



LIFE Prespa Waterbirds - LIFE15 NAT/GR/000936

“Bird conservation in Lesser Prespa Lake: benefiting local communities and building a climate change resilient ecosystem”

Report of the 3rd meeting of the Transboundary Wetland Management Technical Group (TWMTG)

Thursday 10th December 2020, Online meeting

Members of the TWMTG:

Greece: Management Body of the Prespa National Park (MBPNP), Society for the Protection of Prespa (SPP)

Albania: Regional Authority of Protected Areas (RAPA), Protection and Preservation of Natural Environment in Albania (PPNEA)

North Macedonia: Galicica National Park (GNP), Resen Municipality (RM), Macedonian Ecological Society (MES)

List of participants at the 3rd TWMTG meeting:

Presenters:

Giorgos Catsadorakis – Society for the Protection of Prespa (SPP)

Dejan Dimidzievski - Galicica National Park (GNP)

Danka Uzunova – Macedonian Ecological Society (MES)

Zydjon Vorpsi - Protection and Preservation of Natural Environment in Albania (PPNEA)

Leto Papadopoulou, Management Body of the Prespa National Park, Greece

Irene Koutseri - SPP

Constanze Schaaff - Transboundary Biosphere Reserve Prespa

Biljana Rimceska - Resen Municipality

Slavcho Hristovski - MES

Participants:

Olga Alexandrou - SPP

Dragan Arsovski - MES

Andon Bojadzi – GNP

Julia Henderson - SPP

Klaudja Koci - PPNEA

Myrsini Malakou - SPP

Foteini Papanousi - SPP

Ledi Selgjekaj – PPNEA

Daniela Zaec - MES

Unfortunately, Mr Mihallaq Qirjo was not able to attend the meeting, as a representative of the Regional Authority of Protected Area (Korca, Albania), but Ms Constanze Schaaf was delegated to present developments related to wetland management for the Albanian Prespa National Park.



A) Agenda of the 3rd meeting of the TWMTG:

**Action C5 - Transboundary Wetland Management Technical Group
3rd Meeting - Thursday 10th December 2020
Online meeting**

10:00 – 10:10	Welcome and introduction	
10:10 – 10:25	Waterbird populations in the Prespa basin: results from monitoring activities in 2019 - 2020	Giorgos Catsadorakis, Society for the Protection of Prespa (SPP)
10:25 – 10:40	Wetland management and monitoring activities in the Galicica National Park	Dejan Dimidziewski, Galicica National Park (GNP)
10:40 – 10:55	Waterbird monitoring in Great Prespa, North Macedonia	Danka Uzunova, Macedonia Ecological Society (MES)
10:55 – 11:10	Ongoing wetland monitoring activities in Prespa National Park	Zydjon Vorpsi, Protection and Preservation of Natural Environment in Albania (PPNEA)
11:10 – 12:00	Discussion session	
<i>12:00 – 12:30</i>	<i>Short break</i>	
12:30 – 12:45	Wetland Management activities in Prespa National Park (Greece)	Leto Papadopoulou, Management Body of the Prespa National Park, Greece
12:45 – 13:00	LIFE Prespa Waterbirds - wetland vegetation management: review of 2019/ 2020 activities	Irene Koutseri, SPP
13:00 – 13:15	Wetlands of Lesser Prespa Lake	Mihallaq Qirjo, Regional Administration of Protected Areas Korca
13:15 – 13:30	Prespa project (Phase II) – an update	Constanze Schaaff, Transboundary Biosphere Reserve Prespa
13:30 – 13:45	Sustainable management of the protected area - Ezerani Nature Park	Biljana Rimceska, Resen Municipality
13:45 – 14:00	Wetland habitat conservation plans in Ezerani Nature Park	Svetlana Arsovska/ Slavcho Hristovski, MES
14:00 – 15:00	Discussion and next steps	

B) List of acronyms

ENP	Ezerani Nature Park
GNP	Galicica National Park
HIO	Hydrobiological Institute of Ohrid
MES	Macedonian Ecological Society
MBPNP	Management Body of the Prespa National Park (Greece)
MoEPP	Ministry of Environment and Physical Planning (MoEPP)
MoP	Municipality of Prespa (Greece)
NAPA	National Agency of Protected Areas (Albania)
PNP-AL	Prespa National Park – Albania
PONT	Prespa Ohrid Nature Trust
PPNEA	Protection and Preservation of Natural Environment in Albania
RAPA	Regional Agency of Protected Areas (Albania)
RM	Resen Municipality (North Macedonia)
SPP	Society for the Protection of Prespa
SWS	Society of Wetland Scientists
TWMTG	Transboundary Wetland Management Technical Group
WMC	Wetland Management Committee



C) Minutes on presentations and discussions

Part A: Waterbird feeding and breeding habitats

1) Waterbird populations in the Prespa basin: results from monitoring activities in 2019 – 2020 (SPP)

The meeting started with a presentation by **Giorgos Catsadorakis** regarding the results of the scientific monitoring of waterbird populations of the LIFE Prespa Waterbirds project, which aims to evaluate and assess the effect of the vegetation management on population sizes, breeding performance and use of space by the target waterbirds. Following a brief presentation on monitoring methods, Giorgos mentioned important events affecting the reedbed in 2019 (flattened reedbed after 2018, the fires of 2019 and the drought of 2019 and 2020), affecting the available space for species. Subsequently, while breeding pairs numbers of several waterbird species (2015 – 2020) do not seem to be affected, important spatial changes in heron colonies (2017 – 2020) and effects on the breeding performance data for the two species of pelicans (2019 – 2020) were noted, with Dalmatian pelican exhibiting reduction in breeding success. Conclusively, it was noted that there are substantial variations in **nesting population sizes** from year to year in almost all species but there is an overall increase, while on the contrary there are signs of decreasing **breeding success** for three out of the four species for which breeding success is monitored; in the long term **active wetland vegetation management** can contribute greatly to maintain feeding habitats of waterbirds and provide safety for their colonies.

Underlying notes on the conservation of waterbirds Prespa include: (a) it is now clear that wetlands around Prespa are continuously changing, especially connected to the drop of water level in Great Prespa Lake; (b) at the transboundary level, it appears that climate change-driven drought directly affects nesting habitats, as birds search for safer nesting sites in a continuously changing wetland habitat; (c) drought also affects the feeding grounds of waterbirds with an observed expansion of feeding grounds in Lake Great Prespa, where drought creates favourable conditions, (d) the breeding performance of most waterbirds is negatively affected through reduction of breeding grounds and degradation of nesting grounds, possibly affecting nesting population sizes in the future; (e) consequently, it is considered imperative to formulate joint transboundary management goals towards the adaptation of waterbirds to climate change and (f) joint conservation goals should focus on the suitability and proximity of nesting sites, the suitability of undisturbed feeding grounds, prey abundance and the adequate monitoring of ongoing changes.

2) Monitoring activities and wetland management in the Galicica National Park (GNP)

The second presentation was carried out by **Dejan Dimidjievski** of the Public Institution Galicica National Park (GNP) on the monitoring and wetland management activities of the GNP in the last two years. As the Management Plan of the GNP is ending in December 2020, the GNP has proceeded to draft the new plan (2021 – 2030) and also to prepare a Strategic Environmental Assessment (SEA). As cross-border consultation with authorities of the three countries is expected, these documents will be disseminated in the near future to the members of this group. In the new management Plan, there are no changes in the zonation of the park, with Golemgrad island and Stenje marsh remaining Strictly Protected Zones (SPZ). The Municipality of Resen is also drafting a Management Plan for the Prespa Lake Monument of Nature and in consultation with GNP, they have included an area of 400 meters around Golemgrad as a SPZ, a positive measure for the alleviation of threats in this area.



Long-term monitoring activities of GNP include monitoring of the goosander population in both Prespa and Ohrid lakes, the great cormorant colony and the Grecian juniper forest, including dendrochronological research of Grecian juniper on the island of Golemgrad and participation in the winter waterbirds census organized by the Macedonian Ecological Society (MES).

On the goosander population, Dejan mentioned the recent data of the transects in Great Prespa Lake, which run along the coast from Stenje to the Albanian border and around Golemgrad.

The monitoring of great cormorant colonies has been applied since 2010 and shows that the colony is moving from the north-eastern side to the north part of the island, with 2020 exhibiting the highest number of nests. In recent years there are also grey heron nesting (data to be presented by MES).

Two experimental plots on Grecian juniper forest have been established on Golemgrad Island (one within an area impacted by the cormorant colony and one on an area without impact) measuring structural data of Grecian junipers and this work is also complemented by the dendrochronological analyses of Greek junipers, as part of Dejan's MSc thesis, funded by PONT.

Regarding Stenje marsh, there is no direct activity by the GNP currently, but Dejan mentioned that this is the only wetland area within GNP (17ha) and that there is a 100 m buffer zone around it, but there are also threats to the marsh, stemming from the fact that there are private properties around the marsh, now farmed as apple orchards, but also pressures from building developments. As there are no provisions for compensation to land owners, both farming and building developments will continue as threats in the near future.

3. Waterbird monitoring on Great Prespa Lake, North Macedonia (MES)

Danka Uzunova started by presenting the objectives of the waterbird monitoring project of the MES, which include (a) the alignment with the breeding and roosting population knowledge of specific bird species across the Great Prespa lake, (b) monitoring of changes in population size, numbers and species diversity, (c) monitoring habitat changes and the effects of waterbirds and (d) supporting already established monitoring efforts by local protected area management bodies, increasing collaboration.

Following a brief presentation of methods employed to cover the large area of Great Prespa Lake, with boat transects being assessed as the most efficient method, Danka mentioned that they are carrying out monitoring throughout the year to note the changes, so far having covered 1½ years starting in mid-2019 (at the start of the breeding seasons). Danka also presented some results for heron species indicating that 4 species have been recorded at various stages of the life-cycle, with night heron and grey heron breeding in the area and great white egret and little egret using the lake for feeding and roosting throughout the year. On ducks and grebes Danka presented data for four species, with great crested grebes and common pochards recorded as breeding in the area, as well as wintering in the area.

On cormorants and pelicans, Danka mentioned that there is a stable observation of feeding and roosting of all species, with only great cormorants observed breeding in Golemgrad island in increasing trends (as already mentioned by GNP). Grey heron nesting population in Golemgrad island has also doubled in 2020 (from 54 active nest in 2018 to 116 in 2020).

The observed habitat changes, rendered a drone survey necessary, especially to locate glossy ibis possible breeding, after a sighting of feeding glossy ibis in spring 2020. On migratory birds, several other species were observed,



including flamingos. Common terns have also been observed nesting on a rocky outcrop in Ezerani Nature Park (ENP).

Finally, Danka presented major changes in habitats caused by climatic and water level changes and burning or ploughing of the reedbed in ENP, leading to changes in observed species and a boost of migratory birds was observed, especially of waders and terns. Finally, Danka mentioned the collaboration among MES, GNP, the Resen Municipality and transboundary counterparts as key for implementing activities.

4. Ongoing wetland monitoring activities in Prespa National Park, Albania (PPNEA)

Zydjon Vorpsi presented the activities of PPNEA, starting with the mapping of wetland habitats in the Albanian part of both Great and Lesser Prespa lakes, highlighting the fact that five priority habitats were identified according to the classification of the Habitats Directive. On waterbird monitoring, Zydjon mentioned that in 2020 they have joined international or joint transboundary activities of monitoring, including the International Waterbirds Census, the transboundary pelican census with PrespaNet partners and pelican monitoring venture, jointly applied by PPNEA and Regional Authority of Protected Areas (RAPA) in Korca. In the IWC 13,000 individuals of 22 species were observed. The transboundary pelican census showed 180 Dalmatian pelicans and 110 great white pelicans, regular numbers for May in Prespa Lake. Additionally, the National Agency of Protected Areas (NAPA) applied a nationwide count of pelicans, to which PPNEA responded with counts in Prespa, as well as contributing to the regular pelican count of RAPA in August.

In 2021, PPNEA will increase bird monitoring efforts, including an inventory of breeding birds in Prespa National Park (including other habitats, not only wetlands) and bird banding in Lesser Prespa for species using the reedbed.

Additionally, pilot conservation actions in priority habitats are to be implemented following the habitat mapping results in cooperation with counterparts in Greece and North Macedonia and monitoring of important species for the NATURA 2000 will take place.

After the presentations of the first part, the following issues were discussed:

- Myrsini requested further information on the coverage of the area in North Macedonia and the effort needed to carry out monitoring activities for waterbirds. Danka clarified that the western/ north-western part was not covered as often, due to difficult access; this part exhibited lower species diversity when visited (Sirhan vantage point). In terms of effort, the implementation of monitoring required 1-2 people for a minimum of 2 days, and additional participation by staff members of the GNP and the staff of Resen Municipality (RM) for the ENP. Boat transects proved to be the most efficient way, with high coverage of the changing reedbeds and the next monitoring actions will expand boat transects to cover also less accessible areas.
- Julia requested more information on the ploughing of Ezerani, to which Danka replied that it covers an area along the shore of about 600m in length, and added that activities/ access by people/ water pumps had continued through the season as the water level continued to drop.
- Constanze requested some clarifications on the pelican monitoring protocol, mentioning the protocol that has been published in the GIZ publication and adopted by NAPA and on whether there will be a new protocol to be shared. Myrsini mentioned that the development of a new protocol is foreseen in the next PrespaNet project, to

cover the need for joint monitoring of waterbirds in the Prespa area, following the dynamically changing situation referred to by Giorgos above. The research questions to be answered in that project will be more complex than standard presence/absence surveys and the protocol will therefore be tailored to cover all the observed changes and pinpoint the important areas for feeding, roosting and breeding, while addressing a wider range of questions, as needs arise. Of course this will be shared with parks and protected areas by the PrespaNet members, in order to align monitoring activities. Julia added that the development of the protocols will be based on existing ones wherever possible.

- Dragan requested more information about the habitat shifts that lead to changes in habitat use by waterbirds. Giorgos mentioned that it is a combination of factors: (in Lake Lesser Prespa the use of foraging grounds is decreasing because there are limited flooded feeding grounds in recent years, while as the water level in Lake Great Prespa drops, large flooded feeding grounds are created, increasing suitable feeding grounds there. The problems of the two lakes are different: as water level decreases in Lake Great Prespa there is a positive effect with newly exposed areas (even close to areas with steep cliffs), while in Lake Lesser Prespa the water level decrease is not so much, but it lacks the seasonal increase of water level in spring that was taking place in the past and created shallow areas outside the reedbelt toward the land. Also in Lake Lesser Prespa, the birds may abandon or change their nesting places if they are not well flooded, as they need to use islands or make nests in vegetation that is within water (if the surrounding water dries up, they become accessible to land predators). Because these birds need to have their nesting grounds as close as possible to the feeding grounds to reduce the commuting energy cost, more and more they will try to shorten the gap between feeding and nesting grounds (as in the example of the flexible grey herons having already moved to Golemgrad)
- Irene clarified that there is a difference in the water levels of the two lakes. In Lesser Prespa Lake there is a standard annual fluctuation of even up to 1 m between seasons, but recently the high optimal spring water level may not be reached as often as in the past and this is why we have fewer years with flooding in spring.

Part B: Wetland vegetation management

1) Presentation of the wetland management activities in Prespa National Park (MBPNP):

Leto Papadopoulou from the Management Body of the Prespa National Park (MBPNP), presented the main wetland management activities and the coordination of activities by the MBPNP. After presenting the main zonation of the Prespa National Park, Leto mentioned the important addition of two new adjacent NATURA 2000 sites, which now fall under the jurisdiction of the MBPNP and the Municipality of Prespa (MoP) (i.e. most of the MoP now being under a protected area status). Leto referred to the long-standing Wetland Management Committee (WMC) highlighting the multi-stakeholder representation and its consultative role to the MBPNP for the decision-making process, as well as its recognized importance. However, 2020 was the first year that the WMC meeting was not convened, owing to Covid-19 restriction measures, but management was enabled by a decision of the MBPNP to approve the continuation and extension of the activities for the year, based on decisions taken in 2019. Additionally, the MBPNP enabled the approval of the creation of firebreaks by the Real Estate Service of Florina on a permanent basis for the coming years. Additionally, Leto mentioned that the implemented wetland management activities are included in the Management Plan, which was approved in 2011 and that the MBPNP is implementing wardening activities according to annual plans and routes are adjusted seasonally. For 2019, the MBPNP wardens placed new buoys at



the perimeter of waterbird colonies to restrict access and participated in joined efforts with the SPP for the detection of illegal traps for wildlife, after an incident with a trapped bear in December 2020.

Regarding the organization of the wetland vegetation management, the MBPNP issued a public call of interest for (a) the implementation of cutting and (b) the use of reed biomass, a process that is carried out every year in order to enable the wetland vegetation management by different individual stock-breeders in cooperation with the LIFE Prespa Waterbirds project.

Finally, on the issue of reedbed fires, Leto mentioned the public meeting organized in early 2019 with all related stakeholders and authorities, which highlighted the wider effects of reedbed wildfires. More importantly, after joint requests of stakeholders, a local firefighting unit for Prespa was inaugurated in Antartiko village in 2020

2) Presentation of wetland management activities 2019-2020 under the LIFE Prespa Waterbirds project (SPP):

Irene Koutseri referred to the management activities, starting with an overview of the main management objectives: (a) the restoration and maintenance of spawning habitats for fish and feeding habitats of waterbirds, following a decline in wet meadows (habitat type 6420) owing to the expansion of reed and an overgrowth of reed in stream mouths and (b) the protection of waterbird colonies from wildfires.

The absence of management is identified as a key factor affecting the growth of reed in the littoral zone in the dynamic wetland system, while water level management affects the flooding of these areas. On water level Irene mentioned the fluctuations of the water level of Lesser Prespa Lake, highlighting the importance of spring water level for flooding the littoral areas and the autumn optimal water that allows the implementation of management activities (cutting and grazing). A map of flooding in the northern part of the lake for the years 2018, 2019 and 2020 was also presented, along with photos comparing the vegetation at different water levels between 2018 and 2020.

Irene also referred to practical issues of management and the use of biomass as fodder, explaining that the time-frame for extracting biomass is limited between July and October, depending also on drought and weather conditions. Grazing, although used effectively as a complementary management tool, has to be regulated so that it does not affect the quality of fodder collected. Therefore, it is apparent that the contribution of stock-breeders in management is important both in participating in the cutting/collection activities, but also to regulate grazing herds within the littoral zone.

The cutting interventions were shown in a map for 2019 (83 ha) and for 2020 (62 ha), highlighting the contribution of stock-breeders (~50%), but also explaining the fact that the dry conditions of 2020 and subsequent condition of vegetation did not render necessary the implementation of management activities in some parts (hence interventions were implemented in fewer hectares). The interest and contribution of stock-breeders in biomass collection is on the increase since 2018, with 60% of baling operations being implemented by individual stock-breeders in 2020. About 190 tons of biomass was extracted in 2020 and in total more than 20 stock-breeders have contributed or benefitted from fodder collection and grazing in the last three years, following the MBPNP procedures.

Regarding the reedbed fires, it was mentioned that the extent of fires was reduced in 2020 (50ha) in comparison with 2019 (300ha) and that firebreaks created in 2019 played a role in reducing the spread of fire among large areas of reedbeds. An additional positive outcome of firebreak creation is that the deeper parts of firebreaks may remain flooded in spring and act as feeding grounds for waterbirds, even in dry years like 2020.



Regarding streams, the interventions in vegetation management (cutting and removal of vegetation) in two streams were presented, along with the positive response of 6 fish species, out of which 3 are endemic, with use of the streams being observed during the spawning season.

In conclusion, the management has to be adaptive around water level and existing management, leading to a need for defining detailed interventions on an annual basis. Also, the use of biomass has worked positively as an incentive, leading to management actions being carried out by individual stock-breeders, allowing large-scale interventions to be carried out.

3) Transboundary Biosphere Reserve Project: Phase II (KfW)

Constanze Schaaff presented an update of the project, focusing on wetland management. The project has been supporting the Prespa National Park (Albania) in its management since 2018 and although the project is expected to finish in April 2021, an extension has been requested until 2022. Additionally, they have been supporting RAPA in coordinating the grant they have received by PONT, so that all activities from external funding are jointly coordinated. RAPA has 5 new staff members, with 3 specialists and 2 more rangers to be working for the PNP-AL (on PONT funding). In 2021 a new specialist for ecosystems and flora/fauna will be included and Constanze proposed that they are to be included in the TWMTG meetings.

The project has been supporting wetland monitoring activities, including the winter waterbird census and training on bird identification and monitoring (conducted by Spase Shumka), the national (mentioned by Joni/PPNEA earlier) and transboundary pelican census, as well as the inclusion of students and junior rangers in these monitoring actions.

In terms of wetland management, this year there has been a mid-term review of the Management Plan (MP), ongoing since July 2020, including an assessment of objectives of the MP and the status of foreseen activities. Referring to Lake Lesser Prespa an assessment of the status of reed management has been conducted, including proposals on how to proceed with supporting these activities, following a specific request by the KfW. Five objectives related to wetland/ reed management were assessed with two objectives not having commenced (i. improve Lesser Prespa for fishing and ii. harvesting reed as substitute for firewood) and for the other three only reactive work having taken place (i. protecting the reed belt of Lesser Prespa Lake along the border, ii. Protection from contamination with harmful substances and informing/ educating about the fauna and flora of the lakes).

The MP had foreseen a number of measures to improve Lesser Prespa, including (a) removing parts of the reed in summer to open up water surfaces, (b) opening corridors in the reed to allow fishermen to access the open water surface and (c) harvest reed as substitute for firewood. The assessment carried out looked into the status of reed management and options for reed treatment in the PNP-AL, with the objective to provide recommendation on the costs and benefits of investing into reedbed management in light of post-project sustainability. The MP had proposed to link management with pellet production, aiming to reduce also the use of firewood in the PNP-AL; respective processing equipment was purchased, but the action was not implemented, owing mainly to the fact that this would have to be a subsidised activity. At the same time manual harvesting in winter had taken place on an area of 20.4ha, but reed was not processed in to pellet production. The assessment looked into the limitations and the benefits of nine options for using the material, either whole or shredded; the study concluded that in all options subsidies would be necessary for reed management, treatment (if needed) and transport, while specifically for reed briquetting it was shown that it cannot compete economically with current firewood prices and the subsidy would



amount to 17,000 Euros/ year if no other additives were included or 38,500 Euros/ year with increased wood additives. To resolve the issue of long-term subsidy, NAPA decided to transfer the operational ownership of the equipment (grinder/briquette press) to an association of fruit producers with the obligation to treat supplied reed by an amount of about 100 tons/ year, while the distribution of material relies on their own decisions and needs.

Based on the revised MP (2021-2023), the following monitoring and management activities will be supported by the project:

- Waterbirds census and pelican census
- Development of standard monitoring protocol and respective staff training and monitoring implementation (2022, heron species to be included), for which Constanze noted that it would be beneficial, if appropriate, to use the protocols created for transboundary monitoring.
- Assessment of relevant aquatic flora and fauna species within the Prespa lakes (2022/ 2023)
- Development of monitoring protocols for habitat status according to NATURA 2000 requirements and related staff training and monitoring (2022/ 2023).
- Development of a database and monitoring the area of reeds over time (2021)
- Promotion of reed harvesting and its use, under a 3-year plan to be produced in 2021.

Following the presentation Giorgos requested a clarification on whether reed management/ cutting will be discontinued, to which Constanze replied that it is planned to apply some reed management, but the project has now disconnected it from socio-economic activities which were not financially sustainable. Giorgos also asked whether the option of the green material to be used as fodder was investigated and Constanze replied that it was and that it would still need to be subsidized (by 5,000/year) either by the PNP-AL or the stock-breeders.

4) Sustainable management of the protected area Ezerani Nature Park/ Municipality of Resen (ENP/ RM)

Biljana Rimcheska represented the Department of Environment of Resen Municipality (RM), to which she is a new employee. Biljana presented the area for which the department is responsible, which includes not only ENP, but also all the area of the RM (i.e. including river ecosystems). Based on the ENP Management Plan, Biljana presented the aims and implemented/ planned activities on research, conservation and monitoring of the ENP.

One of the aims of the ENP-MR (Program 3) is to provide as much science-based data as possible to establish justified and effective conservation measures and effective monitoring, for which Biljana noted that although there is a lot of scientific data on Ezerani NP, the implementation of further scientific research and monitoring of the area will provide a basis for valid conservation activities. The monitoring is organized and regulated by the management body which then submits the data to the Ministry of Environment and Physical Planning (MoEPP).

Several sub-programs (activities) are foreseen or are currently being implemented not only by the RM, but also by relevant public institutions (Hydro-biological Institute of Ohrid - HIO) and NGOs (MES) in the area. The sub-programs include:

- 3.1. Cooperation with scientific institutions, non-governmental organizations and student associations;



So far this sub-program has included the development of a program for scientific research activities, signing memoranda with counterpart institutions and organizations and establishing cooperation with international scientific institutions for nature protection.

3.2 Determination of the intake of pollutants and nutrients from Golema Reka;

3.3 Environmental research;

In order to obtain quality data for the efficient management of ENP, proposed actions include detailed mapping of habitats and communities, complex environmental research on the priority types of ecosystems and the establishment of an ecological network (e.g. a system of forest in the matrix of wet meadows)

3.4 Reactivation and rehabilitation of the fishponds and the old riverbed of Golema Reka;

3.5 Revitalization of the remaining alder forest in Ezerani Nature Park;

Aiming to stop the illegal activities that negatively affect the specific alder forest habitats and the species that are representative for this unique ecosystem, the proposed activities have included the preparation of a study for rehabilitation of the alder forest, in cooperation with MES, and the preparation of a protocol for management of the water balance of Golema Reka in the old riverbed and with an intensity compatible with the functioning of the fishponds.

3.6 Management of littoral and swamp reeds and wet meadows;

3.7 Management of populations of important bird species;

3.8 Management of alien and invasive species;

Another aim of the MP of the ENP involves education and public awareness, in order to establish ENP as a well-known and respected protected area among stakeholders and beneficiaries, and ensure that they are familiar with the values of the area and the opportunities it offers. Education/awareness raising is an opportunity for the MoEPP and the governing body to re-establish the status of ENP and re-affirm their responsibilities for its protection and management. In this respect, the ENP has been working and will continue to work towards raising awareness among the local population about the negative impact of fires and harmful consequences of inappropriate agricultural and communal activities, as well as the importance of the biodiversity through public education and promotion of the ENP. Also it is expected to include public information and implement a visit protocol, which will provide guidelines for visiting the ENP. Finally, Biljana mentioned the ongoing cooperation with HIO, especially on the activities of the Lake Prespa Monitoring Station and several of the public awareness activities that were carried out within the last year, including the environmental education applied by MES and events for specific international days.

Following the presentation, Giorgos mentioned that the amount of planned activities is great and that it would be very useful if the RM would forward relative documentation regarding activities related to the ENP to members of the TWMTG, so that we are informed on a regular basis.



5) Wetland habitat conservation plans in Ezerani Nature Park, Macedonian Ecological Society

Slavcho Hristovski welcomed Biljana to the TWMTG, and expressed his view that this new addition in RM staff will further strengthen the RM's capacity in nature conservation and monitoring. He also mentioned that he will be presenting on behalf of Svetlana, who could not join the meeting.

Slavcho started off with presenting the two main components of wetland habitat conservation, i.e. activities for the conservation of alder forests and wet meadows, which will be mainly located within the ENP. The development of both components started off from the basis of the habitat type mapping that took place two to three years ago and follow-up additional studies and research on the habitats, while some small pilot activities were implemented and plans for the future were set.

Regarding alder forests, he mentioned that it is a priority habitat and showed a map of their distribution. The mapping emphasized their international importance, the threats were listed, concluding on the necessity of further conservation action to be undertaken; all planned activities are joint efforts between MES and the RM. The coverage of alder forests is about 130 ha and about 42% are found within the boundaries of ENP, wherein conservation action can be implemented easier. As a pilot action, alder seedlings were produced in autumn 2019 and the action is currently ongoing. The process of restoration includes other activities, such as production of seedlings, providing nursery facilities and care, preparation of the field for reforestation, reforestation and monitoring. In November 2020 about 50 one-year alder seedlings were planted on an area of 0.4 ha in Perovo and alder seeds were sown. In parallel, a feasibility study for the restoration of common alder forests in Greater Prespa region (MKD) was developed (December 2019 – June 2020), leading to the selection of 4 (out of 52) suitable and available locations for the reforestation of common alder and to recommendations for monitoring, including other aspects of biodiversity.

Regarding wet meadows, this habitat consists of four meadow habitats and the total estimated surface is about 550ha. Additional studies were carried out on 8 pre-selected sites, including studies on phytosociology, soil, biomass, chemical and biodiversity studies and a questionnaire targeting local stock-breeders on the usage of biomass. An important result is that now the biomass production of these meadows (8 sites) is known. A small pilot activity was conducted in 2020, albeit at a lower intensity owing to COVID-19 restrictions. A single meadow patch of 1.6 ha (1.18 ha of *Calamagrostis epigejos* and 0.42 m² of *Carex* sedges) was mowed in August 2020 and 350 hay bales were produced (350x14.34=5019 kg), while the RM helped in the distribution of hay to five farmers, which were used successfully as fodder. Future plans, upon the approval of project proposals by PONT and the Aage V. Jensen Charity Foundation, summarize as (a) modelling of connectivity on transboundary level (species-based) after defining the appropriate species for this model, (b) continuing with management activities on wet meadows on small scale (3-5 ha), including mowing and distribution among local farmers to be used as fodder, as well as networking with the RM and local farmers, (c) study ecological functions of wet meadows (including their role in pollution control) and their biodiversity and (d) monitoring of habitats and indicator species.

After the presentations of the second part, the following issues were discussed:

Irene mentioned that it is interesting that several initiatives are planned for conservation of habitats in the near future and that it is important that the information of management and monitoring are shared. Giorgos noted that he is happy with the large spectrum of activities planned and asked how all the activities can be coordinated and aligned at a transboundary level and be able to provide the maximum benefit for the ecosystems of the area and keep up with developments and results. Daniela Zaec mentioned the role of PrespaNet and that most activities also

involve PrespaNet members, which are going to continue work with regular meetings both between the NGOs and relevant stakeholders/ authorities of the area, so there is also regular information flowing; additionally, Daniela noted that the meetings of the TWMTG are very useful as well. Julia mentioned that the new project, if funded, has included the continuation of the TWMTG beyond the LIFE project. Irene mentioned that the LIFE project continues until September 2021 and several management, monitoring and assessment activities are foreseen within this 9-month period and two more targeted meetings will be carried out with the next one focusing on the transboundary mapping of wetland habitats. The next meeting will be organized after the assessment of habitat types, after 10 years of the first detailed mapping, and is expected possibly around March 2021.

Giorgos requested a bit more information on the study of the role of wet meadows in pollution control and Slavcho mentioned that this is a new idea, coming out from a recent informal meeting with scientists of the European chapter of SWS and it was included to analyze the soil and the hydrology of the soils, in order to obtain more information on the nitrogen, phosphorous and even heavy metal/ pollutant loads especially in areas in contact with apple orchards and relate it to the extraction of the biomass. Giorgos also asked whether this means that the majority of wet meadows around Lake Great Prespa are connected to underground or inflowing water from the alluvial grounds. Slavcho replied that information on hydrology is currently limited, but suspects that there is a connection owing to the past relevance of the ecosystem, especially since they still continue to be present, even in these dry conditions of the past two years and changing conditions observed.

Giorgos mentioned that due to the low water level of Lake Lesser Prespa in spring of the last two years, there was no spawning of carp observed and that fishermen mentioned movement of fish towards the southern part of the lake in Albania, and that if this is true, then it shows that the different parts of the lakes might play very different roles from one year to another. This renders what Constanze mentioned on the continuation of the conservation management very important, in this particular reedbed, which is the largest and densest in the area and also found in a shallow part of the lake. So if the lake water level continues to drop, it may become dry. Therefore, it is very good that there will be both research and efforts to keep it open. Myrsini mentioned that this part of the lake is very important as 30 years ago the Greek-Albanian border was one of the two places where pelicans had their colonies in 1980s and PPNEA and relevant authorities should be supported more on the conservation of this part of the lake.

Biljana requested to know whether the other sides regularly monitor water quality and how often and proposed joint monitoring among the three countries and sharing of information, as well as drafting joint funding proposals.

Constanze mentioned that on the Albanian side water quality monitoring is the responsibility of National Environmental Agency, but there is no regular data available and NAPA and RAPA have included activities in their 3-year planning and application to PONT, planned for 2022. She also mentioned that as most TWMTG members are beneficiaries of PONT, this may be a good opportunity to check who is doing what when RAPA reapplies for the funding. Klaudja mentioned that PPNEA has not been involved in water quality monitoring and as far as is known it has not been regular, so it is positive that RAPA is pursuing this issue further and PPNEA will follow-up and share developments, when it becomes available.

Julia mentioned that there is also an initiative among relevant scientists for sharing information from the three countries (Prespa Water Forum - PWF) and possibly Biljana and other experts involved in water quality monitoring can be included in the group in the future.

Irene mentioned that on the Greek side, there is regular monthly monitoring by the Greek Wetland/ Biotope Centre and these are all issues that could be elaborated by the PWF. Irene also mentioned that this meeting provided a full



overview of developments in the area and, following several requests throughout the meeting to share documents and reports, she proposed to start sharing key documents, maps, reports and plans in a cloud-based drive, to which the TWMTG agreed.

Next steps:

Finally, Irene summed up the next steps:

- A report on the minutes of the meeting will be shared along with the presentations in the near future
- The “document database” will be set-up to allow the sharing further documents among members
- The next meeting will be organized around February/ March 2021. All member organizations of the TWMTG will be contacted in early February regarding availability and contributions to the preparation of the next meeting.