Plitvice Lakes National Park (Republic of Croatia) (98bis)

1. **Executive Summary of the report**

Plitvice Lakes National Park is the oldest and largest national park in the Republic of Croatia. Plitvice Lakes are protected according to three criteria of OUV, namely VII, VIII and IX and on 26 October 1979 were inscribed on the UNESCO World Heritage List. The property is managed by the Public Institution Plitvice Lakes National Park (PIPLNP) and the main management documents are the Management Plan of the Plitvice Lakes National Park and the Spatial Plan of the area with special features for Plitvice Lakes National Park (Spatial Plan). While the ecological integrity of the property has so far been preserved, recently, certain threats that might affect OUV of the property were observed. The majority of threats stem from the Spatial Plan adopted by the Croatian Parliament in 2014, an excessive number of visitors and the associated pressures (water use, water pollution, road infrastructure, etc.), further to which the UNESCO World Heritage Centre requested State of Conservation reports. In 2017, the Republic of Croatia organized a reactive Monitoring mission and submitted State of Conservation reports on the implementation of the recommendations and the Action Plan for improvement of the conservation status of the National Park. The Action Plan addresses the following issues: expansion of the tourist facilities and visitor numbers in the National Park, restoration of the water supply and drainage system and cooperation with local stakeholders. Besides these issues, the Action Plan outlines the measures and the deadlines for implementation of activities and institutions responsible for specific activities. In April 2017, an Operational Working Group (OWG) was established, with the aim of coordinating the implementation of Action Plan recommendations.

The subject of this report is the response to the Decision of the World Heritage Committee (WHC) 42 COM 7B.3. WHC requests are related to the delivery of the SEA once it becomes available and the compliance of the Management Plan of the property with the SEA, the regulation and monitoring of the issuance of new building permits and compliance of existing buildings with the relevant regulations, improvement of the wastewater, water supply and drainage system and visitor management.

Activities related to the Amendments to the Spatial Plan and the SEA are underway. The results of the SEA, once available, will be delivered to the World Heritage Centre. In order to harmonize all the documents and procedures, if the results of the carried out SEA demonstrate the need for the amendment of the Management Plan, it will be revised and amended accordingly. The State Party supervises the issuance of the building permits and all the relevant institutions are involved in the process of their issuance. As regards water management, two projects were launched with the aim of addressing unsustainable water use and water pollution issues. The agglomeration project will provide the solution for wastewater collection and treatment system, including the area of the Plitvice Lakes National Park and will secure a permanent solution for the collection and treatment of wastewater from the National Park. The project is at the stage at which the Application package has been completed and is ready to be applied for co-financing through European funds. Water supply is adressed by a separate, parallel project entitled “Conceptual solution for the Plitvice Lakes water supply system with the preparation of a mathematical model of the current and future situation and the Pre-feasibility Study”. The water supply project is currently in the analysis phase, that is, the selection of an optimal technical solution. Furthermore, permanent water monitoring was established by PINPPL and Croatian Waters. With regard to the increase in the number of visitors to the property several activities have been undertaken in order
to alleviate pressures, in particular to avoid overcrowding at certain times and at the main attractions of the property.

Since the last report, no other new conservation issues have been recorded and no new construction works, which may have an impact on the property’s OUV, are planned. Therefore, that part of the report remains unchanged.

2. **Response to the Decision of the World Heritage Committee 42 COM 7B.3**

The Decision of the World Heritage Committee indicates the following:

I. **commends the State Party for progress made to respond to the Committee’s decision and to the 2017 mission recommendations, and urges the State Party to continue these efforts to fully implement all recommendations of the mission;**

The State Party is fully dedicated to implementing all IUCN recommendations and to responding to the requests of the World Heritage Committee as is demonstrated by all the actions undertaken so far and all the actions planned in order to preserve the OUV of Plitvice Lakes NP. The State Party already reported on most of these activities in the previous reports while the activities that are still in progress, such as activities related to the amendments to the Spatial Plan and the SEA, wastewater and water supply and drainage system, water pollution risks, visitor management, are the subject of this report. The results of the SEA, once available, will be delivered to the World Heritage Centre.

II. **welcomes the State Party’s decision to amend the Spatial plan for Plitvice lakes National Park which would include preparation of a Strategic Environmental Assessment (SEA), in line with IUCN’s Advice Note on Environmental Assessment and Decisions 40 COM 7B.95 and 41 COM 7B.3, and requests the State Party to provide the results of the SEA to the World Heritage Centre, once available;**

Activities related to the Amendments to the Spatial Plan and SEA are underway. After the contract for the preparation of Amendments to the Spatial Plan was signed, preparatory activities, such as analytical bases, site visit to the area and concept of the Draft Plan were conducted. The next step is the preparation of the Draft Plan for the purpose of holding one or more sessions of the Strategic Assessment Committee (Expert Committee). Regarding SEA, after the public procurement procedure was carried out, a contract was signed with the legal person authorised for developing the Strategic Impact Study (Environmental Report). The authorised person will prepare the Strategic Impact Study on the environmental impact assessment of the Plan adopted in 2014, the assessment of the impact on OUV of the NP and the Strategic Impact Study for SEA implementation related to the Amendments to the Plan, including the chapter Appropriate Assessment (AA) of the Plan for the ecological network. At the moment, the authorised person is carrying out the procedure of data base collection and of the identification of the existing pressures on the NP area. For purposes of obtaining opinions on the content of the Strategic Impact Study, consultations were held with the bodies that delivered their opinion on the content and coverage level of data that would be processed in the Strategic Impact Study. The following is to be carried out: identification of the content of the Strategic Impact Study, appointment of the Strategic Assessment Committee and preparation of the Strategic Impact Study for the implementation of strategic assessment for the purposes of holding one or several sessions of the Strategic Assessment Committee. The results of the SEA, once available, will be delivered to the World Heritage Centre.

III. **takes note of the additional guidelines on the implementation of the current Spatial Plan developed and provided to the relevant regional authorities responsible for issuance of construction permits, and the amendments to the Nature Protection Act which ensure participation of the Public Institution Plitvice Lakes National Park (PIPLNP) in decision-making processes regarding issuance of permits, and also requests the State Party to continue its efforts to strictly regulate and monitor both issuance of new permits and compliance of existing buildings with the relevant regulations;**
Annex 13 of the Operational Guidelines

The State Party supervises the issuance of the building permits and all the relevant institutions are involved in the process of their issuance.

The water, nature and building inspectional services, which are now part of one institution, the State Inspectorate, continue performing inspectional supervisions and monitoring, each within their respective jurisdiction. The nature protection inspectional service organized and conducted 93 coordinated inspectional supervisions. In these supervisions, 8 different inspectional services participated including the tourist, water and agriculture inspectional service. The activities of PIPLNP were also supervised and no irregularities were found.

In 2019, the water inspectional service continued with inspectional supervision in which discharge of wastewater from catering and accommodation facilities where checked. It is important to stress that these supervision activities have had an impact on the environmental awareness of owners of accommodation facilities who installed biotreatment units after their collection pits were suspected of being defective. This solution is also in line with the provisions of the Spatial Plan. The quality of the treated wastewater discharged from biotreatment units of monitored holders of water management permits is satisfactory. Also, it is important to emphasize that temporary mobile wastewater treatment plant with the capacity of 2000 PE in the settlement of Rastovača, continuously provides output quality of treated wastewater that meets the requirements of applicable legislation for underground discharges.

During 2019, the building inspectional service carried out monitoring controls in proceedings initiated during 2017 and 2018 in Plitvica Selo and Jezerce settlements. 27 monitoring controls were carried out and due to the fact that investors obtained necessary acts which authorize construction, 3 building inspection proceedings were suspended. In addition, 5 building inspectional supervisions were carried out and 1 decision was issued for the removal of an illegally constructed building.

These inspectional activities will continue in the future.

IV. welcomes the preparation of a new management plan for the property, including a visitor management plan, and further requests the State Party to ensure that this process is fully harmonized with the procedures foreseen for the SEA and for amending the Spatial Plan, in order to ensure that the overall management framework is fully consistent with the protection of the Outstanding Universal Value (OUV) of the property;

PIPLNP was established for the purpose of effective management of NP, especially for conservation of the lake system and the dynamic growth of tufa barriers as an OUV. Management of the NP area is, among other things, ensured through the implementation of the Management Plan and Spatial Plan. The Management Plan is a strategic document of the Public Institution (PI) that determines the purpose and state of the protected area and defines the management objectives, the activities needed to achieve the goals and indicators of the effectiveness of management. The Management Plan was adopted in 2019 for the period of 10 years and can be amended after 5 years.

Management zonation in the Management Plan was developed in line with the Guidelines for Planning of Protected Areas and/or Natura 2000 Ecological Network, according to which zones are determined in line with the conservation needs of particular values of the area, taking into account permitted and appropriate human activities. The zonation is based on the spatial and other relevant data on the zones of distribution of species and habitat types for Natura 2000 (e.g. tufa cascades of karstic rivers of the Dinaric Alps) and their ecological requirements, data on other significant species and habitats, cultural values, geological localities, data on existing and planned infrastructure, settlements, land use, etc.

The zonation developed for the Management Plan is used for the preparation of the expert nature protection background document for the Spatial Plan, which ensures the compliance of the management zonation in the Management Plan with the organization and use of space prescribed by the Spatial Plan.
Even though the Management Plan is a strategic document of the PI and it does not define provisions for physical planning of existing settlements or the construction zones within individual settlements, the development of settlements in the Spatial Plan has to comply with the management zonation defined by the Management Plan and all the restrictions in relation to defined zones.

The Spatial Plan is the fundamental document for the physical planning of the National park. It determines the rational use of space in accordance with the natural, cultural and historical, economic and other characteristics or demands of space. Spatial plans include the basic organization and delimitation of the area according to the use/functions of area, the infrastructure system and protection of the area. The procedure for the development of the spatial plan, and in particular of spatial plans for national and nature parks, is a procedure which owing to its complexity can extend over several years.

The expert nature protection background document for the Plitvice lakes NP and the Management Plan are a part of the analytical background documents for the development of the Amendment to the Spatial Plan for the NP, which ensures the harmonization of the documents.

SEA is a procedure for assessing likely significant environmental impacts that may arise from implementation of strategies, plans or programmes. According to the Environmental Protection Act and the Regulation on the SEA of Strategy, Plan and Programme, strategic assessment is carried out during the drafting of strategies, plans and programmes. Along with the Amendments to the Spatial Plan for the Plitvice Lakes NP, the SEA, AA of the impact of the Plan on the Natura 2000 Ecological Network and assessment of the potential impact on the OUVP of the property. In order to harmonize all the documents and procedures, if the results of the carried out SEA demonstrate the need for the amendment of the Management Plan, it will be revised and amended accordingly.

V. while noting information provided by the State Party regarding the existing plans to improve wastewater and water supply and drainage system, water pollution risks and continued exponential growth of visitation at the property continue to represent a potential danger to the OUVP, in line with Paragraph 180 of the Operational Guidelines and therefore also urges the State Party to address all pending issues related to water and visitor management as a matter of priority;

All the threats mentioned above are addressed in the Action Plan to improve the property’s conservation status and several activities planned to improve water management have been completed, while others are ongoing.

Two projects were launched with the aim of addressing unsustainable water use and water pollution issues. The agglomeration project will provide the solution for wastewater collection and treatment system, including the area of the National Park and provides a permanent solution for the collection and treatment of wastewater from the National Park. The project is at the stage at which the Application package has been completed and is ready to be applied for the co-funding through EU funds. Project documentation has been prepared, with 4 out of 6 building permits issued so far. Also, all preliminary activities necessary for the Government of the Republic of Croatia to declare the project as a national strategic project have been carried out. Completion of the project is expected in 2023.

Water supply is addressed by a separate, parallel project entitled “Conceptual solution for the Plitvice Lakes water supply system with the preparation of a mathematical model of the current and future situation and Pre-feasibility Study”. The water supply project is currently in the analysis stage, that is, the selection of an optimal technical solution. In order to ensure compliance with legal regulations and to achieve the conservation objectives for the protected area, the conceptual solution for water supply should provide solutions for the relocation of water intakes outside the boundaries of the National Park. Due to the importance of the area in question, the implementation of the water supply investments will begin within the shortest possible time after the selection of the optimal technical solution.

Through these projects, key issues related to water use and pollution will be resolved and direct threats to the OUVP of the property will be mitigated. In the meantime, several projects have been implemented in relation to water supply and wastewater: the programme of water loss reduction in the Korenica –
Plitvice – Rakovica system, the construction of the water supply in the Rudanovac settlement, water investigation works in the Vrelo Koreničko area, the construction of the water supply network of the Vrelo Koreničko settlement, rehabilitation of the pipeline in Smoljanac, designing of the water supply for Plitvice Selo and Poljanak, design documents and construction of water facilities in the area of the agglomeration Plitvice Lakes and the lease of the temporary mobile wastewater treatment plant in the Rastovača settlement.

Also, permanent water monitoring was established by PINPPL and Croatian Waters. Croatian Waters performs monitoring at four surface water monitoring stations. In January 2019, the station Plitvica, Plitvice Selo, was established for monitoring the impact of wastewater load from the Plitvice settlement. Since the station is not representative for the assessment of the ecological status of water, investigative monitoring of organic and microbiological pollution indicators has been performed. In 2019, the plan for groundwater monitoring included five new monitoring stations in the area of the Park, and a three-year monitoring was contracted for the period 2019 – 2021.

Croatian Waters established a classification system for the assessment of the ecological status of natural lakes for five biological quality elements – phytoplankton, phytobenthos, macrophytes, macrozoobenthos and fish as well as supporting physico-chemical and chemical quality elements. The results of the assessment of natural lakes by using this classification system revealed Kozjak Lake as having good status and Prošće Lake as having moderate status according to the biological element fish. In the meantime, the management plan for the NP has been adopted. It includes active measures and regular collection of monitoring results for the element of water quality in Proscansko Lake, Kozjak Lake, Crna Rijeka and Korana Rivers by Croatian Waters and their integration into adequate databases. As part of the establishment of permanent cooperation, Croatian Waters and the PINPPL have developed the Action Plan for harmonizing the objectives of water and aquatic ecosystem protection and cooperation in the water management of the protected area of the Plitvice Lakes NP. The Action Plan was signed by both parties on 17 July, 2019. It includes a plan of individual activities, depending on the implementation of the River Basin Management Plan.

Water monitoring carried out by the PINPPL was conducted during 2019 with the same dynamics (monthly) and at the same locations as in 2018. The main physical and chemical indicators significant for the process of tufa deposition, the trophic levels and the assessment of the ecological status as well as microbiological indicators were monitored.

With regard to the classification systems of ecological status, assessment of the main physical and chemical elements at the locations on watercourses and lotic biotopes shows high and good status. The sources of the main watercourses show slight seasonal changes of the examined indicators, which are characteristic of karst sources. Physical and chemical indicators important for the process of tufa deposition were stable throughout the observed period with anticipated seasonal dynamics. Microbiological indicators show seasonal changes with a certain increase in the bacteria count during the warmer part of the year at certain monitoring locations.

Continuous hydrological monitoring is carried out through 14 hydrological stations in the NP area. Water levels and flows are continuously monitored at the stations, and data is processed by the State Hydrological and Meteorological Institute. During 2018 and 2019, continuous monitoring of water temperature at four hydrological stations was also established.

PINPPL regularly monitors and controls the state of waters and the results of monitoring are available at the PINPPL website (https://np-plitvicka-jezera.hr/en/scientific-research/monitoring/).

Regarding the increase in the number of visitors to the property, several activities have been undertaken in order to alleviate pressure, in particular to avoid overcrowding at certain times and at the main attractions of the property. The online web shop for advanced booking of individual entrance tickets became operational in the period from April to June, while in June 2018 the system that enables preorders for group and agency visitors was also put into operation. Through this activity spatial and temporal (by
hour and by entrance) limitation of visitor numbers was introduced in the visitor system. Reconstruction of Entrance 1 is underway and the completion of works is expected in spring 2020.

Monitoring of the impact and visitors has been performed since the beginning of 2019, especially in the period of “high” tourist season (June, July and August) and full visitor system overload with the maximum allowed number of visitors. Certain corrections of defined capacities will be applied as required, in line with field observations and/or permanent restrictions (weather conditions, maintenance, research, etc.). This activity is deemed to be long – term. These activities are also planned in Visitor Management part of the Management Plan.

3. **Other current conservation issues identified by the State(s) Party(ies) which may have an impact on the property’s Outstanding Universal Value**

Global warming is a major potential threat to OUV. Through the monitoring carried out to date, an increase in the median water temperature by 1.5 degrees Celsius was recorded in the period from 2010 to 2014 as compared to the period from 1981 to 1986.

A trend of a mild reduction in water flow was observed at measuring stations, which indicates a reduction in the total quantity of water in the Plitvice lakes system. The indicated issues are attributed to the impact of global climate change.

PIPLNP regularly monitors the temperature, aquatic habitats and their wildlife.

With regard to water quality monitoring, the Croatian Institute of Public Health carries out analyses four times a year while the laboratory within PIPLNP carries them out on a monthly basis.

4. **In conformity with Paragraph 172 of the Operational Guidelines, describe any potential major restorations, alterations and/or new construction(s) intended within the property, the buffer zone(s) and/or corridors or other areas, where such developments may affect the Outstanding Universal Value of the property, including authenticity and integrity.**

All restorations and/or alterations, such as the conversion of the old restaurant building into a Visitor Centre, are strictly supervised by PIPLNP and other competent state institutions. Construction of the Visitor Centre is one of the measures from the Visitor Management Plan aimed at dispersing visitors and reducing their number in “rush hours”.

The issue of inadequate water and wastewater infrastructure in the Plitvice Lakes NP environs will be solved through the project “Construction of the water supply and drainage system for the Plitvice Lakes agglomeration” and the selected water supply solution. Preliminary activities necessary for the inclusion of the project in the List of strategically important projects have been carried out.

At the moment transit traffic takes place on the state road that passes through the National Park. In the current Spatial Plan, the relocation of the state road outside the borders of the park is foreseen.

The Ministry of Environment and Energy and the Ministry of the Sea, Transport and Infrastructure initiated discussions with regard to two major roads (eastern bypass Grabovac – Ličko Petrovo Selo, length 11.46 km and northern bypass Ogulin – Saborsko – Rakovica, length 12.5 km). Both planned roads would resolve the issue of transit traffic in the park since they are planned outside of the park borders. The procedure for developing the designs, carrying out EIA and AA and obtaining the necessary permits has been initiated.

5. **Public access to the state of conservation report**

Report is available to the public.