examples](#) of sustainable tourism practices in and around protected wetlands that show what kind of impact they can make to nature conservation, poverty reduction, regional and national economies, and in support to local culture. Conversely, if tourism is not developed sustainably, the risks are very high.

In addition to aforementioned ecosystem services, Studenchishte has vast, unlocked tourism potential: It can activate eco- and alternative tourism niches towards which the Ohrid region should strive. To ensure the development of sustainable tourism, however, it is necessary to build a 'wise use' approach to management. In that sense, appropriate infrastructure must be installed that can have the least possible impact on the natural environment and establish mechanisms for reaffirmation of this impaired natural treasure.

In fact, revitalization of Studenchishte Marsh would have multiple applications:

1. Promotion

Given Studenchishte Marsh's close proximity to the city of Ohrid and Lake Ohrid, its development as a tourist attraction would be easily achievable, not only in the sphere of ecotourism, but also in scientific tourism, especially since it is the only preserved wetland on Lake Ohrid's Macedonian coast. This would enrich the tourist map of Ohrid with another natural phenomenon.

Combined with other activities in which the Municipality of Ohrid must engage towards ecology and responsible living, protection of Studenchishte would have a manifold effect in the development of tourism. Impacts would manifest directly in employment related to Studenchishte, and, indirectly, through the increased tourism offer. The wetland could very well be used for promotional goals, both as part of the region's tourism product and also in the direction of (re)branding Ohrid.

Ohrid still has the opportunity to establish itself on the destination map as a small, hidden paradise where the community has dedicated itself to wellbeing and sustainability. This could be of huge promotional value to the region, especially given the growing

environmental awareness across the world, especially among young people. Such an image can be particularly strengthened with implementation of ideas proposed in Ohrid SOS's [Green Platform](#).

2. Education

Studenchishte Marsh exhibits exceptional educational qualities, which could bring knowledge to both tourists and the local population, through familiarizing with the wetland's biological diversity and the ecosystem services it performs. The wetland can also be used as a regular "open classroom" for nature education by schools in the region and beyond. Learning opportunities should be kept in mind for tourism purposes too.

Another educational aspect of Studenchishte Marsh relates exclusively to local residents, and that is in terms of regional history, traditional knowledge, and identity. If protected, it could restore the people's connection to their ancient past and mutual dependence on nature which, unfortunately, has been neglected in classical education.

Furthermore, through visiting and various activities such as indicated later in this document, the wetland can play a role in advancing knowledge about the importance of ecosystems and maintaining their interconnection and wholeness. For Lake Ohrid, this would encourage a more concerned attitude towards natural values and would help to raise the responsibility of future generations towards the environment in which their community lives, i.e. citizens who fully understand the concept of sustainable development.

All of this would have a direct impact on the socio-economic progress of the region.

3. Strengthening of Ecological Awareness

Related to education, the strengthening of knowledge about the importance of wetland ecosystems will directly affect awareness of the need to protect and nurture them among locals and tourists, but also local businesses. It is precisely the knowledge deficit that has led to a serious degradation of Studenchishte Marsh in recent times, not to mention the presumed loss of endemic species in the Ohrid region⁵.

Revitalization of Studenchishte can serve as an explicit example and confirmation that the protection and promotion of wetland ecosystems together with appropriate management measures can result in greater economic benefits. Such an example would significantly contribute to a better understanding of sustainable development and empower ecological awareness with positive long-term effects.

The tourism industry is currently witness to the growing uptake of environmental issues, which are already mainstream in the developed world. Revitalization of Studenchishte Marsh and its corresponding promotion would attract more international visitors with an established awareness of nature protection and who therefore know how to appreciate it.

⁵ Spirovska et al (2012) also note local extinction of relict flora at Studenchishte Marsh.

This can generate word-of-mouth promotion, which is well-known to offer an incomparably greater return-on-investment than other marketing techniques.

MEASURES FOR INCREASING THE TOURISM VALUE OF STUDENCHISHTE MARSH

Described below are proposals to develop and utilize the Studenchishte wetland for tourism. They are presented as concepts that can be improved and implemented relatively easily and have been conceived to prompt an interactive relationship with nature, which can refresh classical, passive modes of tourism, especially with the application of digital and internet technology. As such, the area could strengthen its attractiveness among diverse visitor demographics and animate younger generations.

Certainly, the level of success will depend on the quality of implementation, dedicated management and development, methods and channels of promotion, integration activities within a cohesive whole, and synchronization with the existing tourism offer etcetera.

VISITOR CENTER

The Visitor Center will be the starting point for the Studenchishte Marsh attraction. Diminutive and wooden, it will be designed to minimize obstruction of the landscape. It will serve as an information centre, souvenir shop, ticket office and hotspot for educational resources.

WALKWAYS

Raised paths for the exploration of nature are already standard in projects that adapt wetland habitats for tourism (Figure 3 in the Appendix). These would be made of wood and looped through certain parts of Studenchishte Marsh. The network of paths would be designed by experts and determined according to the ecology of the area. With that, they could also be occasionally closed, depending on the season, to avoid disturbing flora and fauna or exposing it to danger. For security reasons, time limitations on entrance would be applied.

Besides the wooden paths, tourism needs can be fulfilled by further small adaptations. Described in the following sections, these can become one of the main tourist attractions of the region.

OPEN-AIR MUSEUM

The walkways are envisaged to incorporate an open-air museum under the concept *A Journey Through Time*, which will reveal the shared history of people and wetlands, showing how, in many parts of the world, wetlands were the first locations where people transitioned into permanent settlements from a nomadic lifestyle.

Concretely, it will also tell the story of Studenchishte, in whose vicinity is a sacred site where pre-Christian water worship was performed, which later became an early Christian basilica. A key element of this journey through the past, this basilica will capture the rich history of civilizations in the Ohrid region, as well as the way in which society changed under the influence of Christianity. In order to maximize attractiveness and intrigue, the story should be as locally oriented and individualized as possible.

In parallel with human history, the open-air museum will also reveal the natural history of Studenchishte Marsh, answering questions about its age; the mystery of its relict plants, which have disappeared elsewhere; and how Macedonia looked thousands of years ago. In fact, wetland habitats were very prevalent then, but, as a consequence of various natural and human factors, they are very rare today.

Throughout, Studenchishte Marsh has survived to convey the story of the past. And one of the reasons for its survival is Lake Ohrid...

NATURE APPRECIATION

Revitalization of Studenchishte Marsh in fact means restoration of the ecosystem that supports the biodiversity of Lake Ohrid, which, as natural World Heritage, is a primary attraction of the Ohrid region. Therefore, it is extremely important for visitors and locals alike to understand Studenchishte's significance and value. Appropriate infrastructure, staff training and tourism promotion are crucial to this aim and emphasis will be placed on defining the recreation offer, feature diversification, and innovative approaches to presentation and marketing, which, alongside conservation, will combine into commercial viability.

To achieve these goals, the following steps can be taken:

1. **Daily Species Tables:** In Macedonian and English, info boards will display the names of animals and birds that have been spotted that day. They will be positioned in various locations and will require regular maintenance including daily data updates.
2. **Gamification:** Educational info boards will guide visitors to recognize different species. Each species will carry a certain number of points according to its local rarity, for example, 1 point for a tree sparrow and 5 points for a Macedonian marmot etcetera. This will transform visits to Studenchishte Marsh into a kind of game or competition, especially for the children and families, and the lists will also vary by season, depending on species' representation. All information should be available on a website and later as part of a dedicated mobile application.
3. **Citizen Science:** Visitors will be encouraged to photograph birds, animals and plants they have observed and forward them to a database. On one hand, this will engage them directly in exploration of the marsh; on the other, it will establish a relationship between nature, visitors, and science. In each season, different topics will be

defined, such as dragonflies and butterflies for the summer months. This activity can be linked to Facebook, Twitter Instagram and others through both visitor profiles and Studenčishte Marsh's own social media accounts as well as further supported by the official profiles of relevant national institutions, websites and social media for national tourism promotion. Putting visitors in the role of active researchers will raise excitement, leave a stronger impression and generate a robust attachment with the wetland.

4. Live Streaming: Video material can incorporate many modes and forms:

- a) Charismatic species such as otter can be selected and filmed during their lifecycle, and the videos transmitted live online. The nests of certain migratory birds, which can only be spotted at certain periods offer similar possibilities.
- b) Cameratraps can be placed in different locations across the marsh to run on a regular basis, broadcasting the landscape, its cycles and changes, and the visitors from the natural world that occasionally drop by.
- c) Video records can chart the process of revitalization at given locations so that viewers follow the rehabilitation process. Short time-lapse videos upon this theme can highlight the renewal more tangibly. The entire process can establish documentary material to approach world-class media like National Geographic etcetera.

Social networks are an excellent channel for such audio-visual media and presentations of wildlife are increasingly popular on [the internet](#), serving as superb promotional tools and valuable marketing content. They can also be used for educational and research purposes.

- 5. Charismatic Species: On the basis of recorded species, a logo can be created or even developed to popularize a certain animal, a mascot of a kind that is endemic or uncommon elsewhere. This may generate commercialization opportunities. After a period of time, when certain species have become symbolic of Studenčishte, an additional idea would be to organize elections for ambassadors of the marsh with a choice of one representative from various types of flora and fauna: birds, butterflies, amphibians, dragonflies, plants etcetera. Such activities would create an excellent framework for children to develop a more active relationship to nature. To this end, online visitor competitions for visual documentation of chosen species or artworks inspired by them can also be designed.
- 6. Hides: Observation spots for birds will be erected, and watching activities for other species such as fireflies, bats or butterflies can also be established. Realization of the latter does not require infrastructure and facilities, but it should be devised by experts and guided by trained professionals who can teach visitors how to read the many signs of nature: differentiating species; recognizing sounds; identifying nests according to shape or location; and verifying bird or animal tracks etcetera.
- 7. Events: Beyond routine activities, greater attendance can be encouraged by hosting events, especially on nature-related days such as World Wetlands Day, the Day of

the Lake⁶, and World Water Day (combined with Biljana Springs) etcetera. Some new themes can be introduced, like Dragonfly Month, for example. Again, such events have large educational potential.

8. **Natural and Cultural Heritage:** A visit to Studenchishte Marsh can also be connected with Biljana Springs and the aforementioned early-Christian basilica, which offers some of the best views of the wetland. Combining natural and cultural phenomena, such a plan will also finally put the monumental archaeological site of the basilica into use. Constructed extra muros, it is located where ancient pre-Christian cults worshipped water as life-force, as confirmed by its position near one of Lake Ohrid's most plentiful springs. Dating back to end of 5th and the first half of the 6th century (Snovli, 2013) BCE, it was established during a consolidated, stable and prosperous period of Byzantine history, which culminated during the glorious reign of Byzantine Emperor Justinian I (527-565). Thus, it has unique characteristics⁷ pointing to the exciting tourism potential of this locality. Potentially, the natural habitats of Mazija and others in close proximity to Studenchishte can be incorporated, transforming all these aspects into a rounded story to explore the wetland from multiple perspectives.
9. **Scientific tourism:** The revitalization of Studenchishte Marsh is itself a science project for human wellbeing. Given its exceptional importance for the quality of the waters at one of the oldest and most species rich lakes in the world, the wetland is extremely suitable for research, yet despite its scientific value, the marsh is still insufficiently explored. Ecosystem services for one have not been quantified in economic terms. This situation marks a large opportunity to attract scientists from around the world and engage financial resources aimed at research, whose return would be a share in the development of Macedonian science through increased know-how and new findings etcetera. At the same, it establishes another channel for regional tourism promotion.
10. **Targeted Tourism Narratives:** Wetland rehabilitation can also be directed towards targeting certain countries or interest-groups by focusing on species that have a special significance for them, thereby bringing points of attraction to consumer attention. Specific narratives of the natural world can further suffuse the tourism offer to create an exceptional visitor experience, emphasizing uniqueness and individualizing the attraction (for example, a given phenomenon that can only be seen in August, on a certain number of days in the year, or even once every few years etcetera). Such adventures leave deeper impressions, which visitors are more likely to share with others.

⁶ The Day of the Lake is dedicated to Lake Ohrid and held in the Ohrid region annually.

⁷ A unique feature of this early Christian basilica is the complicated system of annexes on the west side of the naos and the special complex of annexes for baptism on its south side, which is typical of the Ohrid-Prespa region (Bitrakova-Grozdanova & Pupaleski, 1989).

EXPANDING TOURISM BENEFITS: REGIONAL INTEGRATION

1. Studenchishte Marsh could be incorporated within a "passport program" for the Lake Ohrid region as is current practice in other protected areas globally. Under such a scheme, tourists could receive stamps at selected spots around the lake. This would be more effective with supplementation from locations on the Albanian side of Lake Ohrid and National Park Galichica, thereby creating a more complete and valuable experience.

Locations chosen for the passport should be carefully selected to control the flow of visitors, i.e. less sensitive spots that nonetheless exhibit the geological, natural and cultural history of the Ohrid region. The stamps themselves should display micro-local features such as characteristic species, for example wild cat at Mount Galichica, Ohrid sponge at Ljubanista and so on. These would serve as symbols for given localities. Passport holders would qualify for discounts on public transportation and bike rentals to reduce pressure on roads and the negative consequences of car travel.

In collecting stamps, visitors would also be creating their own personalized souvenirs from Ohrid-Prespa. Instead of passports in the form of a book, other objects could play the role too. For example, at Mount Fuji in Japan, wooden hiking sticks are used, and the stamps are branded upon them with an individual mark for resting points at different altitudes. Thus, someone who has climbed the entire mountain has gradually engraved his or her hiking stick along the journey, thereby symbolizing their achievement and creating a trophy to take away and share with loved ones. In that way, the journey becomes more authentic; its impressions are much stronger; and the trip transforms into a personal achievement and inspiration for others.

For Ohrid, a locally made souvenir could perform this function and a small, fixed fee could be charged for the stamps. The right to issue them would be strictly regulated and granted to firms as a mechanism of attracting visitors. Amounts collected would be contributed to a regional fund for nature conservation as explained later and visitors who collected predetermined numbers of stamps, e.g. 10, 20, 30 and so on, would trigger special offers from companies who entered the scheme. Those with a full set of stamps would receive a special gift, for example a symbolic key to Ohrid-Prespa. However, collecting all the stamps would be relatively difficult to complete and unachievable in just a few days. Hence, the accomplishment would gain importance, and encourage longer, deeper and repeat visits to the region.

2. In the context of the UNESCO Ohrid-Prespa Transboundary Biosphere Reserve, special tours can be structured around its mini-hotspots of biological diversity: Studenchishte Marsh and Ezerani Nature Park. By designating Lake Ohrid as a Ramsar Site⁸, this tour would constitute visiting two wetland ecosystems of international importance in one day and would serve as a brand new tourist product. For reference, in Greece, 15% to 20% of visitors to Prespa National Park participate in tours that include a visit to wetlands.

⁸ Efforts are currently being made to establish Lake Ohrid and Studenchishte Marsh as Macedonia's third Ramsar Site.

INFRASTRUCTURAL NECESSITIES FOR PROPOSED ACTIVITIES

The following tourism infrastructure provisions will be needed for Studenchishte Marsh:

1. Design and construction of a visitor centre and wetland walkways.
2. Standard information boards, maps and drawings that will tell the story of the wetland. Here, sponsorship from local companies should be considered.
3. Digital files for internet downloads, such as podcasts that visitors can listen to while walking around. These could cover a variety of topics in Macedonian and other languages. Visitors would be charged a certain amount for the materials or they would be free at more basic levels with payment for access to more detailed information.
4. QR codes at different locations would enable access to "extra secret topics" so as to personalize the Studenchishte experience.
5. Short-term exhibitions on various topics could be held within Studenchishte Marsh so that return attendance is rewarded with new attractions and visitation from consumers whose primary interest is not wetlands can be secured.
6. The Studenchishte Marsh walkway could incorporate works of art to increase its uniqueness. As such, attention should be paid to the aesthetics of information boards, which could be developed in cooperation with local artists or designers.
7. In the future, applications for augmented reality may enable a more vivid retelling of the site's history. Seasonal limitations can also be circumvented.
8. Specially trained tour guides must be equipped with deeper information than that typically available to the public. These should also have a passion for nature protection.
9. Wildlife observation courses could be guided by experts who will teach others insights such as how to identify birds by flight and song; recognition of species from traces in the field; and understanding of animal behaviour etcetera.
10. Fixed telescopes without glass (longitudinal cylinders for directional view), placed at appropriate locations, would direct the visitor's line of sight to signs of animals, nests, plants or other points of interest. This has already been successfully applied in other wetland areas⁹.
11. Telescopes would allow observation of wildlife, landscapes and wilderness areas of Mount Galichica and Lake Ohrid etcetera.

⁹ See Hong Kong Wetland Park, for example.

12. To exploit commercial opportunities from charismatic species, local craft items could be manufactured alongside digital stickers that would be free to download in applications like WhatsApp, Viber, Line, WeChat, SnapChat, Facebook Messenger etcetera.
13. Visibility of Studenchishte Marsh as a primary regional attraction should be ensured via social media.

PRIVATE LAND-OWNERSHIP: SOLUTIONS

It is essential to know the role played by Studenchishte Marsh in the wider ecosystem of Lake Ohrid. This wetland is a key element of the region's natural capital that is either irreplaceable or the cost of reimbursement for its benefits would be extraordinarily high. Guaranteeing Studenchishte's remaining extent is therefore of national interest and resolving the land-ownership issues should be approached with this in mind.

Based upon the national cadastre and the protected area zoning outlined in the Integrated Study by Spirovska et al in 2012, the proposed Zone of Strict Protection is entirely and Zone of Active Management is almost entirely under state ownership for Studenchishte. As such, only parts of the envisaged Zone of Sustainable Use are private land. However, in line with intentions not just to protect the wetland but also to ensure its revitalization, these areas should be bought out by the state. In parallel, the question of whether individual plots of land are legitimately owned or have been illegally appropriated must also be answered. For latter cases or when ownership has been established through use, the land can be bought for a lower price.

If nationalization of the area cannot be achieved due to land-owner opposition, continued private ownership could be facilitated, provided that land-use was conducted sustainably. Inconvenience caused by restrictions on use would then be compensated through a portion of revenues generated by entrance fees, organized tours, souvenirs and scientific visits etcetera.

Nonetheless, the ideal solution would be for all the proposed zones of a Studenchishte Marsh protected area to be owned by the state in entirety.

FUNDING MEASURES

Financing for Studenchishte Marsh could be secured from a number of sources. The greatest share of expenses would be in the initial phase to build the required infrastructure and revitalize the degraded part of the wetland, as well as for the possible purchase of privately owned land. Part of these expenses should be financed from the budget of the Republic of Macedonia. For the purpose of revitalization and infrastructure, resources could also be secured through the programs of the UNDP, GEF, KfW Bank, PONT, Ramsar, UNESCO, and the EU etcetera.

In the later phases, for more sizeable plans, it would be advisable to apply to the [EU Life project](#), which funds revitalization of larger regions, usually rivers and flood plains, and for which part of the resources are dedicated to research. Crowdfunding would be another financing option, whereby contributions would be collected globally (e.g. via IndieGoGo, Kickstarter etc.). This approach could be used for specific larger projects, such as rehabilitation of habitats or other similar enterprises.

Ongoing finance for management is also very important and input from the private sector would be required here. The following section contains related ideas.

ADDITIONAL MEASURES

The correlation between both clean water and biodiversity on one hand and income from tourism on the other is already established. The attractiveness of nature in such terms is already well known too. On the other hand, carbon capture will play an essential role in reducing the expenses associated with changing climate patterns in the upcoming years.

Studenchishte Marsh provides all of these ecosystem services for the Ohrid region. For that reason, it is appropriate that the expense for their maintenance is calculated in the costs of local businesses, especially in the initial phase when the conditions for development of this area into a tourist attraction are still being established.

In addition:

1. An entrance fee would be charged for visitors, but waived for residents of the Ohrid-Prespa region. Additional fees would be instituted for certain activities such as photo sessions, filming, recording commercials etcetera.
2. A portion of revenues from goods purchased at the airport could contribute to a Wetland Fund, which would mitigate the harm of carbon dioxide emitted from international flights by supporting Studenchishte's peatlands. This practice could be implemented in collaboration with airline companies like Wizz Air. Voluntary contributions could be tested, whereby the customer chooses to pay a little more when purchasing an airline ticket, making a donation for the preservation of the

wetland. This is already a familiar practice with some airline companies such as [Cebu Pacific from the Philippines in partnership with WWF](#).

A second well-established practice from elsewhere in the world would be to place a box for leftover currency at Ohrid airport. Visitors with Denars remaining from their trip to Ohrid could then place this unneeded cash in the box, the proceeds from which would contribute to protection of Studenchishte Marsh.

3. Another option would be charging non-resident vehicles a toll fee for using the lake's coastline roads in the summer months. (Local residents, taxi vehicles and public transport will not fall into this category.) That would promote the use of public transport and reduce pressure on the existing Ohrid-St. Naum roadway.
4. In the Ohrid SOS [Platform for a Green and Modern Ohrid](#), we proposed introduction of a Green Ohrid Certificate (title for illustration purposes only). Local businesses, especially in but not limited to the field of tourism, would have the opportunity to contribute voluntarily to a regional fund for the protection of nature, which would include Studenchishte Marsh. In exchange, they would receive the green certificate. The Green Ohrid Certificate would then be widely promoted in order to build a brand recognized by locals and visitors alike. Promotion would utilize mainstream media, internet channels, and official promotional tools on a local and national level (brochures, catalogues, web pages, materials for attracting foreign investment, and airline magazines etcetera). In this manner, local business will have a tool for promotion, be encouraged to show greater care for the environment, and be recognized as socially responsible entrepreneurs. This will attract more companies to participate.
5. Another alternative to consider could be adding a small sum to the price of accommodation, which would not only be clearly expressed, but also widely promoted, and which would contribute to the fund for protection. This approach could be justified simply by the fact that the natural environment, including Studenchishte Marsh, is an essential component of a happy vacation for visitors, and its maintenance is necessary, especially considering the negative impact that tourism has upon the environment. Informed visitors will have more appreciation for what they enjoy. Promoting this visitor contribution would enhance the awareness of the region's value as World Heritage and would improve Ohrid's image as a place that takes nature protection seriously.
6. A voluntary fund to which visitors could contribute donations to the maintenance and lasting protection of Studenchishte Marsh can also be considered. In order to motivate visitors to donate, they should receive clear information about how important their contribution is for the maintenance of the water ecosystem as a whole and how they can become active preservers of the oldest lake in Europe or

one of the oldest lakes in the world. Alternatively, donations could be graded by amount to offer visitors an appropriate recognition for their support, for example, a "Friend of the Lake" stamp for a small donation; a badge or trinket with an endemic species for a more generous contribution; or discounts at selected Green Certificate businesses at a higher level.

7. Financial resources could be collected via the issuance of stamps in the passport program (elaborated in the section titled [*Expanding Tourism Benefits: Regional Integration*](#)).
8. Sponsorships for events, information-boards and other content material at the open-air museum could develop another line of revenue.

As an additional tool for promotion and encouraging greater support, a transparent overview of the income flow from each and all of these sources should be available to the public at all times. In the framework of this scheme, the aforementioned possibility for compensation of owners with property in the protected zones should also be considered.

ACTION PLAN

This Action Plan outlines the basic steps to establish Studenchishte Marsh in the dual functions of protected area and tourism attraction:

1. Formation of a managing committee consisting of a) two environmental experts (in the field of natural sciences) of which at least one would come from the Hydrobiological Institute in Ohrid; b) one representative from the Municipality of Ohrid; c) one representative of land owners in the protected area (as applicable); and d) two representatives from the environmental NGO sector, including one from the citizen initiative, Ohrid SOS.
2. Development of a management plan for Studenchishte Marsh which would define the long-term direction and strategies for maintenance and improvement of this asset.
3. Establishment of a detailed business plan which would include a calculation of the necessary expenses (including maintenance costs) and potential income sources. Expenses could be covered through commercial activities, international funds for nature protection, but also through additional approaches (as described in the [Additional Measures](#) section).
4. Creation of a separate fund for the protection of nature in which resources would be collected for the management of Studenchishte Marsh as a protected area and the organization of educative events etcetera. This fund could in fact be dedicated to a number of objectives in relation to ecology and conservation, one of which would be Studenchishte Marsh¹⁰.
5. Development of a draft design for a visitors' center and walkways that fully respects ecologically sensitive areas, developed by domestic and international experts with proven experience in the rehabilitation of wetland ecosystems. This design would also be subject to a Strategic Environmental Assessment.
6. Definition of programs for wetland rehabilitation.
7. Designation of species and locations for internet promotion such as live-streaming.
8. Investigation of possibilities for citizen science projects (in which members of the public contribute to data collection) with an emphasis on international visitors.
9. Design and initiation of training programs for guides and visitor center employees.

¹⁰ Various ideas in this direction are listed in the Ohrid SOS [Platform for a Green and Modern Ohrid](#).

10. Commencement of construction of walking paths, observatories and info-boards etcetera.
11. Opening social media channels through which the process of wetland restoration at Studenchishte would be covered from the very start, as well as establishing access to the popular platforms of organizations, groups, influential bloggers and eco-activists etcetera.

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APPENDIX

Figure 1: Map of the Studenchishta district, according to the General Urban Plan of the Municipality of Ohrid

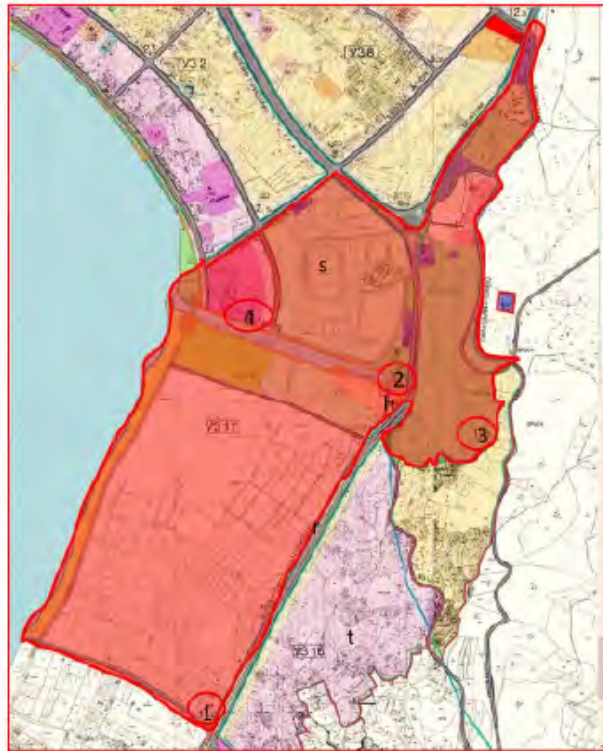


Figure 2: Proposal for a protected area — Studenchishte Marsh — according to the *Integrated Study on the State of the Remains of Studenchishte Marsh and Measures for its Revitalization* by Spirovska et al 2012 (The lightest green overlay denotes the Zone of Sustainable Use; the intermediate green overlay denotes the Zone of Active Management; and the darkest green overlay denotes the Zone of Strict Protection.)



Figures 3 and 4: Examples of wetland walkways





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World Heritage on the Edge

Part II: Engine of Neglect

Supplementary material



April 2019

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Introduction

The following document contains material supplementary to *World Heritage on the Edge II: Engine of Neglect*, submitted to the World Heritage Centre by Citizen Initiative Ohrid SOS on March 13th 2019. It focuses on events related to the UNESCO Natural and Cultural Heritage of the Ohrid Region during the months of February, March and early April 2019, which either had not occurred or had yet to fully unfold at the time of submittal.

Namely, these are the continued burning of reeds, which, though mentioned in Chapter 3 of *World Heritage on the Edge II*, has reached epidemic proportions since the time of writing; a second contentious attempt at legalization of non-legal buildings in the Municipality of Ohrid on April 2nd 2019; further insight on the functioning of the Commission for Management of the Natural and Cultural Heritage of the Ohrid Region; and a tantalizing glimpse into the mind of Ramiz Merko, Mayor of the Municipality of Struga.

Commission for Management of the Natural and Cultural Heritage of the Ohrid Region

Following a request for information, Ohrid SOS has now seen the draft¹ Minutes from the Fifth Session² of the Commission for Management of the Natural and Cultural Heritage of the Ohrid Region, held on December 21st 2018³. These reveal serious functional deficiencies related to the commission's understanding of its role, procedures and World Heritage Committee Decision 41COM 7B.34. Most damningly, anomalies have also occurred in the body's voting process.

Role and Approach

Commission members appear to be neither completely apprised of their function as a control mechanism for pressures facing the Ohrid region world heritage property nor fully informed of the worsening conservation background that has led to the commission's establishment.

For instance, even though Decision 41COM 7B.34 requires State Party adherence to all of the 2017 World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission recommendations, including number 6 for a moratorium on any coastal or urban transformation within the world heritage property, Krste Blazevski, the commission's President of the Association of Hoteliers, falsely claimed during the fifth session that "UNESCO at no point requested to pause urbanization" (Ministry of Culture, 2018). Alongside making a mockery of the Republic of Macedonia's official November 2018 progress report to the World Heritage Centre, which claims that a moratorium was already in effect

¹ Minutes to one session are officially signed off at the next. Therefore, the final version of the minutes will only be adopted after the sixth session of the commission has convened.

² Ohrid SOS only received minutes for sessions 1 to 4 on April 5th and thus has not had time to analyse them before the World Heritage Centre cut-off date for information submission.

³ Incredibly, there are three dates on the document, recording October 5th, October 6th and December 21st. However, the December date is presumed accurate.

at the time of the fifth session, this also shows—ironically—that voting members of the very body established to perform the role of a functional control system for urbanization in the Ohrid region as envisaged under Recommendation 6 were simultaneously unaware of this recommendation’s full requirements!

Far from judging proposals according to their potential impact on Outstanding Universal Value, some members are clearly more preoccupied with development issues too, illustrating the conflict of interest that is often inherent in their positions. Blazeovski is again recorded in the minutes to the fifth session expressing the opinion that citizens need to live and more hotels need to be built, while, with only 6000 beds in Ohrid and Struga, the region cannot even be considered a small destination. At the same time, Daniel Risteski, the commission representative for the Municipality of Debarca, also points out that urbanization is linked to economic development. Whatever the validity of these arguments, such statements are more appropriate to discussions of development strategy than for the meeting of a control body whose mission is to accept or deny regional planning proposals by attempting to foresee their effect on world heritage values. Moreover, there is an inherent neutrality issue when people such as the figurehead of the local hotel industry are expected to vote upon the heritage impact of proposals aimed at tourism.

The commission’s knowledge-base and decision-making processes are also doubtful. According to the draft minutes, Donka Bardzieva-Trajkovska did not receive a positive reception to the suggestion that, in addition to planning documents, the commission should also receive statistical data from the respective municipalities on annual tourist figures in order to make better-informed decisions on coordination between urban plans and tourism accommodation, and to evaluate if proposals are appropriate. On the contrary, Ilber Mirta, vice president of the commission and a representative from the Section on Waters from the Ministry of Environment and Physical Planning, responded that such analysis was beyond the commission’s scope. This triggers scepticism about the basis on which decisions are made and the level of research that informs them.

Other details from the fifth session hint at similar shortcomings in terms of the provision of information to commission members: Missing documentation related to building proposals was submitted during the session, not 7 days beforehand as required under normal, non-urgent circumstances, and concern with the practice of tabling last-minute information was vocalized by commission member Sandra Andovska, General Secretary of the National Sustainability Development Council of the Republic of Macedonia (Ministry of Culture, 2018). Minutes to the session also reveal that this situation arose because commission members do not have access to e-Urbanism, the state electronic urbanization system.

Voting

Discussion between the fifth session’s 14 member attendees (the remaining 9 had not turned up) reveals that voting processes still had not been settled even after four official meetings during which decisions had been taken. This came to the fore during a vote concerning Municipality of Struga DUP Block 23, UE 8, where a complex including residential, hotel and commercial buildings comprised of constructions rising G+2+attic to G+6+attic and a ten-storey building are envisaged. Originally, the

request for the complex was denied at the fifth session because only 7 commission members were in favour (with five abstentions, 1 against and 1 seeming disappearance⁴). However, in reaction, it was considered that, instead of requiring a full commission majority in order to pass a request for preparation of planning documents as categorically stated in the commission's rulebook⁵, perhaps a majority of attending members could be accepted if more than half were present. Had this idea been put into effect, it would have reduced the number of votes required to make a decision from 12 to 7, and therefore transformed non-acceptance into acceptance.

As it was, commission members decided not to change voting mechanisms for the present time⁶, which prompted Mayor Merko of the Municipality of Struga, in attendance despite not being a member of the body, to storm out of the meeting, accompanied by unspecified members of the commission, thereby triggering session termination. According to the *Rulebook for the Operations of the Commission for Management of the Natural and Cultural Heritage of the Ohrid Region* (Ministry of Culture, 2018b), this should have caused the session to be reconvened within 7 days with all prior decisions up to the point of termination considered to be in force⁷.

That did not occur. Rather, initial non-acceptance of Municipality of Struga DUP Block 23, UE 8 was overcome via a remote second vote conducted by email. Committee members that had not participated in the fifth session were included in this second vote. As such, even though votes by electronic mail are not foreseen in the rulebook, which explicitly states that opinions should be given publicly by a raising of hands, and the decision not to pass the building ought to have been adopted in line with provisions for terminated sessions, the complex proposal has now received positive acceptance from the commission and is able to progress towards completion.

Delving into the history of the complex proposal is instructive. The plan had been placed before the commission more than once previously yet had always been returned without acceptance until, in the above-mentioned circumstances, it suddenly received permission to proceed via a bare minimum majority. With procedural deviations indicating that pressure may well have been applied behind the scenes, this abrupt change of opinion coincides with a series of atypical decisions taken in the Republic of Macedonia prior to the parliamentary vote to implement controversial constitutional changes in relation to the Prespa Agreement, many of which were suggestive of concessions being offered in exchange for political support.

Conclusion

The minutes from the fifth session and subsequent occurrences demonstrate beyond reasonable doubt that the Commission for Management of the Natural and Cultural Heritage of the Ohrid Region is not yet fit for the purpose of a control mechanism. Members are either not suitably aware

⁴ The number of votes on the day does not tally with the list of participants.

⁵ The idea has still not been completely discarded, even though the rulebook unequivocally states that "decisions, conclusions, suggestions and other acts are brought by a majority of votes from the total number of commission members".

⁶ Commission President Zoran Pavlov is recorded in the minutes suggesting that a legal opinion could still be sought to downsize the required majority in this manner for the future.

⁷ The rulebook does allow for exceptions to the 7-day reconvention deadline in urgent cases. Here, the urgency was deemed to be upcoming holidays.

of World Heritage Committee requests or deliberately misrepresenting them; not all are cognizant of the commission's intended function to assess plans in terms of their potential heritage impact; conflict of interest is apparent; political figures such as municipality mayors are able to disrupt session activities; operations do not match processes established in the official rulebook; voting procedures are neither reliable nor standardized; and there is credible suspicion that pressure is exerted upon the commission from behind the scenes.

Legalization of Illegal Buildings

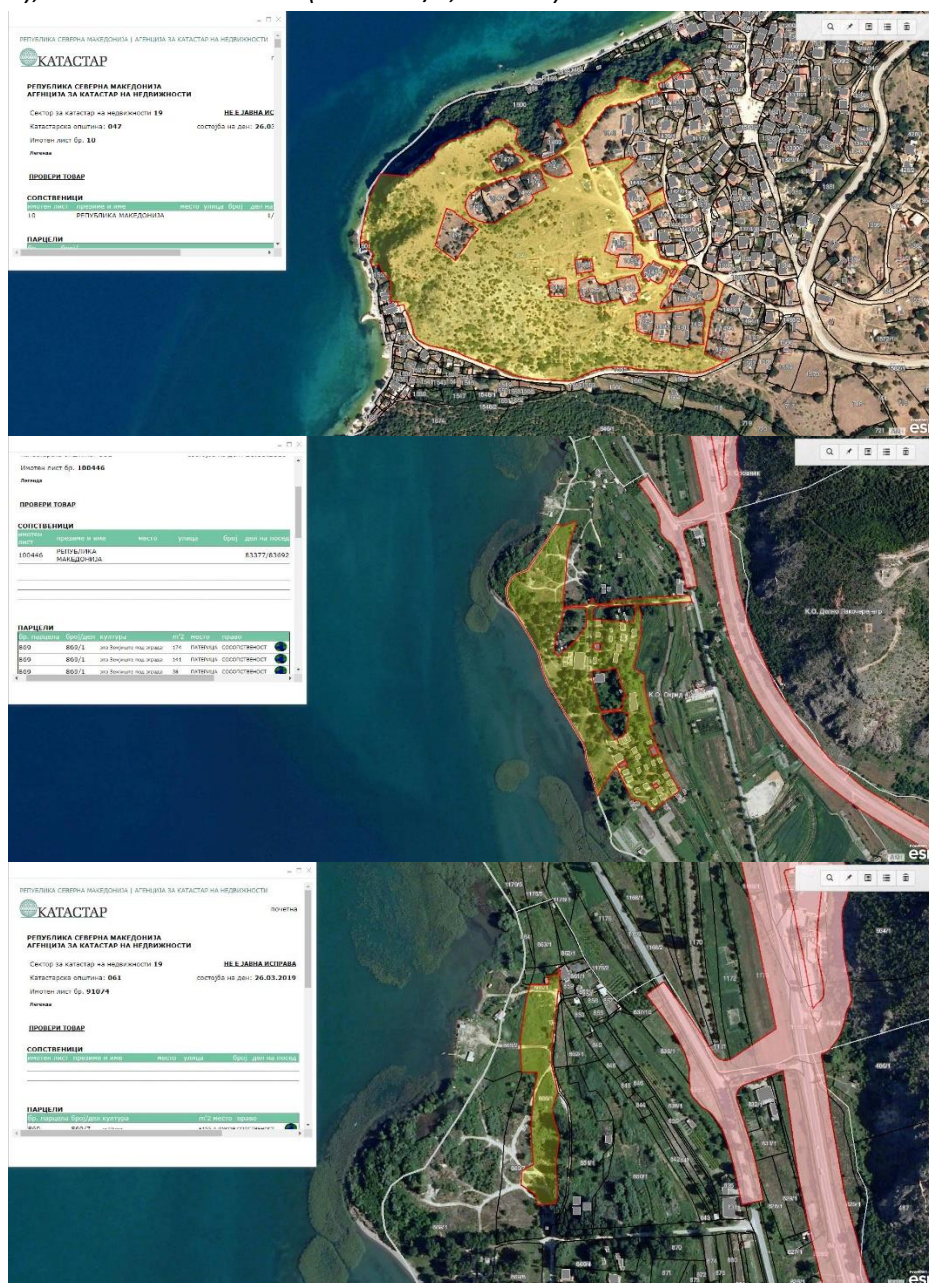
Following the mass legalization of illegal buildings held on 5th February 2019 in the Municipality of Ohrid, which was documented in *World Heritage on the Edge II: Engine of Neglect*, the same municipality's 26th session on April 2nd 2019 aimed at legitimizing 61 additional illegal structures, including at coveted locations in National Park Galichica and around Lake Ohrid such as Trpejca, Velestovo, North Gorica bordering Studenchishte Marsh, and Anton Dukov. Again, this was proposed without prior adherence to the 2017 World Heritage Centre/ICOMOS/IUCN Recommendation 9 request for an inventory of non-legal constructions to be made and their environmental impact assessed. Eventually, the agenda was postponed due to the influence of upcoming elections and amid displeasure from the environmental community, although future attempts with the same target are likely.

As with the legalization episode on February 5th, various contemporary features of the April attempt to give legal status to buildings constructed outside the law are especially dangerous to the Ohrid region world heritage property: Amendments to the Law on Legalization of Illegally Constructed Buildings from 2015 mean that a) such objects can now be legitimized within the protected 50m green belt zone that supposedly extends from the highest elevation of Lake Ohrid's waterline on condition that the owner signs a document confirming both that they will not request financial assistance from the state in case of natural disasters and that they will compensate for any environmental damage (Official Gazette, 2015); b) previous provisions that automatically required an opinion from the Ministry of Environment and Physical Planning prior to legitimization have been removed, including retrospectively (Gazette 129/2015); and c) illegal constructions within the 50m green belt are considered to be at the property owner's risk, which means that the buildings do not have to be included on urban planning documents (Gazette 124/2015). The first of these provisions was cited by the Municipality of Ohrid in a press release responding to Ohrid SOS's public criticism of the legalization attempt, in which the municipality both effectively defended illegal construction on state land and asserted its right to override the 50m protective belt (Makfax, 2019).

Compounding the recklessness of this blasé approach to illegal construction in the world heritage property, the postponed agenda for the Municipality of Ohrid's 26th session offered no details of the objects that were proposed for legalization, containing only their location in the cadastre. Therefore, the number, footprint, capacity and purpose of the constructions could not be ascertained, devitalizing attempts to monitor urbanization in the Ohrid region. Some contentious items on the agenda centred on attractive locations under large urbanization pressure such as the shoreline area of Anton Dukov, in which vicinity land reclamation is known to be occurring and previous

legalizations have already taken place, while at least one relates to land where no existing building is currently in evidence.

Below: National Cadastre images (March 2019) where legalization is to take place: top Trpejca (C.No.1499, 6.3 ha), middle Andon Dukov (C.No 869/1, 8.3 ha), bottom Andon Dukov (C.No 866/1, 0.72 ha)



Interpretation of the legalization policy by citizens is a further problem. With 276 legalization requests achieving adoption since the 2018 change of leadership in the Municipality of Ohrid, some residents unsurprisingly see slack in the legal framework as an opportunity. This became specifically obvious in the case of Nefi Useini, a member of the Assembly of the Municipality of Ohrid, who, when questioned by the media about the potential illegal nature of his property next to the old plane tree (Star Chinar) in the core protected area of the Old Town Nucleus of Ohrid was quoted in the media stating, "I don't have permission to build, but I also don't have a decision to demolish. I

expect the Municipality of Ohrid to issue a permit, i.e. to legalize the construction” (A1on, 2019). Given that Mr Useini’s position allows him to vote on legalization decisions, this optimism is not entirely misplaced.

Altogether, the latest attempt to give legitimacy to structures whose existence is contrary to law demonstrates that local authorities remain amenable to uncontrolled urbanization. The pullback of the agenda for the Municipality of Ohrid’s April 2nd 2019 session should not therefore be understood as anything other than a delay, which is emphasized by the municipality’s defence of its legalization policy in the media (Makfax, 2019). In truth, the World Heritage Centre/ICOMOS/IUCN Reactive Monitoring Mission Recommendation 9c, which calls upon the State Party to “ensure the strict enforcement of existing laws and regulations to prevent any further illegal construction within the property”, is not being used to temper illegal building activities, but instead being misapplied to drive legalization processes under the auspices of infamous laws that have been specifically designed for their porosity in conservation terms. These actions represent an almost wilful lack of understanding of the importance of the protection of the natural and cultural heritage of the Ohrid region on the part of the local authorities.



Above: Illegal construction by Municipality of Ohrid assembly member Nefi Useini, who expects the building to be legalized in the future, perhaps in part because he will vote upon the decision.

Reed Burning

The ecological and ecosystem services of reed belts to Lake Ohrid natural heritage are numerous: Habitat for several species, including as spawning/nesting grounds for native fish and many of the lake's 88 bird taxa, reeds also protect against coastal erosion, hold mud in place, buffer against eutrophication by removing phosphorous, perform the function of a natural filter by absorbing pollutants, and even provide a source of food to aquatic species for the winter (Watzin, 2002). Their destruction by cutting and burning has been identified as a threat to Lake Ohrid's natural world, i.e. its Outstanding Universal Value, in influential literature for many years (Watzin, 2002).

February and March 2019 have nonetheless seen a disturbing spate of fires at various locations in the reed belts within the Municipalities of Ohrid and Struga, a minimum of 8 separate incidents occurring just prior to the spring nesting and spawning season. These have been formally categorized as arson by the fire department. The burning has been accompanied with reed-cutting. Understanding the Ohrid context in which rampant urbanization of the lakeshore both legal and illegal has been taking place over decades, alongside the recent trend in Strategic Environmental Assessments to justify building on the grounds that local habitats are already degraded and concreting of the shore will prevent illegal activities (Ohrid SOS, 2019), the destruction of reeds can be viewed as preparation of the lakeshore for construction. In at least two cases, loose stones have already been used to compact earth at the site of reed fires, indicating that building is intended, and arson hotspots are correlated with areas under development pressure, such as the shoreline from Struga to Kalishta, Anton Dukov, and near the site of the orthopaedic hospital in the Municipality of Ohrid.

[Ohrid's Office of Interior Affairs](#) has stated that it will take enhanced measures for fire prevention and repression, announcing a plan on March 19th for cooperation with local firefighting units, the Crisis Management Centre, Public Enterprise Macedonian Forests, Public Institution National Park Galichica, the forest and border police, the army, the Red Cross and local government. Nonetheless, fire frequency did not subside in the following period and the commitment of local municipalities to preventing reed fires, reversing their effects, and ensuring that construction does not occur at their locations remains in question.

For instance, coordination does not seem to have extended to municipality and state inspectors. Since February 11th when the recent arson outbreak initiated, Ohrid SOS has officially submitted five separate Requests for Action to relevant environmental inspectorates related to 10 reed eradication incidents (see Table 1). These have been escalated beyond the regional level due to perceived inactivity on the part of these bodies, but responses have not been received for most cases, despite the proliferation of reed damage.

So far, only one substantive reply (to two Requests for Action dated February 21st/22nd 2019) has been issued. It was sent by State Environmental Inspector Igor Trajkoski, who dismissed the impact of reed fires at a few locations between Struga and Kalishta in the Municipality of Struga by suggesting that they would only be of environmental concern if physically inside lake, thereby ignoring reeds' complex ecological communication with the lake proper, the natural flux of water levels and the link between reed loss and permanent coastal transformation. On the latter point,

Trajkoski stated that the reed incineration had occurred on private property and reacted to the evident preparation of the ground for development by stating that such activities fall within the jurisdiction of the Construction Inspector for the Municipality of Struga, failing, however, to inform this person, despite legal requirements to do so. He also referred other aspects of the reed burning to the municipality's Agriculture Inspector and Waste Management Department, again taking no action to winterize them, as stipulated by law, of the situation.

Ohrid SOS responded to Inspector Trajkoski on February 28th 2019 by disputing the location of the fires in respect to the lake and pointing to various legislation including the Law on Nature, whose obligatory principles of integrity and prevention offer respective legal provisions for habitats and their connections to be seen as integrated wholes, and measures to be taken to pre-empt negative impact. The initiative also called for a joint inspection into the fires with all the inspectorates he had identified, an interpretation of a Law on Nature requirement for cooperation between state entities. At this point, Inspector Trajkoski discontinued contact until April 5th 2019, when, having been threatened with report to the Inspection Council and Administrative Inspectorate, he provided another response offering contact by telephone, yet still did not disclosing in writing either the results of his inspection or the actions that would be taken in consequence.

While Mr Trajkovski's interaction with Ohrid SOS has demonstrated inadequacy for the aim of preventing further reed destruction and the permanent coastal transformation that may subsequently emerge from it, other relevant bodies have displayed even lower standards. No contact details are available for the Nature Inspector or Construction Inspector for the Municipality of Struga and the State Inspector for Construction did not respond to a request for the email address or telephone number of his inspectorate's local representative to be provided. The State Inspector for Agriculture and Water did not respond in any way to a Call for Action submitted on March 5th 2019; and none of the Government of the Republic of North Macedonia, the Commission for Protection of the Natural and Cultural Heritage of the Ohrid Region, Municipality of Struga, Municipality of Ohrid, parliamentary representatives for Ohrid and Struga, or the informal parliamentary group, Friends of the Lake, responded to a written Ohrid SOS call to take appropriate action against reed annihilation within the boundaries of their jurisdiction.

Through the Public Prosecutor, Ohrid SOS has now learned that three cases have been brought in relation to the reed attacks: two charges for reed burning; one for reed destruction against two individuals; and one for environmental destruction against one individual. Additionally, the Nature Inspector for the Municipality of Struga has been charged after refusing to undertake an investigation of reed-cutting. The case of environmental destruction was for various infringements starting in August 2018 of digging, earth disposal and flattening of the lakeshore to expand the land surface, and performing acts of destruction of the protected reed-belt and Lake Ohrid, which have occurred on land property of the Republic of Macedonia. Additionally, via the media, it is now known that some kind of joint inspection did occur following the reed fires. However, this concluded that construction was not happening on the lakeshore, seemingly because flattening reed belts to reclaim land from the lake is not categorized in this manner.

Overall, reaction at State Party level to the repeated burning and other destruction of reed belts in the Ohrid region, although not entirely absent, equally does not quite constitute the State Party doing "all it can...to the utmost of its resources" to identify, protect, conserve, present and transmit

natural heritage to future generations under Article 4 of the World Heritage Convention. Construction or preparation for land development is evident at locations where fires have been initiated, forming part of the intensification of coastal transformation in the Ohrid region world heritage site that has occurred during and since 2018, particularly in the Municipality of Struga (Ohrid SOS, 2019). Charges against one or two individuals some 7 months after acts of usurpation have been recorded do little to change this, and it is not believed that movements towards development of the shoreline will be reversed. Moreover, the reluctant, slow, and uncommunicative attitude from various bodies, most notably inspectorates, has contributed to two months of intense eradication of habitats that hold some of the greatest importance for and contribution to natural heritage values.

Photos on the ensuing pages have been provided by eye-witnesses, except where otherwise stated. They relate to the destruction of reed belts and associated coastal transformation within the boundaries of the World Natural and Cultural Heritage of the Ohrid Region.



Above: Gravel disposal in preparation for construction between Struga and Kalishta on 9th March, 2019

Below: The gravel disposal area between Struga and Kalishta. (Credit: Monitoring, Protection and Sustainable use of the Reed Belt of Lake Ohrid, 11th March 2019)



Below: Reed-belt fire between Struga and Kalishta, on 10th March, 2019



Above: The aftermath of reed burning and removal between Struga and Kalishta. (Credit: Monitoring, Protection and Sustainable use of the Reed Belt of Lake Ohrid, 11th March 2019)

Below: Aftermath of fire near Hospital Sv. Razmo on 22nd March, 2019 (Credit: Ohrid SOS)



Above: Reed-belt fire between Struga and Kalishta on 24th March, 2019 (Credit: Monitoring, Protection and Sustainable use of the Reed Belt of Lake Ohrid)

The Mind of Merko

Recent statements and behaviour from Mayor Ramiz Merko of the Municipality of Struga form disturbing indicators for the ecological trajectory of the western side of the Ohrid region, which, as seen in *World Heritage on the Edge II: Engine of Neglect* and the supplementary section on reed destruction contained in this document, is sliding towards wild and arbitrary development, literally preceded by flames. As a core decision-maker, Mayor Merko's contribution is integral to hopes of protection for the world heritage property's Outstanding Universal Value, but, calamitously, he is not engaging with this responsibility.

This was encapsulated via a series of denials, misrepresentations, misunderstandings of serious environmental challenges and combative perspectives that were broadcast to the Republic of Macedonia on 30th March 2019 by 24 News. During a one-hour interview for the television channel, Mayor Merko both denied that any usurpation of the lakeshore was occurring in the Municipality of Struga and claimed that no development activities or construction preparation is in fact taking place. Then, when questioned about the frequent fires and various other interventions along the coast indicating otherwise, he stated that any clearance of shoreline habitats in the municipality is simply "cleaning waste" and "removal of dry reeds"; that the area in question is "left to its own fate being comprised of uncultivated plants"; and that it represents "wasteland" that "scares pedestrians". Related charges of environmental destruction pressed by the State Prosecutor "do not mean that criminal acts have been performed".

From Merko's expressed point of view during the interview, an illegal landfill within his municipality is also not a pollutant as it "doesn't smell" and "waste is not poisonous", while, at the same time, the wastewater system is not overcapacity, but suffering due to a lack of funds for local municipalities⁸. Tellingly, Struga's mayor recognizes that inflows of raw sewage into Lake Ohrid occur because municipalities do not communicate about the subject. This, however, is not unreasonable in his opinion, because care of the lake "is not within their jurisdiction". Meanwhile, in Merko's world, alarms raised both by the media and environmental groups are likely just a campaign to harm the upcoming tourism season in Struga.

As has already been seen, the mayor's documented behaviour in the fifth session of the Commission for Management of the Natural and Cultural Heritage of the Ohrid Region was seemingly an extension of this worldview. Sparking termination of the meeting after a failed attempt to secure permission for a large development complex in the vicinity of the lakeshore was the culmination of a performance during which he delivered various disconcerting insights into his managerial approach to world heritage such as the idea that there is no need for a lake unless it is for hotel construction and offering tourism concessions; and that urban planning documents should not be blocked on the grounds of overloading the sewerage system and pump station (Ministry of Culture, 2018).

Averting even greater deterioration of the Outstanding Universal Value of the Ohrid region in the face of huge development pressures, climate change, eutrophication, pollution, inadequate solid waste disposal and various other threats requires sophisticated stewardship from decision-makers in local municipalities. This, in turn, depends upon awareness of the ways in which human actions can

⁸ President of the management board for Kolektorski Sistem, the company newly established by the government of the Republic of Macedonia to manage the sewerage system for the Ohrid region, will be Mayor Merko's daughter.

negatively impact upon the habitats and ecosystems of Lake Ohrid and its surroundings; a will to avert these impacts; a commitment to the values enshrined in the World Heritage Convention; and an understanding of the ecosystem services that create economic opportunities for the Ohrid region.

Epitomized by Mayor Ramiz Merko, current leadership is an active danger to Outstanding Universal Value.

Conclusions

Events and new information that have come to light during March and April 2019 subsequent to the production of *World Heritage on the Edge II: Engine of Neglect* have added further weight to its troubling evaluation of the current approach to the management of the Natural and Cultural Heritage of the Ohrid Region.

They confirm that the picture of care and action presented to the World Heritage Centre by the State Party of the Republic of Macedonia in its progress reports from February and November 2018 are a falsity. This has been articulated by yet another opaque attempt to legalize illegal structures by the Municipality of Ohrid; the heritage illiteracy of the Mayor of Struga; and the obvious malfunctioning of the Commission for Management of the Natural and Cultural Heritage of the Ohrid Region, which could become a useful and effective control mechanism if it was not blighted by conflict of interest, members' misunderstanding of their roles, a failure to fully research world heritage issues, and erratic implementation of procedures including voting.

Against the backdrop of such chaos, it is no surprise that vital coastal habitats have spent a significant portion of the previous two months in flames.

Recommendations

- Designation of temporary protected areas at sites where reeds have been eradicated since February 11th and all necessary measures to be taken to ensure their revitalisation;
- In line with other countries such as Spain, legal mechanisms to be established that prevent construction at sites of suspected arson for a period of 20 years;
- Anonymous voting for members of the Commission for Management of the Natural and Cultural Heritage of the Ohrid Region to be adopted;
- Establishment and functioning of the new Council for Management of the Natural and Cultural Heritage of the Ohrid Region that will be created under the auspices of Law on the Management of the Cultural and Natural Heritage of the Ohrid Region to take all necessary measures to avoid the anomalies currently evident in the Commission for Management of the Natural and Cultural Heritage of the Ohrid Region at minimum by
 - I. Strict adherence to codified voting practices and other written procedures;
 - II. The provision of standardized written background materials to all members prior to taking on the role, including a concise explanation of the council's function, translations of all reports from the World Heritage Centre, ICOMOS and IUCN related to the Ohrid region, an independent assessment of the current condition of the Ohrid region's Outstanding Universal Value, and an explanation of key concepts such as ecosystem services and eutrophication; and
 - III. The provision of quarterly reports from the Hydrobiological Institute, Public Institution National Park Galichica and bodies relevant to world heritage conservation, which should also contain non-technical summaries of results from the latest scientific and other research in the world heritage site;
- Permission for the proposed building complex at the Municipality of Struga DUP Block 23, UE 8 passed by the Commission for Management of the Natural and Cultural Heritage of the Ohrid Region to be rescinded in line with rulebook provisions for terminated meetings;
- A voluntary fit and proper person test to be designed for mayoral candidates in the Ohrid region so that the electorate is better able to evaluate their world heritage credentials; and
- Revisions to the Law on Legalization of Illegal Buildings from 2015 to be reversed and the entire legal framework for legitimization of non-legal structures to be revised before any future legalization episodes.

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Supplementary Table 1: *Reed destruction incidents, action taken by Ohrid SOS and responses by authorities, February - April 2019*

Date	Event	Location	Action	Response	Note
11 Feb 2019	Reed-belt fire	Struga – Kalishta Struga Municipality	21 Feb call to action submitted to the State Environment Inspector at Municipality of Ohrid, Igor Trajkoski (c.c. others inspectors from the SEI)	22 Feb One response by the State Environment Inspectorate (SEI)	Remarks and additional questions submitted; couple of reminders followed with no response.
15 Feb 2019	Reed-belt fire	Struga – Kalishta Struga Municipality			
21 Feb 2019	Lakeshore construction (see Ohrid SOS, 2019)	Struga – Kalishta, Struga Municipality			
8 Mar 2019	Reed-belt fire	Near Hospital St. Erasmo, old road to Struga Ohrid Municipality	11 Mar call to action submitted to Igor Trajkoski (c.c. others inspectors from the SEI)	No	From 11 Mar to 3 Apr Ohrid SOS sent total of 4 calls to action and reported 8 instances of reed-belt destruction or shore usurpation. Meanwhile, a few reminders and inquiries on the progress were submitted with no single response on the part of SEI. The Apr 5 th response was only received after the initiative issued a warning that further inaction would result in a complaint to the Inspection Council and Administrative Inspectorate.
9 Mar 2019	Reed-belt cutting in the Lake (video)	Struga, Struga Municipality			
9 Mar 2019	Gravel disposal by the shoreline (photos below)	Struga - Kalishta Struga Municipality			
10 Mar 2019	Reed-belt fire (photos below)	Struga – Kalishta Struga Municipality			
22 Mar 2019	Reed-belt fire (video)	Near village of Podmolje, old road to Struga, Ohrid Municipality	24 Mar call to action with pictures by Ohrid SOS of the aftermath submitted	No	
24 Mar 2019	Reed-belt fire (photos & video)	Struga – Kalishta, Struga Municipality	25 Mar call to action submitted		
27 Mar 2019	Reed-belt fire (video)	Near Hospital St. Erasmo, old road to Struga, Ohrid Municipality	3 Apr call to action submitted	5 Apr Response to the email, yet no info given related to actions taken and inspection results on submitted calls to action	
29 Mar 2019	Reed-belt fire (video)	Struga – Kalishta Struga Municipality			