

THE BLUE HEART OF EUROPE - SAVE THE BALKAN RIVERS

The Mavrovo National Park, Macedonia

DAM CONSTRUCTION PLANS PUT NATIONAL PARK AT RISK!

The Mavrovo National Park in Macedonia is one of Europe’s oldest national parks. It is famous for its extensive beech forests, alpine meadows, pristine rivers and streams. A huge variety of species, such as rare trout species, wolves, bears, and otters, live in the park. One species is outstanding though: the Balkan Lynx (*Lynx lynx balcanicus*). The Mavrovo National Park is the centre of the remaining population of the critically endangered subspecies of the Eurasian Lynx.

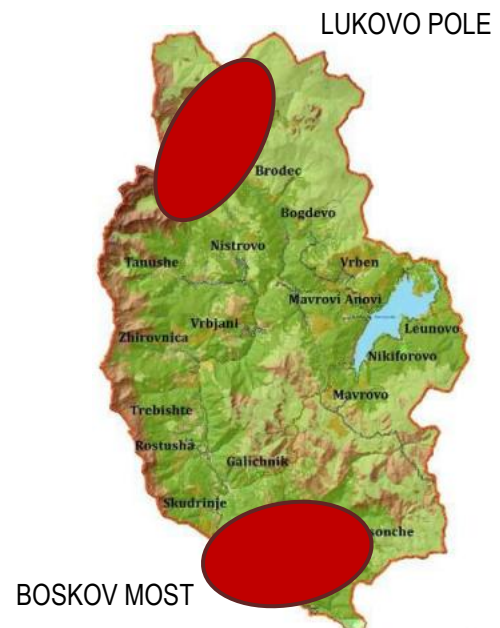
The park hosts more than 1,000 different plant species. It is part of the southernmost section of the European Green Belt - an outstanding ecological network that has developed undisturbed along the former iron curtain.



Location of Mavrovo National Park in Macedonia

The threats

Two large scale hydro-power projects (HPPs) are planned inside the park – “HPP Boskov Most” and “HPP Lukovo Pole”. Both projects depend on funds from international financial institutions and are undermining the very idea of a national park. If these two projects – or even one of them – will be implemented as foreseen, severe negative impacts on the biodiversity of Mavrovo National Park will be the consequence. Moreover, these projects risk the revocation of the national park status.



The location of the HPP project sites Lukovo Pole and Boskov Most inside the National Park

(Source: Stakeholder Engagement Plan, Project: “Hydropower Plant Boskov Most”, prepared by GEING KuK Skopje)

I. HPP Boskov Most

The dam project Boskov Most is located in the upper Mala Reka valley in the southernmost part of the national park. The main source of funding for this dam project is the EBRD – the European Bank for Reconstruction and Development. The HPP is designed to produce peak energy. For that purpose the discharge of Mala River as well as its two major tributaries and several smaller streams in the area will be diverted into a reservoir via pipes and canals. On demand, the water will be released once a day. This will mean daily flushes, which have enormous negative impacts on biodiversity and species populations in the river sections below the power-house – and all this in a national park. Furthermore, riverine ecology of the entire valley will severely suffer from the diversion of a major part of its natural water supplies.

HPP Boskov Most: two rivers that would be affected by drainage and flush: Mala River (left) and Radika River (right).



Facts and Figures

- *Dam hight: 33 m*
- *Output: 68 MW*
- *Max daily flush: 22 m³/s in 5h per day (average discharge of Mala Reka: 5.75 m³/s)*
- *Construction/widening of new roads: 16.4 km*
- *New supply channels: 19.70 km*
- *Directly affected area inside Mavrovo NP: 935 ha*
- *Investment: 84 Mio EUR, 65 Mio. EUR provided by a EBRD loan*

The final evaluation of HPP Boskov Most's compliance with the funding criteria of the EBRD is not yet finished.

In contrast to the official conclusion of the “Biodiversity Survey” elaborated under the leadership of the Macedonian Energy Group ELEM, the HPP Boskov Most would result in severe destruction of biodiversity and to population decline of endangered species. Internationally renowned experts analysed the biodiversity survey and came to the following conclusions:



The European Otter (*Lutra lutra*) is an internationally protected species.

“The proposed drainage of the streams, detailed in this report, will have an immediate negative impact on the fish habitats and fish populations in these watersheds.

In our opinion this biological diversity survey remains superficial, incomplete and misleading with regards to the otter, clearly not taking the risks to this threatened species seriously.”

Dr. Nicole Duplaix, Chair of the IUCN-SSC Otter Special Group

“The proposed actions in the National Park will have strong negative effects on the native trout populations which will largely vanish from the reservoir area as well as from the downstream sections of the dam...”

Dr. Jörg Freyhof, Leibniz-Institute of Freshwater Ecology and Inland Fisheries Berlin and European Chair of IUCN SSC/WI Freshwater Fish Specialist Group

“Overall, there seems to be the view that ..., the negative effects can be easily mitigated. This is not a view that I can... share, and ...I strongly feel that it is in stark conflict with the primarily management goals of an IUCN Category II National Park.”

Dr. Steven Weiss IUCN Salmonid Specialist Group (SSG) & Red List Authority (RLA) for Salmonid Fishes in Eurasia



“Mavrovo hosts [...] the last source of population with reproduction of the Balkan lynx [...]. Putting any additional stress on this source population may lead to the extinction of one of the most threatened mammal populations in Europe.”

Dr. Urs Breitenmoser, Co-Chair, IUCN-SSC Cat Specialist Group

Left: The endangered Balkan Lynx (*Lynx lynx balcanicus*)

HPP Lukovo Pole

This project is planned close to the Macedonian border with Kosovo. The main source of funding is the World Bank. The Lukovo Pole project shows many similarities with Boskov Most. The water will be diverted from several tributaries to the Radika River, which will be channelled to the reservoir through a pipe system. Among the affected tributaries is the fragile Dlaboka Reka valley – a pristine and untouched mountain stream, its slopes being characterized by unique ancient beech forest. This part of Mavrovo National Park has recently been identified as a potential World Heritage site by an international expert delegation.



The reservoir is to be constructed in one of the richest and most beautiful parts of the national park in terms of plant biodiversity. These wide alpine meadows represent a very valuable site for the specialists amongst Europe's plant species.

Left: The dam construction site – this area is to be flooded.

Facts and Figures

- *Dam height: 71 m*
- *Output: 6 MW, estimated at 159 GWh per year with respect to additional benefits from existing HPPs*
- *Max daily flush: 6 m³/s*
- *Construction/ widening of roads: > 20 km road widening and bitumisation*
- *New supply channels: 19.95 km*
- *Directly affected area inside Mavrovo NP: 3,546 ha*
- *Investment: 83 Mio EUR, 70 Mio EUR provided by a World Bank loan¹*

The World Bank has not yet confirmed to supply the funds to start the construction of the project.

¹ <http://www.worldbank.org/projects/P112730/lukovo-pole-water-regulation-renewable-energy-project?lang=en>

Conclusions

- A total of over 4,400 ha of natural habitats would be directly affected by the two dam projects.
- Both dam projects are violating the National Park guidelines
- **In other words, the EBRD and the World Bank are planning to fund the possible revocation of Mavrovo's status as a national park!**



Entrance portal of Mavrovo National Park close to the Boskov Most project area: "Welcome to National Park Mavrovo"

We demand

- THE EBRD AND THE WORLD BANK MUST RETRACT THEIR FUNDING OF THESE PROJECTS!
- THE GOVERNMENT OF MACEDONIA MUST STOP AND ABANDON THE PROJECTS

NATIONAL PARKS ARE FOR THE PRESERVATION OF NATURE, BIODIVERSITY AND RECREATION – NOT FOR DAMS!