

**REPORT ON THE MISSION TO PLITVICE LAKES NATIONAL PARK, CROATIA  
FROM 17 TO 19 JANUARY 2017**



**May 2017**

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	iii
LIST OF ACRONYMS.....	iv
EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS .....	1
1. BACKGROUND TO THE MISSION .....	4
1.1. Inscription history and World Heritage values .....	4
1.2. Examination of the state of conservation by the World Heritage Committee .....	4
1.3. Justification of the mission.....	5
2. NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY .....	7
3. IDENTIFICATION AND ASSESSMENT OF ISSUES / THREATS.....	9
3.1. Housing, major visitor accommodation and associated infrastructure within the World Heritage property.....	9
3.2. Impacts of tourism and visitors .....	10
3.3. Water extraction; ground and surface water pollution .....	12
3.4. Transportation infrastructure and effects arising from its use.....	13
3.5. Management and institutional factors .....	13
3.6. Changes in traditional ways of life and knowledge system; abandoning of small scale agriculture .....	15
4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY .....	16
5. CONCLUSIONS AND RECOMMENDATIONS.....	18
6. ANNEXES.....	20
Annex 1: Decision 40 COM 7B.95 adopted by the World Heritage Committee at its 40 <sup>th</sup> session (Istanbul, 2016) .....	20
Annex 2: Terms of reference of the mission .....	21
Annex 3: Report on the state of conservation of the Plitvice Lakes National Park examined by the World Heritage Committee at its 40th session (Istanbul, 2016).....	23
Annex 4: Map of the Plitvice Lakes National Park World Heritage property .....	25
Annex 6: List of people met.....	28
Annex 7: Development of accommodation units and overnight stays at Plitvice Lakes National Park.....	31

## **ACKNOWLEDGEMENTS**

The mission team wishes to express its gratitude to the Croatian authorities for their hospitality, support, open and active engagement throughout the mission, and in particular the Ministry of Environment and Energy for organizing the mission. The team wishes to also thank the Ministry of Construction and Physical Planning for their support and guidance.

The mission team was privileged to have been guided and accompanied by officials from the different national institutions throughout its stay in Croatia, including the Ministry of Environment and Energy, the Ministry of Construction and Physical Planning, the Ministry of Tourism, the Croatian Agency for Environment and Nature, Croatian Waters and the Croatian Institute for Spatial Development. The mission team thanks all the experts for their time and effort in sharing the relevant information with the team.

The mission team is extremely grateful to the Public Institution Plitvice Lakes National Park for successfully hosting the mission at the Plitvice Lakes National Park World Heritage property, and for sharing their expertise and experiences.

The mission team also acknowledges and thanks all the researchers, officials and representatives of the different County administrative departments, municipalities, utility companies and tourist boards for the exchanges and information.

The mission team acknowledges with appreciation the valuable discussions with the civil society, including the representatives of the Associations of Croatian Veterans, the NGO Green Action and the individuals who approached the mission during its stay.

Finally, the mission thanks the Regional Bureau for Science and Culture in Europe and its UNESCO Antenna Office in Sarajevo for their valuable assistance to this mission, including translation of background material.

## LIST OF ACRONYMS

CAEN	Croatian Agency for Environment and Nature
CISD	Croatian Institute for Spatial Development
EIA	Environmental Impact Assessment
IUCN	International Union for Conservation of Nature
MCPD	Ministry of Construction and Physical Planning
NGO	Non-governmental organisation
OUV	Outstanding Universal Value
PIPLNP	Public Institution Plitvice Lakes National Park
PLNP	Plitvice Lakes National Park
SEA	Strategic Environmental Assessment
SOUV	Statement of Outstanding Universal Value
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHC	UNESCO World Heritage Centre

## EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

At the request of the World Heritage Committee made at its 40th session (Decision **40 COM 7B.95**; Istanbul, 2016), a joint World Heritage Centre (WHC)/International Union for Conservation of Nature (IUCN) reactive monitoring mission was invited to the Plitvice Lakes National Park World Heritage property (inscribed in 1979 under criteria (vii), (viii) and (ix)) from 17 to 19 January 2017 by the State Party of Croatia. The mission's main objective was to evaluate the threat posed to the property and its Outstanding Universal Value (OUV) by the recent expansion of tourism facilities and to confirm whether the property meets the conditions for inscription on the List of World Heritage in Danger.

Based on available documentation, visit to the property and exchanges with the national authorities and other stakeholders, the mission identified the following key factors impacting on the property and its OUV:

- new and existing housing, major visitor accommodation and associated infrastructure inside the property;
- impacts of tourism and visitors;
- water extraction;
- surface and ground water pollution from waste water and traffic;
- transportation infrastructure and effects arising from its use;
- management and institutional factors; and
- changes in traditional ways of life and knowledge system (abandoning of small scale agriculture).

All of these factors are related to the high attractiveness of the Plitvice Lakes National Park as a tourism destination due to its exceptional landscape and consequent rapid growth of visitor numbers and tourism facilities within the World Heritage property, with associated risks of excessive water usage and water pollution from waste water and traffic. In addition, the visual character of the property is rapidly changing. Taken together, these issues pose a clear and serious threat to the sensitive hydro-ecological system of the Plitvice Lakes National Park (criteria (viii) and (ix)), as well as "exceptional natural beauty and aesthetic importance" and visual integrity of the property (criterion (vii)), all critical for its OUV. Moreover, with transformation of the traditional houses and farms into tourism facilities and abandonment of small scale agriculture, the park is losing not only part of its biodiversity but also important cultural and historical features.

The mission therefore confirms the World Heritage Committee's concern over the significant expansion of tourism facilities within the property, which is already burdened by the great number of visitors. Clearly, there is an urgent need to harmonise the key planning and management documents: mainly, the Spatial Plan for Plitvice Lakes National Park whose implementation may have direct impact on the OUV of the property but is outside the authority of the park management institution, and the Management Plan for the National Park, which is currently outdated, but would enable better visitor management.

In accordance with Decision **40 COM 7B.95**, the State Party should urgently develop a Strategic Environmental Assessment (SEA) of the Spatial Plan for the Plitvice Lakes National Park, including a specific assessment of potential impacts on the OUV and integrity of the property, in line with IUCN's Advice Note on Environmental Assessment, in order to inform the measures required to ensure the adequate protection of the OUV of the property. In the absence of the SEA, the full extent of the existing, potential and cumulative impacts of the implementation of this plan on the property and its OUV would not be fully assessed. Furthermore, given the existence of two separate management regimes affecting the property, one focused on physical planning and the other on conservation and management of the National Park, as well as intensity and multitude of interests in the use of the park, decisive efforts, through appropriate legislative and other adjustments, to improve coordination, cooperation and exchange of information among the various institutions and stakeholders would be required.

At the same time, most threats and challenges to the Plitvice Lakes are well understood by the national authorities, with a stated commitment to respond to the situation. In addition, Croatia has professional institutions and a rigorous legislative framework both for protection of natural heritage and for physical planning. The property is managed by a well-capacitated and competent institution and comprehensive information and scientific data is available on the property. The park seems to also enjoy uncompromised support from local communities. Importantly, the ecological integrity of the property appears to be so far preserved through relatively well maintained water quality and good or improving condition of the surrounding forest ecosystem that protects the sensitive water basin.

These assets, together with the fact that the ecological integrity of the property appears to have been preserved so far, provide an important premise for effective protection and management of the property. Therefore, the mission concludes that the property does not currently meet the requirements for inscription on the List of World Heritage in Danger. However, it notes that immediate measures are needed to ensure that the OUV of the property is not threatened any further from rapid and uncontrolled tourism pressure and to prevent any possible impacts on the OUV and integrity of the property. As an urgent step, the mission recommends that the State Party revise its Action Plan presented to the mission and subsequently also submitted as part of the State Party's 2017 State of Conservation Report for the property, clearly outlining a programme of urgent necessary measures and indicating the timeframe and resources required for their implementation, and submit it to the World Heritage Centre and IUCN for review.

If no substantial progress in the implementation of the World Heritage Committee's requests and of the recommendations of the mission is achieved by 2018 and in view of the current and potential impact from the significant and unsustainable expansion of tourism facilities and excessive number of visitors on the property and its OUV, the mission recommends that the World Heritage Committee consider inscription of the property in the List of World Heritage in Danger at its 42nd session in 2018.

**Recommendation 1:** Strengthen cooperation, coordination and exchange of information among national, regional and local authorities on activities having an actual or potential impact on the property and its OUV and ensure participation of the Plitvice Lakes National Park management authority in related decision-making processes through the development of appropriate mechanisms.

**Recommendation 2:** Develop, in line with IUCN's Advice Note on Environmental Assessment, a Strategic Environmental Assessment (SEA) of the Spatial Plan for the Plitvice Lakes National Park based on the requirements under the World Heritage Convention, including a specific assessment of potential impacts on the Outstanding Universal Value (OUV) and integrity of the property in order to inform the measures required to adequately protect its OUV, and subsequently revise the Spatial Plan as required.

**Recommendation 3:** Based on the results of the SEA, complete the visitor management plan as part of the Management Plan for the property, to mitigate the impacts of tourism on the property and its OUV, particularly within the most sensitive areas of the lake system.

**Recommendation 4:** Maintain rigorous and permanent water monitoring within the property's watershed, strengthen the overall ecological monitoring programme of the National Park, effectively enforce regulation on water use and waste water management, and rehabilitate, reconstruct and extend, as appropriate, water infrastructure within the property, while carrying out emergency improvement measures as recommended by Croatian Waters, ensuring strictest environmental criteria.

**Recommendation 5:** As part of the process to develop the new Management Plan, conduct a comprehensive traffic study as foreseen in the Spatial Plan, to reduce the traffic pressure within the property and to mitigate its impacts on the property and its OUV.

**Recommendation 6:** Finalize the new Management Plan for the property through an inclusive and participatory approach, incorporating the results of the SEA, the traffic study, the visitor management plan and the relevant scientific studies, ensuring that the relevant national legislation and the overall planning and management framework is fully consistent with the protection of the OUV and the provisions of the World Heritage Convention.

**Recommendation 7:** Consider establishing a buffer zone around the property so as to avoid any adverse impact on the property and its OUV from developments in its surroundings.

**Recommendation 8:** Take measures to encourage local and environmentally sensitive agriculture, and consider establishing a local brand name for certified products and services provided by local people.

**Recommendation 9:** In accordance with Decision **40 COM 7B.95**, urgently complete the administrative assessment underway to evaluate the issuing of construction permits within the property and the overall implementation of the Spatial Plan, so as to propose, as appropriate, potential amendments to the procedures and legislative framework.

**Recommendation 10:** Taking into account the mission recommendations, finalize the Action Plan whose outline was presented to the mission and subsequently submitted as part of the State Party's 2017 State of Conservation report of the property, clearly defining a programme of urgent necessary measures and indicating the timeframe and resources required for their implementation and submit it to the World Heritage Centre and IUCN for review.

## 1. BACKGROUND TO THE MISSION

### 1.1. Inscription history and World Heritage values

The Plitvice Lakes National Park (PLNP) was inscribed on the World Heritage List in 1979 under natural criteria (ii) and (iii), with a total area of 19,462 ha. Due to changes introduced to the inscription criteria by the World Heritage Committee (the Committee), this currently corresponds to criteria (vii), (viii) and (ix).<sup>1</sup> The State Party is in the process to finalise a retrospective Statement of Outstanding Universal Value (SOUV)<sup>2</sup>, a key reference for effective protection and management of the property, which is to be submitted to the World Heritage Centre for Committee's approval.

At the time of inscription, criterion (ii) identified outstanding examples of on-going ecological, biological and geological processes. The continuing formation of travertine, which creates the tufa barriers forming the lakes at Plitvice, was cited as outstanding examples of such processes. Criterion (iii) speaks of superlative natural phenomena or areas of exceptional natural beauty which was also seen to be met at Plitvice Lakes.<sup>3</sup>

In 2000, the World Heritage Committee approved the extension of Plitvice Lakes National Park by 10,020 ha. After the extension, the total area of the property is 29,630.77<sup>4</sup> ha. Map of the property is enclosed in Annex 4. In its technical evaluation of the extension, IUCN concluded that the extension would strengthen the existing site by preventing deleterious developments in the surrounding catchment area, enhance the integrity of the site by extending catchment protection crucial to water quality and bring in forested areas including unlogged forest. It also noted that the regulations provide that tourist facilities, which might have impaired water quality, cannot be constructed in the immediate catchment area, and prohibit heavy traffic use of the national highway passing through the park, thus reducing disturbance and pollution threats from this source. Both the nomination dossier and the IUCN reviewers expressed concern about deteriorating water quality in the lakes, and notified the need to include provisions for the monitoring of water quality and action to enhance it in the management plan of the property.

### 1.2. Examination of the state of conservation by the World Heritage Committee

As requested by the authorities of Croatia, the property was inscribed on the List of World Heritage in Danger in 1992 as the result of potential and ascertained threats of armed conflicts<sup>5</sup> that had been onset in the region in 1991. Missions to the site were carried out in 1992 and 1993.

The mission of a rapid assessment team to the property in May 1996 confirmed that the World Heritage values had not been adversely impacted by the armed conflict. However, essentially all park facilities had been destroyed, infrastructure had been seriously deteriorated and the park staff had been displaced from the property until 1995. The mission provided a number of recommendations to improve the state of conservation and management effectiveness of the property. Many recommendations remain valid to date, particularly those related to the need for efficient visitor management and guidance and education programmes, as well as those related to the location of park, visitor and commercial facilities which should be kept away from the property's primary resources. The World Heritage Committee took note of these recommendations at its 20th session in 1996 and decided to maintain the property on the List of World Heritage in Danger due to damages to the Park infrastructure and possible negative impacts caused by visitors.

---

<sup>1</sup> Decision **30 COM 8D.1**. This revision applied to all properties inscribed for both geological and ecological values under natural criterion N (ii), and for which natural criterion (i) was added in accordance with the revised *Operational Guidelines* (2005).

<sup>2</sup> Paragraph 155 of the *Operational Guidelines for the Implementation of the World Heritage Convention* (*Operational Guidelines*), <http://whc.unesco.org/en/guidelines/>

<sup>3</sup> IUCN technical evaluation for the extension of the property, 2000

<sup>4</sup> As recognized through the boundary clarification noted by the World Heritage Committee in its Decision **40 COM 8D**.

<sup>5</sup> For the purpose of this report, the term "armed conflict" is used, in accordance with the wording used in the Decisions of the World Heritage Committee.



By the following year, the park management authority had undertaken measures to repair damage to the Park's infrastructure. Subsequently, the Committee decided to remove the property from the List of World Heritage in Danger at its 21st session in 1997. In 1998, the 22nd session of the Committee commended the authorities for their continuing efforts to enhance the protection of the property. As the border of the National Park had been expanded in 1997 to encompass the whole catchment area, the Committee urged the State Party to nominate the extension of the National Park also within the World Heritage Convention. In 2000, the proposal for extension was then received and approved by the Committee.

In 2016, the Committee examined the state of conservation of the property again, following receipt of third party information which raised concerns over potential implications of the "Physical Plans for areas with specific features of the Plitvice Lakes National Park" (hereafter referred to as the Spatial Plan) for the protection of the property's Outstanding Universal Value (OUV).

In its Decision **40 COM 7B.95**, adopted at its 40th session (Istanbul, 2016), the World Heritage Committee noted with concern the significant expansion of tourism facilities within the property and considered that it represented a potential danger to the property's Outstanding Universal Value (OUV). The Committee also urged the State Party to undertake the proposed evaluation of procedures and competences on issuing of construction permits and to ensure that no new permits are issued until this process has been completed and proposed developments are confirmed to not have a negative impact on the OUV of the property. The Committee further requested the State Party to ensure that the management authority of the property is included in the future decision-making processes regarding permissions for any development within the property, as well as to develop a Strategic Environmental Assessment (SEA) of the Spatial Plan, including a specific assessment of potential impacts on the OUV and integrity of the property, in line with IUCN's Advice Note on Environmental Assessment<sup>6</sup>. The Decision and the report on the state of conservation of the property as presented to the World Heritage Committee in 2016 are enclosed (Annex 1 and 3).

### **1.3. Justification of the mission**

In its Decision **40 COM 7B.95**, adopted at its 40th session (Istanbul, 2016), the Committee requested the State Party to invite a joint WHC/IUCN Reactive Monitoring mission to evaluate the threat posed to the property's OUV by the recent expansion of tourism facilities within the PLNP. The terms of reference of the mission are enclosed (Annex 2).

The mission was specifically tasked to:

1. Analyse the planning situation for all tourism development projects in the property and its vicinity, whether proposed, approved or contracted;
2. Analyse the impact or potential impact of these tourism development projects on OUV, given the sensitivity of the property's unique hydrological regime and geological features. In particular, the mission should review whether the property meets the conditions for inscription on the List of World Heritage in Danger, in line with Paragraph 180 of the *Operational Guidelines*;
3. Review progress achieved by the State Party in the implementation of the Committee's decision **40 COM 7B.95**.

The mission was conducted from 17 to 19 January 2017 by Ms Susanna Kari as the UNESCO World Heritage Centre's representative and Mr Pierre Galland representing IUCN. The mission was accompanied by representatives from key Ministries and other institutions connected with management of the property. The mission visited the property and met there with staff members of the park management authority, researchers and representatives of the civil society, local communities, regional/local administrative departments, municipalities, (water) utility companies,

---

<sup>6</sup> IUCN World Heritage advice note on Environmental Assessment, November 2013, [https://www.iucn.org/sites/dev/files/import/downloads/iucn\\_advice\\_note\\_environmental\\_assessment\\_18\\_11\\_13\\_iucn\\_template.pdf](https://www.iucn.org/sites/dev/files/import/downloads/iucn_advice_note_environmental_assessment_18_11_13_iucn_template.pdf)

and tourist boards. The mission programme and list of people met are also enclosed (Annex 5 and 6).

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

Located in the central part of the Dinaric karst region, the area of Plitvice Lakes had been remarked for its spectacular formations of lakes and waterfalls embedded in dense and wild forest already in 1777. A society for preserving the lake beauty and developing visitor infrastructures was established in 1893. The adverse impacts of tufa excavations and sawmills led to a first request for the establishment of a National Park in 1916, which was eventually proclaimed in 1949 as the first national park in Croatia. The boundaries of the national park were extended in 1997.

Governance of the PLNP is linked with several ministries and government specialised institutions. The Ministry of Environment and Energy (MEE), through its Directorate for Nature Protection, is responsible for implementing the Nature Protection Act and for requirements under the EU Ecological Network and the international biodiversity-related Conventions. The Ministry functions as the focal point on natural World Heritage (cultural World Heritage being governed by the Ministry of Culture). It works in close collaboration with the Croatian Agency for Environment and Nature (CAEN), which performs expertise-based tasks pertaining to nature protection in the Republic of Croatia. MEE is also responsible for water policy in Croatia, with Croatian Waters (Hrvatske vode) acting as the legal entity for water management. Croatian Waters is responsible for issuing water rights conditions, certificates and permits in accordance with the Croatian Water Act, as well as for monitoring the quality of surface and groundwater.

The Ministry of Construction and Physical Planning (MCP) coordinates the preparation and implementation of physical plans, assisted by the Croatian Institute for Spatial Development (CISD). The physical plans for areas with specific features, national parks and nature parks are approved by the Croatian Parliament. The "Physical Plans for areas with specific features of the Plitvice Lakes National Park" was adopted by the Parliament in 2014, replacing a previous spatial plan from 1986. The allocation of land for different purposes within the plan is twofold: first, an allocation based on categories of settlements; and second, an allocation based on conservation zones. The County physical planning departments approve the building permits, and the County building inspectors carry out inspectional supervision of implementation of these permits.

In addition, the Ministry of Tourism and the Ministry of Culture administer programmes and initiatives of relevance to the property. Within 4 administrative municipalities, a total of 21 settlements are entirely or partially located inside the property, and their population is estimated at 1,500. Many of the inhabitants are employed by the park management authority; they have the right to use land for traditional agriculture within the park and benefit from providing private accommodation to visitors.

The management of the property is undertaken by the Public Institution Plitvice Lakes National Park (PIPLNP), established as an independent legal entity by the Croatian Government. The Public Institution's bodies are the Governing Board, Director General and Conservation Manager, who administer 7 different organisational units. PIPLNP owns three hotels inside the property, and one hotel, one restaurant and two campsites outside its boundaries. These facilities were mainly constructed in the early decades of the park, and rehabilitated after the armed conflict. The park being crucial to local, regional and even national economy, it employs close to 700 year-round employees and around 400 seasonal workers. The institution is self-financing through its own revenues from park entrance fees and through services it provides.

The property is managed on the basis of a 10-year *Plitvice Lakes National Park Management Plan*<sup>7</sup> adopted in 2007 and developed in accordance with the Nature Protection Act. The plan identifies in detail the biological, geomorphological, cultural, socio-economic and tourism resources of the park, based on which the objectives and measures for conservation of natural and cultural heritage of the property have been defined. As the plan is expiring, the development of a new plan has started in 2017.

---

<sup>7</sup> Plitvice Lakes National Park Management Plan, 2007, <http://www.np-plitvicka-jezera.hr/en/park-management/management-plan/>

In addition to a number of specific legislation on conservation of specific species, ecosystems, cultural heritage or tourism, the main legislation relevant for the protection of PLNP in the Republic of Croatia is:

- Act on Proclamation of Plitvice Lakes National Park (Official Gazette no. 29/49, 34/65, 13/97) – establishment of the PLNP and its extension (IUCN category II);
- Strategy and Action Plan for the Protection of Biological and Landscape Diversity (Official Gazette no. 143/08) – basic nature protection document that systematically defines and plans nature protection activities in the Republic of Croatia;
- Nature Protection Act (Official Gazette no. 80/13) – ensures specific protection for particularly valuable organic and inorganic components of nature, defines the categories of protected areas, management methods and documents;
- Regulation on the Ecological Network (Official Gazette no. 124/13, 105/15);
- Building Act, Physical Planning Act, Building Inspection Act (Official Gazette no. 153/13);
- Adoption of the Physical Plan for the Plitvice Lakes National Park (Official Gazette no. 49/2014);
- Statute of Public Institution of Plitvice Lakes National Park (2014).

The territory of the Plitvice Lakes National Park is part of the Ecological Network that was proclaimed by the Republic of Croatia in 2013 through the Regulation on the ecological network (OG 124/13 and 105/15). It is included in the European Union ecological network Natura 2000, and consists of conservation areas significant for birds (SPAs) and conservation areas significant for species and habitat types (SACs). The IUCN technical evaluation for the extension of the property in 2000 noted the potential of the site to be also nominated under the Ramsar Convention on Wetlands, but to date this has not been pursued.

**Table 1.** Key management documents of the Plitvice Lakes National Park. Source: Adapted from original by the Ministry of Environment and Energy (MEE) / Directorate for Nature Protection, 2017

<b>Document</b>	<b>Physical plans for areas with special characteristics</b> <i>Physical Plans for areas with specific features of the Plitvice Lakes National Park (OG no. 49/2014)</i>	<b>Ordinance on protection and conservation</b>	<b>Protected Area Management Plan</b> (10 years) <i>Management Plan for Plitvice Lakes National Park (2007)</i>	<b>Annual programmes for the protection, maintenance, preservation, promotion and use of a protected area</b>
<b>Application</b>	National and Nature Parks	National and Nature Parks, Strict and Special Reserves	All Protected Area categories	All Protected Area categories
<b>Purpose</b>	Allocates certain areas within the parks for specific uses and defines terms of use	Defines conservation measures and terms of nature protection in the protected area	Determines conservation goals and objectives and management activities necessary to achieve those goals	Plans management activities into more detail – in line with the management plan
<b>Type</b>	Spatial planning	Rules and regulation	Management - strategic level	Management - implementation level
<b>Principal body</b>	Approved by Croatian Parliament, implementation under the jurisdiction of Ministry of Construction and Physical Planning MCPP, coordinated by CISD	Minister of Environment and Energy (MEE)	Protected area Management Authority (PIPLNP)	Protected area Management Authority (PIPLNP)

### 3. IDENTIFICATION AND ASSESSMENT OF ISSUES / THREATS

#### 3.1. Housing, major visitor accommodation and associated infrastructure within the World Heritage property

Due to an increasing demand for accommodation facilities and opportunities for profitable business, the property is experiencing a rapid expansion of developments, with many former farmhouses and other buildings transformed and extended into tourism facilities such as private lodges, dramatically changing the landscape and the visual character of the property. The overnight stays and accommodation capacity within the park has remarkably increased over the past few years (Annex 7). This has a number of environmental and management implications, including direct impacts from visitors with difficulties in managing their dispersal, increase of physical disturbance from construction work, increase of water demand especially in dryer summer periods, increase of waste water, increase of motor traffic and requirements for better infrastructure; these impacts are described later in the report.

Currently, the construction permits are issued on the basis of the Spatial Plan approved in 2014. Although it is argued that the plan includes some improvements to the previous plan that had been in force since 1986, many expert advices provided by CAEN and PIPLNP regarding the allocation of settlements into specific categories and provisions for constructions were not reflected in the approved plan. These recommendations had been informed by aims of the protected area and based on scientific data, including the results of an extensive hydrogeological research completed in 2010, which had among other things defined the hydrogeological model of the Plitvice Lakes and carried out a comprehensive risk assessment analysis.<sup>8</sup>

Although each proposal is being carefully assessed against relevant legislation, the rapid increase in the number of issued permits is noticeable. According to data available to the mission, some 20 permits had been issued between 2007 and 2014. Since the adoption of the new plan, 35 new permits had been issued by December 2016, over half of them only within the last three months. During the past few years, a considerable number of reports of suspected illegal construction, in majority by PIPLNP, have also been submitted to the State construction inspectors.

The buildings are said to respect traditional construction methods and architecture, but many are distinctively different from and considerably bigger than the existing houses in the villages, which possess important cultural and historical features. The mission notes with concern that the rapid and accelerating construction of accommodation and other visitor facilities will inevitably disturb the unique “exceptional natural beauty and aesthetic importance” and visual integrity of the property, having a negative impact on the OUV under criterion (vii). This applies particularly to areas where previous constructions had been either forbidden or limited by the old Spatial Plan. Overall, this significant and unsustainable expansion of tourism facilities within the property appears to conflict with the justified attempt of the Spatial Plan to support local small-scale entrepreneurship, and to ensure continued opportunities for local inhabitants to stay in the region.

The majority of the current construction pressure stems mainly from private tourism developments and is located in ecologically and geologically sensitive areas by the immediate vicinity to the lake system. Data on the increasing accommodation capacity provides an indication on the locations (Annex 7), which includes the Plitvica Selo settlement located in one of the most sensitive areas at the watershed (Plitvice creek, Great waterfall), outside the public water infrastructure.

As confirmed by the hydrogeological study<sup>9</sup> and the concern raised by relevant environmental authorities, the mission also notes with concern that the physical disturbance due to construction and heavy traffic, growing water demand due to an increasing number of visitors and facilities, consequently increasing waste water disposal, and a high risk of water pollution pose serious threats to the sensitive hydrological system of the property and its values associated with criteria

---

<sup>8</sup> Mountainous lakes: sustainable utilization of water in the pilot area Plitvice Lakes. Final Report. 2010; Biondić B., Biondić R. and Meaški H. The conceptual hydrogeological model of the Plitvice Lakes. *Geologia Croatica*, Vol.63 No.2, 2010.

<sup>9</sup> Ibid.

(viii) and (ix), namely the ongoing sensitive process of tufa formation through geological and biochemical processes, and the ecological integrity of the property. As the Spatial Plan that directs the approval of construction permits was not subject to a Strategic Environmental Assessment (SEA), the full extent of the potential cumulative impacts of the implementation of this plan on the property's OUV and integrity are not known.

While SEAs are nowadays a legal obligation to physical plans for areas with special characteristics, no SEA had been conducted for the Spatial Plan of PLNP as it was initiated before the legal obligation for SEAs came into force. However, the World Heritage Committee requested the State Party to develop such a SEA in its Decision **40 COM 7B.95**. The findings of the mission fully confirm that an SEA is necessary in order to inform the measures required to ensure the adequate protection of the OUV of the property, as noted in the World Heritage Committee's Decision. The results of a SEA would not only be critical in guiding a possible revision of the Spatial Plan, but also in guiding the development of the property's Management Plan, including the visitor management plan currently underway.

In addition, there is a need to revisit the procedures regarding coordination, cooperation and exchange of information among the various authorities on all decisions impacting the property. Similarly, there is evident disagreement at the local level on the needed management responses. National authorities are therefore encouraged to foster exchange and cooperation to facilitate a better understanding and to reconcile the multiple positions and interests.

**Recommendation 1:** Strengthen cooperation, coordination and exchange of information among national, regional and local authorities on activities having an actual or potential impact on the property and its OUV and ensure participation of the Plitvice Lakes National Park management authority in related decision-making processes through the development of appropriate mechanisms.

**Recommendation 2:** Develop, in line with IUCN's Advice Note on Environmental Assessment, a Strategic Environmental Assessment (SEA) of the Spatial Plan for the Plitvice Lakes National Park based on the requirements under the World Heritage Convention, including a specific assessment of potential impacts on the Outstanding Universal Value (OUV) and integrity of the property in order to inform the measures required to adequately protect its OUV, and subsequently revise the Spatial Plan as required.

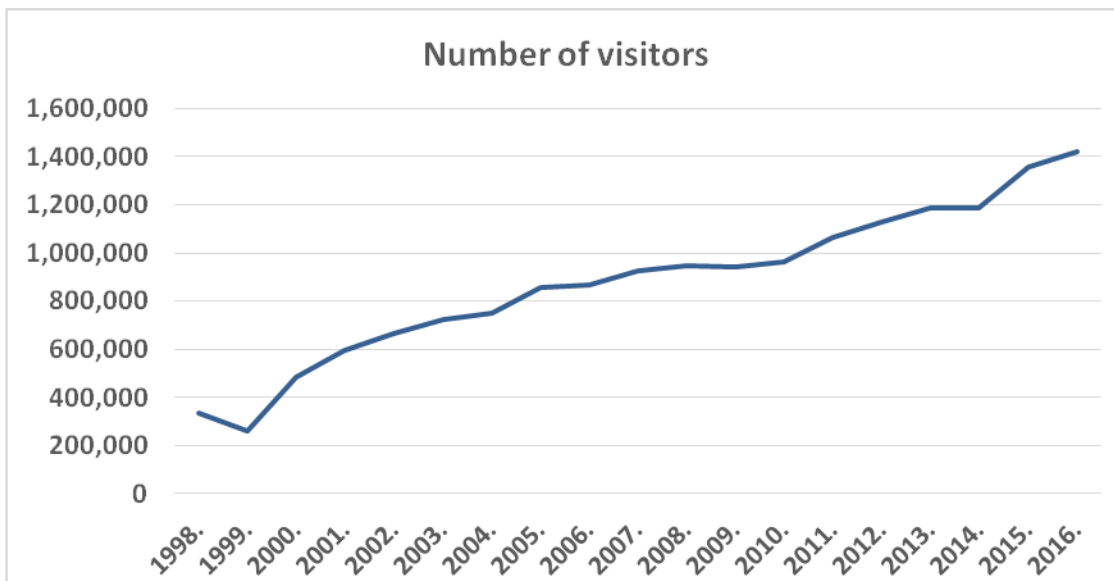
### 3.2. Impacts of tourism and visitors

The development of current visitor system began at the end of the 19th century and was completed during the first part of the 20th century. With minor adjustments, the trails, including the wooden boardwalks at the lakeside and several small bridges, adhere to those originally built in 1960s. Throughout its history, the park has struggled to bring the enormous interest it enjoys as a tourism destination in line with its conservation objectives. At the same time, regardless of recommendations provided by previous missions to the property, the most sensitive areas of the property by the lake system continue to accommodate the main touristic activities and structures, such as hotels, guest receptions, parking for visitors and restaurant services. Many new tourism developments are also located in this sensitive area, already pressured by rising visitor numbers.

The situation has also led to recorded safety incidents and damage to the values of the park when crowding of visitors causes people to leave paths and thus affect the sensitive ecosystem. In addition, a previous attempt to construct new trails in the Korana canyon led to irreversible destruction of tufa formations – key attributes of the property – thus having a direct negative impact on the OUV of the property. The damage was well documented by the Croatian Geological Institute in 2011; the construction was subsequently stopped and the trail closed. Since then, some additional new trails have been opened as compensation and in an attempt to somewhat disperse the flow of visitors.

The overall number of visitors has been growing steadily since the end of the war and is now close to 1.5 million per year (Figure 1). Most people come to PLNP to visit only the lake area. The highest congestion of visitors appears during the summer months, and at midday, with astounding numbers of over 10,000 visitors a day. Many tourists wish to stay several days, contributing to the rapid increase of tourism facilities, while groups coming especially from the coast usually stay only for a few hours. As the mission took place in January, boats and trains to transport the visitors were not operating and mass tourism could not be directly experienced, though some trails remain open all year. However, the exchanges with national authorities and available data indicate that the current system has reached its carrying capacity, with excessive number of visitors and insufficient visitor management leading to unwanted activities and difficulties in managing water and wastewater, all in all hampering efforts to effectively protect the property and its OUV.

**Figure A :** Plitvice Lakes National Park – Number of visitors / year from 1996 to 2016 based on the sold entrance tickets. Source: Data from PIPLNP, 2017



The PIPLNP has initiated a process to develop a visitor management plan for the property, which builds on an assessment made in 2014<sup>10</sup>, and attempts to assess the carrying capacity of the property. The preparation of the plan provides a clear opportunity to assess the property’s carrying capacity and to consider a strategic shift from quantity to quality, while at the same time ensuring clearly defined provisions on development of quality and certified local goods and services. The tourism strategy should further consider the regional context of the park and explore the possibility to release some of the visitor pressure by transferring it to other national and nature parks in Croatia, some of them located close by. The mission considers that this document should not be a stand-alone, but should be integrated into the Management Plan which is also under preparation. In developing the plan, the linkages of tourism and visitors to all other factors impacting the property, including those that have been identified in this report, should be clearly assessed. Moreover, in developing the plan, the authorities are encouraged to consult the tools and guidance provided by the UNESCO World Heritage and Sustainable Tourism Programme.<sup>11</sup>

Currently, there is disagreement among PIPLNP and some local stakeholders on the carrying capacity of the property and the sustainability of the current visitor management system, including transportation infrastructures, trails and entrances to be provided. These divergences of opinion would need to be sorted out before adopting the new management instruments. Although an assessment of the impacts on visitor experience and safety was beyond the scope of this mission,

<sup>10</sup> S.McCool and P.Eagles, 2014: An Assessment of Visitor and Tourism Management in Plitvice Lakes National Park and World Heritage Site, Croatia

<sup>11</sup> <http://whc.unesco.org/en/tourism/>

it is clear that success in safeguarding the property's OUV will also determine the future of the World Heritage property as a tourism destination.

**Recommendation 3:** Based on the results of the SEA, complete the visitor management plan as part of the Management Plan for the property, to mitigate the impacts of tourism on the property and its OUV, particularly within the most sensitive areas of the lake system.

### 3.3. Water extraction; ground and surface water pollution

Public water infrastructure for water supply and waste water collection are partially in place within the territory of the property. To be consistent with the current legislation, the ownership and management responsibility of water infrastructure is currently being transferred from PIPLNP to a public water service provider. Water supply for the majority of the park area and the municipalities of Rakovica and Plitvička Jezera continue to rely completely on uptake from Lake Kozjak, one of the two largest lakes in the heart of the property. These two lakes ensure the maintenance of the high water quality of the whole system, but the hydrogeological research indicates the high vulnerability of the system to geological and hydrological disturbances.<sup>12</sup>

As indicated by the previous missions to the property, the hydrogeological study and data collected by PIPLNP, different stages of both deterioration and improvement of water quality of the lake system can be detected both seasonally and in the long term. Currently, despite the high number of visitors and the growth of facilities within the property, the water quality is reported to be still good with very little contamination. Similarly, the water uptake from the lake doesn't appear to have yet a dramatic impact on the water regime, though a general decrease of water flow in summer had been observed and the long-term sustainability of the water uptake has been seriously questioned. Furthermore, currently it appears difficult to separate the effects of direct uptake from the impacts of natural variation, as well as those of climate change. Detailed data on the evolution of volumes of water being drawn directly from the property's water supply system, divided to four main sources, was not available to the mission, but would be valuable for future planning and assessing the influence of increasing water demand on discharge and the lake system as a whole. Leaking of water supply infrastructure is also reported, while information on efforts to improve water use efficiency was not available.

The previous renovation of the waste water system contributed considerably to improving the quality of the water in the main lakes, however, the infrastructure is getting outdated again and it should probably be extended to some of the settlements which are not connected yet. No wastewater treatment plant exists and untreated wastewater is discharged into the karst bedrock within the NPPL boundary. This being located downstream of the property, there has been no indication of pollution in lakes and rivers within the property so far. Nonetheless, this is not compatible with a modern National Park management. On the other hand, a very comprehensive water monitoring system is in place. In addition to statutory monitoring of water quality carried out by Croatian Waters, PIPLNP is currently improving its own water monitoring programme.

Croatian Waters has suggested a number of emergency improvement measures, including a temporary wastewater treatment plant, while waiting for plans for a major EU-supported project to advance. The project would rehabilitate and reconstruct water structures within the PLNP, including collection and treatment of wastewater within two municipalities, reconstruction of the water supply network and relocation of the water supply outside the property by 2022. The above project holds clear promise of solving major issues related to water use and pollution, hence addressing critical and direct threats to the OUV of the property. Simultaneously, extension of the sewage system in order to connect settlements into the public waste water system should be considered where feasible. Limited information was available to the mission on the feasibility study and environmental impact assessment underway for this project, which should specifically consider the potential impacts of the project on the OUV of the property. The mission also considers that the

---

<sup>12</sup> Biondić et al. 2010.



upgrade of the (water) infrastructure should not be funded through the park's resources, but should be considered as a national priority and should therefore receive the necessary funding from state budget.

As tourism accounts for the major share of the water uptake and waste water, harmonising the visitor management system, tourism infrastructure and water conservation would be required. As a particular example, new swimming pools are not allowed to be constructed within the property, but authorities disagreed on claims of irregularities in approving new permits. Undoubtedly, usage of swimming pools is likely to increase the water footprint of the property, with particular concern over the potential impacts of chemical leakage to the environment.

**Recommendation 4:** Maintain rigorous and permanent water monitoring within the property's watershed, strengthen the overall ecological monitoring programme of the National Park, effectively enforce regulation on water use and waste water management, and rehabilitate, reconstruct and extend, as appropriate, water infrastructure within the property, while carrying out emergency improvement measures as recommended by Croatian Waters, ensuring strictest environmental criteria.

### 3.4. Transportation infrastructure and effects arising from its use

Traffic has been a persistent challenge for the PLNP for several decades, both as a source of pollution and through increasing difficulties to manage congestion of tourism related traffic. The construction of the freeway from Zagreb to the coast relatively far from the property has reduced the transit traffic and pollution from this source, however, the park is still crossed by a major highway. The location of park entrances inside the park close to the sensitive lakes and rivers has led to building of extensive parking facilities inside the property. Yet, they are considered insufficient to meet the increasing need, particularly during the high season. Similarly, pressure to reopen (or to keep open) secondary roads and to upgrade road infrastructure within the property for easier access for tourists is reported to be high. Any road improvement within the property or in its surroundings, or any lifting of current restrictions, would likely generate more traffic and further disperse the tourists and the tourism facilities.

Given the relatively small size of the property and the risks associated with traffic to the water basin, the mission reaffirms the recommendation of the 1996 mission to consider relocating the park entrances and related facilities at the periphery or outside of the park, and enforce restrictions on tourism related traffic inside the property (especially private cars), eventually considering banning such traffic inside the property, while expanding the system for public visitor transportation. Some provisions for bypass roads and control of traffic within the property, including the development of a Traffic Study, are set out in the Spatial Plan but their status is currently unclear. This study could help address the threats related to traffic and traffic infrastructure on the property and inform the revision of the Spatial Plan and the Management Plan, including the visitor management plan therein, as appropriate.

**Recommendation 5:** As part of the process to develop the new Management Plan, conduct a comprehensive traffic study as foreseen in the Spatial Plan, to reduce the traffic pressure within the property and to mitigate its impacts on the property and its OUV.

### 3.5. Management and institutional factors

PIPLNP is a competent and well-resourced organisation, with clear understanding on the requirements for effective management and protection of the property. It implements a comprehensive ecological monitoring programme and cooperates with various research institutions. These efforts are highly commendable, and a good basis for many conservation measures. In addition, PIPLNP should consider increasing its cooperation with schools and universities, such as by providing opportunities for field research and courses, and strengthen

environmental education programmes for children and youth, which should be among the core functions of World Heritage properties.

The park covers its own operational costs but this might be an incentive for the Government to reduce its financial commitments. Given the importance of the park for regional economy and the overall responsibility over the protection of the property by the State Party, the Central Government should invest in the various infrastructure projects within the property and its surroundings for which there is a demonstrated need.

Key sectors related to construction and physical planning, water management and transportation infrastructure are governed by other authorities and separate planning and decision-making processes. Currently, PIPLNP appears to be excluded from these processes. Given the potential negative impacts these sectors might have on the OUV and the integrity of the property and insufficiency of exchange and cooperation among the various institutions, the situation is clearly unsustainable and impedes management effectiveness.

A 10-year Management Plan for the property was accepted in 2007, and a new plan is currently under preparation. The drafting of this key document should be the occasion to integrate the results of the numerous and comprehensive studies that have been realized and presented during the mission. It should also include a (> 20 years) vision for the Park, followed by mid-term sectorial strategies, in particular regarding visitor capacity and tourism management. As previously mentioned, a global Strategic Environmental Assessment (SEA) with a strong social component should be made in order to help selecting strategic options and estimating the overall capacity in different sectors, considering the potential environmental impacts and their consequences on the OUV. Within such a process, there is also a need to review the planning and environmental protection legislation at national and local levels to ensure that World Heritage site inscription and World Heritage Management Plans are fully recognised in such legislation in order to assure future protection and management of the OUV of the property and other Croatian World Heritage properties.

Discussions are ongoing regarding a potential privatization of some of the services managed and owned by the park. While a separate "commercial" entity within the Public Institution might help to clearly relate the sources of financing with their direct costs, full privatization of some of the hotels, restaurants and souvenir shops would present a very high risk of commercial derive at the expense of conservation.

The property has currently no buffer zone, but within its response on the Second Cycle of Periodic Reporting, the State Party indicates that there is a need for such a zone. The provisions for buffer zones in the Croatian legislation are not known to the mission. Although the entire watershed is already included in the property following its extension in 2000, the territorial development in and around the park, in particular the increase of motor traffic and overnight capacities and their connected environmental consequences make it necessary to consider establishing a buffer zone in which construction and infrastructures would be planned and organised in a way that prevents any adverse impact on the property and its OUV.

**Recommendation 6:** Finalize the new Management Plan for the property through an inclusive and participatory approach, incorporating the results of the SEA, the traffic study, the visitor management plan and the relevant scientific studies, ensuring that the relevant national legislation and the overall planning and management framework is fully consistent with the protection of the OUV and the provisions of the World Heritage Convention.

**Recommendation 7:** Consider establishing a buffer zone around the property so as to avoid any adverse impact on the property and its OUV from developments in its surroundings.

### **3.6. Changes in traditional ways of life and knowledge system; abandoning of small scale agriculture**

The abandoning of farmlands and the decrease in cattle grazing have continued, resulting in forest expansion which has been positive for specific animal species, such as some bird species and large mammals. However, the loss of meadows and grazing areas is a threat to the overall biodiversity and the changes in traditional ways of life risk the area losing the traditional knowledge systems and unique cultural character of the property. The phenomenon is closely linked to the financial attractiveness of selling land for other purposes and transforming buildings into tourism facilities. A serious effort should be pursued to limit the transformation of the traditional farms and houses, but also to provide better incentives for local and sustainable agriculture, for example by developing a certified brand for local products and services. Similarly, given the old history of settlements inside the park, it is clear that opportunities for community use and local small scale tourism activities should be encouraged, provided that it does not threaten the values or integrity of the park.

In order to promote small scale farming and to prevent land acquisition by private investors interested in developing tourism infrastructure, the Park administration has developed a land acquisition policy which deserves to be further extended in order to decrease pressure from further developments.

**Recommendation 8:** Take measures to encourage local and environmentally sensitive agriculture, and consider establishing a local brand name for certified products and services provided by local people.

#### 4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

The ecological integrity of the property appears to be so far preserved through relatively well maintained water quality and good or improving condition of the surrounding forest ecosystem that protects the sensitive water basin. The apparent stability of the large predators' population is also a very positive sign.

However, the values of the property have already been impacted by excessive number of visitors and significant expansion of tourism facilities within the property, and the risk of rapid ecological and visual deterioration is high. To date, many of these impacts have unexpectedly taken place outside the most spectacular and visited area in the heart of the property with waterfalls, tufa barriers and cliffs – an essential manifestation of the property's heritage values – or these impacts are mainly not visible from this area. However, despite the recommendations of the previous mission to the property, the most sensitive areas of the property continue to accommodate the main touristic structures and activities, hotels, guest receptions, parking for visitors and restaurant services, and pressure from further tourism developments and rising visitor numbers in these locations is increasingly high.

In 2011, construction of new trails in a small area now closed from visitors was reported to have permanently damaged some tufa barriers, which are the most important attribute of the property. An accelerating construction of tourism facilities rapidly changes the visual character and natural beauty of the property, which inevitably has a cumulative impact on the property's values associated with criteria (vii) and its visual integrity. In addition, the physical disturbance due to construction and heavy traffic, risk of excessive water use by the increasing number of visitors and tourism facilities, and water pollution from waste water and traffic pose potential serious threats to this sensitive hydrological system and its values associated with criteria (viii) and (ix), namely the ongoing process of tufa formation through geological and biochemical processes, and the ecological integrity of the property. This process, and the biological and geological diversity that it supports, depend on maintaining the water quality and water balance of the lake ecosystem.

Water for domestic and commercial use within the property and its immediate surroundings continues to be directly sourced from the lake system inside the park and the public water infrastructure, although previously rehabilitated, is considered to be inadequate and limited in reach. Plans for a major EU-supported project to rehabilitate and reconstruct water structures within the PLNP are in place and should be considered as a priority. The status of the projects seemed unclear to some stakeholders, whereby the Committee may wish to request further details on it.

As the Spatial Plan that directs the approval of construction permits was not subject to a SEA, the full extent of the potential and cumulative impacts of the implementation of this plan on the property and its OUV are currently not known. Furthermore, based on the data available to the mission and exchanges with the national authorities, the mission is alarmed to note that in the absence of clear and decisive response by the State Party to Decision **40 COM 7B.95** the construction works have only intensified, burdening the county administrative bodies with new and opportunistic requests for further tourism developments.

The mission notes that in its Decision **40 COM 7B.95** the Committee requested the State Party to develop a SEA, including a specific assessment of potential impacts on the OUV and integrity of the property, in line with IUCN's Advice Note on Environmental Assessment, in order to inform the measures required to ensure the adequate protection of the OUV of the property. SEA should be completed as a matter of priority, and guide the possible revision of the Spatial Plan and development of the overall Management Plan and the visitor management plan. Similarly, any other major development projects within the property, including the major projects to upgrade water or traffic infrastructure, and to construct a visitor centre and entrance facilities should be subject to environmental impact assessments specifically assessing the potential impact of these developments on the OUV. The mission recommends that the Committee closely follows up on these developments.

An outline of an Action Plan was presented to the mission and subsequently included in the State Party's 2017 State of Conservation Report of the property received by the World Heritage Centre on 1 February 2017. The Action Plan is aimed at responding to the current conservation issues at the property. In general, the measures identified by the State Party correspond to key priorities, including measures to increase coordination and cooperation between the two responsible Ministries and to initiate inspection of tourism facilities within the property and current processes of implementation of the Spatial Plan. These inspections respond to Decision **40 COM 7B.95**, and should be urgently completed to enforce the existing legislation, restore public trust in the governance of the property and prepare, as appropriate, potential amendment to the related procedures and legislative framework.

In general, the Action Plan would benefit from further clarity, defining the necessary measures in more detail. The Action Plan should also include the expected timeframe for its implementation, which is critical in order to respond to the rapid changes taking place, and in order to sequence the steps and preparation of various studies and documents appropriately. As an immediate step, the Action Plan should be revised based on the recommendations of this mission and submitted to the World Heritage Centre and IUCN for review.

While most of the threats are serious, the mission considers that the national authorities are in good position to implement the necessary measures given their stated commitment, existence of a robust legislative framework, availability of professional expertise at the various national institutions, including within the park management authority, and substantial amount of information and scientific data already available on the property.

Therefore, the mission concludes that the property does not currently meet the conditions for inscription on the List of World Heritage in Danger. However, it notes that immediate measures are needed to ensure that the OUV of the property is not being compromised any further from rapid and uncontrolled tourism pressure.

**Recommendation 9:** In accordance with Decision **40 COM 7B.95**, urgently complete the administrative assessment underway to evaluate the issuing of construction permits within the property and the overall implementation of the Spatial Plan, so as to propose, as appropriate, potential amendments to the procedures and legislative framework.

**Recommendation 10:** Taking into account the mission recommendations, finalize the Action Plan whose outline was presented to the mission and subsequently submitted as part of the State Party's 2017 State of Conservation report of the property, clearly defining a programme of urgent necessary measures and indicating the timeframe and resources required for their implementation and submit it to the World Heritage Centre and IUCN for review.

## 5. CONCLUSIONS AND RECOMMENDATIONS

The factors affecting the World Heritage property are all related to the high attractiveness of the Plitvice Lakes National Park due to its exceptional landscape and consequent rapid growth of visitor numbers and tourism facilities within the property, with associated risks of excessive water usage and water pollution from waste water and traffic.

In view of the property's unique "natural beauty" and sensitive hydrological regime and geological features, the mission confirms the concern of the World Heritage Committee that the significant expansion of tourism facilities within the property poses a potential threat to the Outstanding Universal Value (OUV) of the property, including its ecological and visual integrity. In the absence of the Strategic Environmental Assessment (SEA) requested by the Committee in its Decision **40 COM 7B.95** (Istanbul, 2016), the full extent of the potential and cumulative impacts on the property and its OUV deriving from the implementation of the Spatial Plan that directs approval of the tourism facilities are not known.

Clearly, there is an urgent need to harmonise the key planning and management documents: mainly, the Spatial Plan whose implementation may have direct impact on the OUV of the property but is outside the authority of the park management institution, and the Management Plan, which is currently outdated, but would enable better visitor management. Furthermore, given the existence of these two separate management regimes affecting the property, as well as intensity and multitude of interests in the use of the park, decisive efforts, though appropriate legislative and other adjustments, to improve coordination, cooperation and exchange of information among the various institutions and stakeholders would be required.

While the threats and challenges to the Plitvice Lakes National Park are serious, they are well understood by the national authorities, with a stated commitment to respond to the situation. In addition, Croatia has professional institutions and a rigorous legislative framework both for protection of natural heritage and for physical planning. The property is managed by a well-capacitated and competent institution and comprehensive information and scientific data is available on the property. The park seems to also enjoy uncompromised support from local communities. Importantly, the ecological integrity of the property appears to be so far preserved through relatively well maintained water quality and good or improving condition of the surrounding forest ecosystem that protects the sensitive water basin.

These assets, together with the fact that the ecological integrity of the property is so far preserved, provide an important premise for effective protection and management of the property. Therefore, the mission concludes that the property does not currently meet the requirements for inscription on the List of World Heritage in Danger. However, it notes that immediate measures are needed to ensure that the OUV of the property is not being compromised any further from rapid and uncontrolled tourism pressure. As an urgent step, the mission recommends that the State Party revise its Action Plan presented to the mission and subsequently also submitted as part of the State Party's 2017 State of Conservation Report for the property, clearly outlining a programme of urgent necessary measures and indicating the timeframe for their implementation, and submit it to the World Heritage Centre and IUCN for review.

If no substantial progress in the implementation of the World Heritage Committee's requests and of the recommendations of the mission can be achieved by 2018 and in view of the current and potential impact from the significant and unsustainable expansion of tourism facilities and excessive number of visitors on the property and its OUV, the mission recommends that the World Heritage Committee consider inscription of the property in the List of World Heritage in Danger at its 42nd session in 2018.

**Recommendation 1:** Strengthen cooperation, coordination and exchange of information among national, regional and local authorities on activities having an actual or potential impact on the property and its OUV and ensure participation of the Plitvice Lakes National Park management authority in related decision-making processes through the development of appropriate mechanisms.



**Recommendation 2:** Develop, in line with IUCN's Advice Note on Environmental Assessment, a Strategic Environmental Assessment (SEA) of the Spatial Plan for the Plitvice Lakes National Park based on the requirements under the World Heritage Convention, including a specific assessment of potential impacts on the Outstanding Universal Value (OUV) and integrity of the property in order to inform the measures required to adequately protect its OUV, and subsequently revise the Spatial Plan as required.

**Recommendation 3:** Based on the results of the SEA, complete the visitor management plan as part of the Management Plan for the property, to mitigate the impacts of tourism on the property and its OUV, particularly within the most sensitive areas of the lake system.

**Recommendation 4:** Maintain rigorous and permanent water monitoring within the property's watershed, strengthen the overall ecological monitoring programme of the National Park, effectively enforce regulation on water use and waste water management, and rehabilitate, reconstruct and extend, as appropriate, water infrastructure within the property, while carrying out emergency improvement measures as recommended by Croatian Waters, ensuring strictest environmental criteria.

**Recommendation 5:** As part of the process to develop the new Management Plan, conduct a comprehensive traffic study as foreseen in the Spatial Plan, to reduce the traffic pressure within the property and to mitigate its impacts on the property and its OUV.

**Recommendation 6:** Finalize the new Management Plan for the property through an inclusive and participatory approach, incorporating the results of the SEA, the traffic study, the visitor management plan and the relevant scientific studies, ensuring that the relevant national legislation and the overall planning and management framework is fully consistent with the protection of the OUV and the provisions of the World Heritage Convention.

**Recommendation 7:** Consider establishing a buffer zone around the property so as to avoid any adverse impact on the property and its OUV from developments in its surroundings.

**Recommendation 8:** Take measures to encourage local and environmentally sensitive agriculture, and consider establishing a local brand name for certified products and services provided by local people.

**Recommendation 9:** In accordance with Decision **40 COM 7B.95**, urgently complete the administrative assessment underway to evaluate the issuing of construction permits within the property and the overall implementation of the Spatial Plan, so as to propose, as appropriate, potential amendments to the procedures and legislative framework.

**Recommendation 10:** Taking into account the mission recommendations, finalize the Action Plan whose outline was presented to the mission and subsequently submitted as part of the State Party's 2017 State of Conservation report of the property, clearly defining a programme of urgent necessary measures and indicating the timeframe and resources required for their implementation and submit it to the World Heritage Centre and IUCN for review.

## 6. ANNEXES

### Annex 1: Decision 40 COM 7B.95 adopted by the World Heritage Committee at its 40<sup>th</sup> session (Istanbul, 2016)

#### Plitvice Lakes National Park (Croatia) (N 98bis)

#### Decision 40 COM 7B.95

The World Heritage Committee,

1. Having examined Document WHC/16/40.COM/7B.Add,
2. Notes with concern the significant expansion of tourism facilities within the property and the fact that the concerns of the management authority of the property with regards to the procedures for issuing construction permits have not been addressed by the relevant planning authorities;
3. Considers that the scale of development of tourism facilities that has taken place in the property since 2014 represents a potential danger to its Outstanding Universal Value (OUV), in accordance with Paragraph 180 of the Operational Guidelines;
4. Notes the information that an administrative supervision will be carried out in order to evaluate the issuing of construction permits for facilities within the property by the regional planning authority, and urges the State Party to undertake such an evaluation of procedures and competences as a matter of priority and to ensure that no new permits are issued until this process has been completed and proposed developments are confirmed to not have a negative impact on the OUV of the property;
5. Requests the State Party to ensure, through the development of appropriate mechanisms, that the management authority of the property is included in the future decision-making processes regarding permissions for any development within the property;
6. Also requests the State Party to develop a Strategic Environmental Assessment (SEA) of the Spatial Plan for the Plitvice Lakes National Park, including a specific assessment of potential impacts on the OUV and integrity of the property, in line with IUCN's Advice Note on Environmental Assessment, in order to inform the measures required to ensure the adequate protection of the OUV of the property;
7. Further requests the State Party to invite a joint World Heritage Centre/IUCN Reactive Monitoring mission to the property to evaluate the threat posed to the property's OUV by the recent expansion of tourism facilities within the property, provide recommendations to the State Party with regards to the SEA, and to confirm whether the property meets the conditions for inscription on the List of World Heritage in Danger;
8. Requests furthermore the State Party to submit to the World Heritage Centre, by 1 February 2017, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 41st session in 2017.



## Annex 2: Terms of reference of the mission

### Terms of reference Joint World Heritage Centre/IUCN Reactive Monitoring mission to Plitvice Lakes National Park, Croatia

**Dates: 17-19 January 2017**

The World Heritage property of Plitvice Lakes National Park (Croatia) was inscribed on the World Heritage List in 1979 (19,462 ha) under natural criteria (vii)(viii)(ix) and extended in 2000. The property covers a total area of 29,630.77 ha.

At its 40th session (Decision **40 COM 7B.95**, Istanbul, 2016) the Committee noted with concern the significant expansion of tourism facilities within the property and the fact that the concerns of the management authority of the property with regards to the procedures for issuing construction permits have not been addressed by the relevant planning authorities (Annex 1).

For the first time since 1993, the Committee requested the State Party to invite a joint World Heritage Centre/IUCN Reactive Monitoring mission to the property to evaluate the threat posed to the property's Outstanding Universal Value (OUV) by the recent expansion of tourism facilities within the property, provide recommendations to the State Party with regards to the Strategic Environmental Assessment (SEA) of the Spatial Plan for the Plitvice Lakes National Park, and to confirm whether the property meets the conditions for inscription on the List of World Heritage in Danger.

The objective of the monitoring mission is to review the overall state of conservation of the property as well as progress in the implementation of the Committee's decision 40 COM 7B.95 (Annex 1). In particular, the mission should undertake the following:

1. Analyse the planning situation for all tourism development projects in the property and its vicinity, whether proposed, approved or contracted;
2. Analyse the impact or potential impact of these tourism development projects on OUV, given the sensitivity of the property's unique hydrological regime and geological features. In particular, the mission should review whether the property meets the conditions for inscription on the List of World Heritage in Danger, in line with Paragraph 180 of the *Operational Guidelines*;
3. Review progress achieved by the State Party in the implementation of the Committee's decision 40 COM 7B.95, in particular:
4. The evaluation of procedures and competences regarding the issuing of construction permits for facilities within the property;
5. The development of mechanisms to ensure that the management authority of the property is included in the future decision-making processes regarding permissions for any development within the property;
6. The development of a Strategic Environmental Assessment (SEA) of the Spatial Plan for the Plitvice Lakes National Park, including a specific assessment of potential impacts on the OUV and integrity of the property, in line with IUCN's Advice Note on Environmental Assessment, in order to inform the measures required to ensure the adequate protection of the OUV of the property;

7. In line with paragraph 173 of the *Operational Guidelines*, assess any other relevant conservation issues that may negatively impact on the Outstanding Universal Value of the property, including the conditions of integrity and protection and management.

The State Party should facilitate necessary field visits to key locations. In order to enable preparation for the mission, it would be appreciated if the following items could be provided to the World Heritage Centre (copied to IUCN) as soon as possible and preferably no later than 1 month prior to the mission:

1. A copy of the Spatial Plan for the Plitvice Lakes National Park;
2. Copies of any recent Environmental Impact Assessments (EIAs), and of the terms of reference or scoping studies of any ongoing EIAs, for all recent and proposed developments of tourism facilities;
3. Time-series data on the hydrology of the property, including surface and ground water levels, for the past 5-10 years.

The mission should hold working meetings and consultations with the Croatian authorities at national and local levels, in particular the Ministry of Environmental and Nature Protection, the Ministry of Tourism, and the Ministry of Construction and Physical Planning. In addition, the mission should hold consultations with a range of other relevant stakeholders, including i) scientists and researchers; ii) NGOs; iii) representatives of local communities; and iv) representatives of the local tourism industry.

Based on the results of the above-mentioned assessments and discussions with the State Party representatives and stakeholders, the mission will develop recommendations to the Government of Croatia and the World Heritage Committee with the objective of providing guidance to the State Party for actions to be taken to address identified threats to the property, and to improve the conservation of its Outstanding Universal Value. It should be noted that recommendations will be provided within the mission report (see below), and not during the mission's implementation.

The mission will prepare a concise report in English or French on its findings and recommendations within six weeks following the site visit. The report will follow the standard format (Annex 2).

**Annex 3: Report on the state of conservation of the Plitvice Lakes National Park examined by the World Heritage Committee at its 40th session (Istanbul, 2016) [extract from document WHC/16/40.COM/7B.Add]**

***Conservation issues presented to the World Heritage Committee in 2016***

On 15 February 2016, the World Heritage Centre sent a letter to the State Party requesting clarifications regarding the “Physical Plan for areas with specific features of the Plitvice Lakes National Park”, following receipt of third party information raising concerns over potential implications of the Plan for the protection of the property’s Outstanding Universal Value (OUV). On 6 May 2016, in response to the letter from the World Heritage Centre, the State Party submitted a report on the state of conservation of the property (a summary is available at <http://whc.unesco.org/en/list/98/documents/>), providing the following information:

1. The development of a spatial plan for Plitvice Lakes National Park started in 2005. Public consultations were held in 2011, 2012 and 2013, and in 2014 the Plan was adopted by the Parliament of Croatia;
2. The obligation to carry out Strategic Environmental Assessments (SEA) of spatial plans for national parks was introduced through a number of legislative amendments adopted in 2008, 2009, 2011 and 2013. Since the development of the Spatial Plan for the Plitvice Lakes National Park started before 2008, this requirement did not apply to this plan;
3. In 2013 the responsibility for the application of the Spatial Plan for the Plitvice Lakes National Park and the issuing of construction permits was transferred from the Ministry of Construction and Physical Planning to the regional planning authority. Since then the Public Institution “Plitvice Lakes National Park” has expressed its concerns regarding incorrect application of the legislation and potential threats to the OUV of the property due to excessive construction. Between 2007 and 2014, before the Spatial Plan was adopted, 20 building permits for reconstruction of tourism facilities within the property were issued. The Plitvice Lakes National Park Public Institution appealed some of these permits; however, the appeals were not accepted. Since 2014, 40 new tourism facilities have been constructed within the property;
4. In February 2016, the Ministry of Environment and Nature Protection requested the Ministry of Construction and Physical Planning to carry out administrative supervision of the regional authority responsible for the issuing of construction permits and to prepare a potential legislative amendment related to the competence for issuing construction permits within protected areas.

***Analysis and Conclusion by World Heritage Centre and the Advisory Bodies in 2016***

The expansion of tourism facilities within the property raises serious concerns, including the fact that concerns over issuing of construction permits have repeatedly been expressed by the management authority of the Plitvice Lakes National Park, but have not been addressed. The reported scale of construction within the property appears significant, and is considered to represent a potential danger to its OUV in accordance with Paragraph 180 of the Operational Guidelines, given the sensitivity of the property’s unique hydrological regime and geological features.

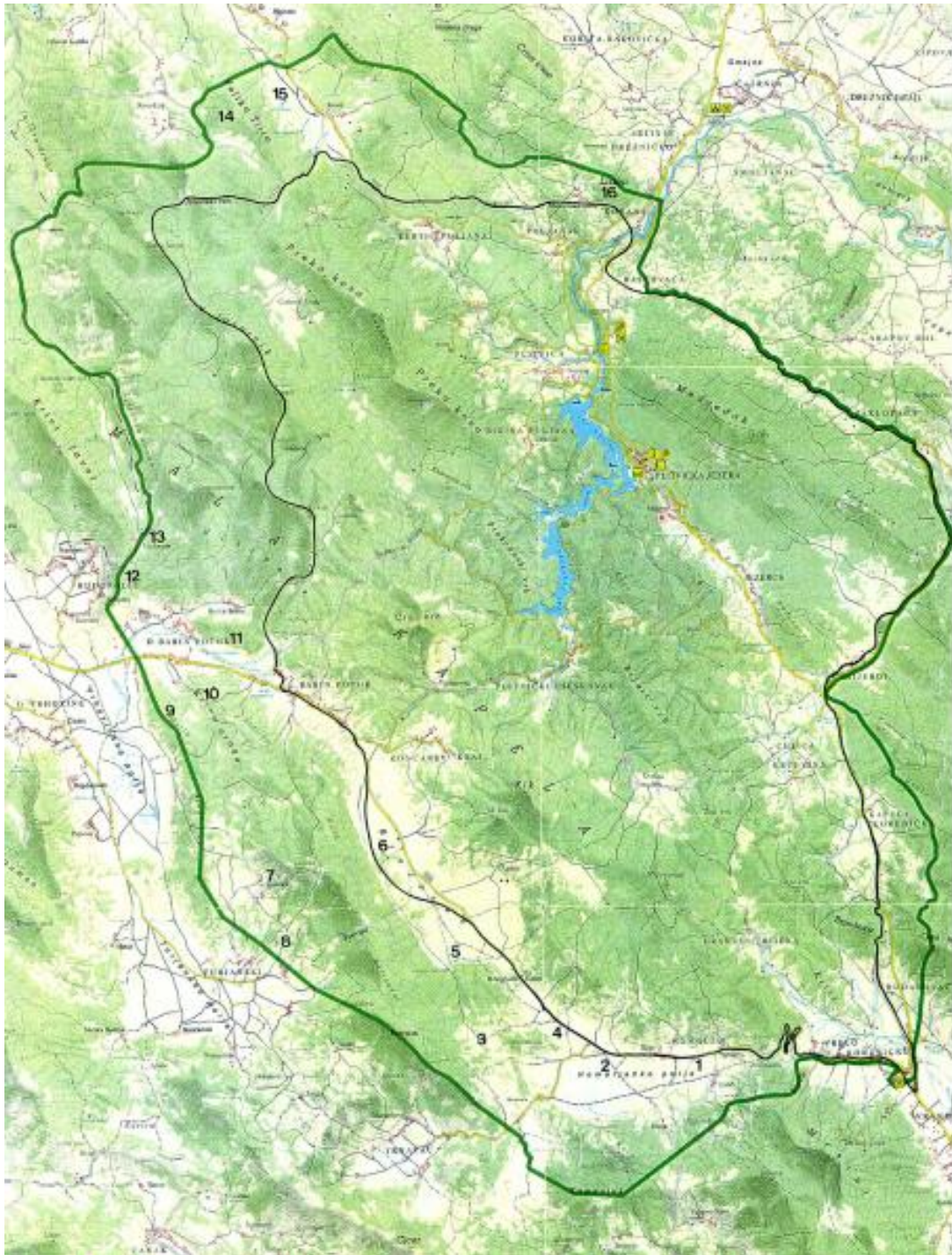
The information provided by the State Party that an administrative supervision has recently been requested and will be carried out in order to evaluate the issuing of construction permits for facilities within the property by the regional planning authority is noted. It is recommended that the World Heritage Committee urge the State Party to undertake such evaluation of procedures and competences as a matter of priority and to ensure that no new permits are issued until this process has been completed. It is also recommended that the Committee request the State Party to ensure, through the development of appropriate mechanisms, that the management authority of

the property is included in the future decision-making processes regarding permissions for any development within the property.

While noting that no such requirement existed at the time of the initiation of the Spatial Plan for the Plitvice Lakes National Park, the fact that the Spatial Plan was adopted in 2014 while no SEA had been carried out during its preparation is of serious concern. It is recommended that the Committee request the State Party to undertake such an assessment, including an assessment of potential impacts on the OUV and integrity of the property, in line with IUCN's Advice Note on Environmental Assessment, in order to inform the measures that will need to be taken to ensure adequate protection of the OUV of the property.

It is further recommended that the Committee request the State Party to invite a joint World Heritage Centre/IUCN Reactive Monitoring mission to the property to assess the threat posed to the property's OUV by the recent expansion of tourism facilities within the property and to confirm whether or not the property meets the conditions for inscription on the List of World Heritage in Danger. The mission should also provide recommendations to the State Party with regards to the preparation of the SEA.

**Annex 4: Map of the Plitvice Lakes National Park World Heritage property**



**Map 1: Boundaries of the Plitvice Lakes National Park World Heritage property during time of inscription in 1979 and after the extension in 2000. Source: PIPLNP**

## Annex 5: Mission programme

<b>16 January 2017</b>	17:00/20:00 Arrival in Zagreb
<b>17 January 2017</b>  <b>Location:</b> <b>Ministry of Environment and Energy (MEE), Radnička Cesta 80 Zagreb</b>	9:00 <b>Courtesy meeting with Minister Slaven Dobrović</b> 9:30-10:00 <b>Meeting with Assistant Minister Igor Kreitmeyer</b> <b>Part 1.</b> 10:00-10:30 <b>Introductory presentation by the mission team</b> – Expectations of the mission, reporting and procedures 10:30-10:45 <b>Nature Protection Sector</b> – Jurisdiction of Ministry of Environment and Energy according to Nature Protection Act (Martina Vidaković, MEE) 10:45-11:30 <b>Plitvice Lakes National Park</b> – Jurisdiction of Public Institution Plitvice Lakes National Park; measures taken to preserve OUV of the park; projects in progress; visitor management plan; new management plan (Krešimir Čulinović, PIPLNAP) 11:30-12:00 Coffee break 12:00-12:30 <b>Sector of Construction and Physical Planning</b> – Jurisdiction of Ministry of Construction and Physical Planning and Croatian Institute for Spatial Development; Spatial planning documentation; procedure of development of physical plans for areas with specific features of the National Park "Plitvice Lakes" (MCCP/CISD) 12:30-13:00 <b>Report on implementation of physical plan of the National Park "Plitvice Lakes"</b> – report and findings from the field (Anđelko Novosel, PIPLNP) 13:00-13:30 <b>Procedure and data on issuing construction permits</b> (Katica Prpić, MCCP) 13:30-14:00 <b>Data on building inspection</b> (MCCP) 14:00-14:30 <b>Questions and discussion</b> 14:30-15:30 Lunch break <b>Part 2.</b> 15:30-16:00 <b>Construction of water utility infrastructure of agglomeration Plitvice Lakes</b> – EU Project (Croatian Waters) 16:00-16:30 <b>Issuing water regulation conditions</b> (Croatian Waters) 16:30-17:00 <b>Questions and discussion</b> 17:00-20:00 Travel to Plitvice Lakes National Park
<b>18 January 2017</b>  <b>Location:</b> <b>Plitvice Lakes National Park</b>	08:00-08:30 <b>Plan of field visit</b> – Information on the locations visited and problems at those locations (PIPLNAP) 08:30-12:30 <b>Field visit</b> – Vrela, Plitvički Ljeskovac, Jezerca, Plitvica Selo, Poljanka, Canyons of the lower lakes 12:30-14:00 <b>Lunch break</b> 14:00 -14:40 <b>Hydrogeological study</b> (Hrvoje Meaški, University of Zagreb) 14:40-15:10 <b>Biodiversity of Plitvice Lakes National Park</b> (Maja Vurnek, PIPLNP) 15:10-15:50 <b>Monitoring results and conducted and planned research</b> (Maja Vurnek, PIPLNP) 15:50-16:30 <b>Water status of Plitvice Lakes</b> (Valerija Musić, Croatian Waters)

	16:30-17:00 <b>Large carnivores and humans in Plitvice Area</b> (Josip Kusak, University of Zagreb)
<b>19 January 2017</b> <b>Location:</b> <b>Plitvice Lakes National Park</b>	7:00-8:30 <b>Field visit</b> Canyons of the lower lakes, Big Waterfall 8:30-9:30 <b>Meeting with representatives of the municipalities</b> (Rakovica, Saborsko, Vrhovine, Plitvička Jezera) 9:30-10:00 <b>Meeting with representatives of utility companies</b> (Rakovica, Saborsko, Vrhovine, Korenica) 10:00-11:00 <b>Meeting with representatives of tourism sector</b> (Ministry Of Tourism, Tourist Boards) 11:00-11:30 <b>Coffee break</b> 11:30-12:00 <b>Meeting with representatives of the competent administrative bodies Counties responsible for spatial planning and licensing</b> (Ličko-Senjska, Karlovačka County) 12:00-12:30 <b>Meeting with representatives of associations</b> (Croatian War Veterans, Green Action) 12:30-13:00 <b>Conclusions</b> 13:00-14:00 <b>Lunch break</b> 14:00-17:00 <b>Travel to Zagreb</b> 19:00 <b>Departure</b> (IUCN representative)
<b>20 January 2017</b>	9:00 <b>Departure</b> (World Heritage Centre representative)

MEE — Ministry of Environment and Energy  
PIPLNAP — Public Institution of Plitvice Lakes National Park  
MCCP — Ministry of Construction and Physical Planning  
CISD — Croatian Institute for Spatial Development

## Annex 6: List of people met

INSTITUTION	PARTICIPANT
Ministry of Environment and Energy/ Directorate for nature protection	Igor Kreitmeyer, Assistant Minister
	Daniel Springer, Head of Service for Protected Areas, Geodiversity and Ecological Network
	Blandina Randić Potkonjak, Head of Service for Planning Documents
	Loris Elez, Head of Service for Appropriate Assessment
	Martina Vidaković, Expert associate and focal point for UNESCO
Ministry of Environment and Energy/ Directorate for environmental impact assessment and sustainable waste management	Tanja Šinko, Expert associate
Ministry of Environment and Energy/ Office of the Minister	Saša Radojević, Minister advisor
	Ksenija Matošević, Secretary to the Office of the Minister
Ministry of Environment and Energy/ Directorate for inspectional affairs	Tihomir Devčić, senior inspector for Nature Protection
	Krešimir Ilić, Head of Sector for Nature Protection Inspection
Ministry of Environment and Energy/ Directorate for water management	Vesna Trbojević, Head of Sector for Public Water Supply and Public Sewage System Activities
	Željka Lučan Dikanović, Head of Department for Water Protection
Croatian Agency for Environment and Nature	Irina Zupan, Head of Department for Nature Protection
	Gordana Zwicker Kompar, senior expert advisor
Croatian waters	Tatjana Jauk
	Vesna Grizelj Šimić
	Jasmina Antolić
	Ivan Kolovrat
	Tina Miholić
	Valerija Musić
Ministry of Construction and Physical Planning / Cabinet of the Minister	Domomir Pavelić, Head of Sector
	Jasna Kavurčić, Inspector
	Katica Prpić, State Secretary
Ministry of Construction and Physical Planning / Directorate for Physical Planning Legal Affairs and European Union Programmes	Igor Čižmek, Assistant Minister
	Sandra Momčilović, Head of Service

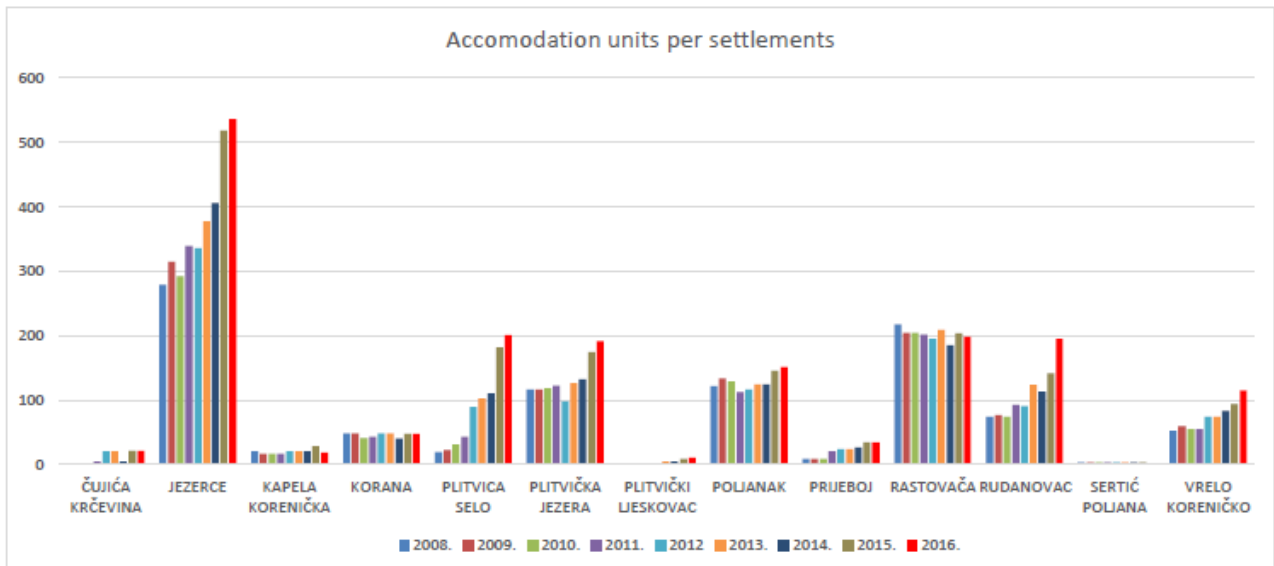


Croatian Institute for Spatial Development	Držislav Dobrinić, Head of Service for State Level Physical Planning Documents
	Irena Matković, Director
	Vesna Marohnić-Kuzmanović, Head of Department for Strategy of Spatial Development of Republic Of Croatia and other State Level Physical Planning Documents
Ministry of Tourism/ Directorate for Competitiveness	Vesna Rajković, Head of Sector
	Sonja Pelicarić, Head of Service
Public Institution Plitvice Lakes National Park	Anđelko Novosel, Director
	Krešimir Čulinović, Conservation manager
	Željko Rendulić
	Ognjen Škunca, Associate
	Maja Vurnek
Translation	Buga Novak
	Dario Borković
Faculty of Veterinary Medicine, University of Zagreb	Josip Kusak, Scientist
Faculty of Geotechnical Engineering, University of Zagreb	Hrvoje Meaški, Scientist
Municipality Rakovica	Franjo Franjković, Head
	Zoran Luketić, President of the municipality Council
Municipality Saborsko	Marko Bićanić, Head
Municipality Vrhovine	Milorad Delić, Head
Municipality Plitvička jezera	Vinko Bartolac, External associate
	Boris Luketić,
Spelekom d.o.o., Rakovica / utility company	Danijela Marinić
	Davor Salopek
Vreline d.o.o., Vrhovine / utility company	Renato Gomerčić
Vodovod Korenica d.o.o. / utility company	Hrvoje Kukuruzović, Director
	Danko Prša
State Administration Office in Ličko-senjska County, Department for Economy	Emir Merdić, Head of branch Korenica
Rakovica Tourist Board	Mira Špoljarić, Director
Plitvice Lakes Tourist Board	Maja Šikić, Director
Touristic Board of Karlovačka county	Dina Begić
The Administrative Department for Construction of Ličko-Senjska County, Gospić	Ana Milinković Rukavina, Head

The Administrative Department for Construction, environmental protection and municipal economy of Ličko-Senjska County, branch Korenica	Mladenka Brajnović Abramović, Advisor
Karlovačka county, Administrative Department for physical planning, environmental protection and construction	Marinko Maradin, Head
Karlovačka county, Department for physical planning and construction, branch Slunj	Valentina Stipetić
Association of Croatian Veterans	Ivica Jandrić
	Marijan Marković
	Zvonko Conjar
	Nikola Turkalj
NGO Green Action	Jagoda Munic
	Jasna Šumanovac

## Annex 7: Development of accommodation units and overnight stays at Plitvice Lakes National Park

**Figure A :** Accommodation units per settlement / year from 2008 to 2016.  
Source: Plitvička Jezera Municipality Tourist Board



**Figure B :** Overnights per settlement / year from 2008 to 2016.  
Source: Plitvička Jezera Municipality Tourist Board

