

# The Declaration on the Protection of the Lake Ohrid Ecosystem

Final Resolution adopted at the 13<sup>th</sup> Society of Wetland Scientists  
Europe Chapter Meeting

Ohrid, Republic of Macedonia, 1-3 May 2018



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



The image shows three handwritten signatures in black ink. From left to right, they appear to be: Matthew Simpson, Keith Edwards, and Matthew Cochran. The signatures are written in a cursive style.