

БЪЛГАРСКА АКАДЕМИЯ НА НАУКИТЕ
НАЦИОНАЛЕН ПРИРОДОНАУЧЕН МУЗЕЙ
1000 София, бул. „Цар Освободител“ № 1
Регистрационен №, индекс и дата
Мух. 5327208 / 11.12.2015

To: Environment Directorate General

Commissioner Karmenu Vella

Letter of Support

Author: the National Museum of Natural History - Bulgarian Academy of Sciences

Subject: COMPLAINT TO THE COMMISSION OF THE EUROPEAN COMMUNITIES
CONCERNING FAILURE TO COMPLY WITH COMMUNITY LAW

**/Complaint sent by “Balkanka” Association, Sofia, on 29.06.2015, about the construction of hydropower plants /HPP/ and its impact on Bulgarian river ecosystems/
ID Number: CHAP(2015)02363**

Dear mr. Vella,

Regarding the Complaint submitted to the European Commission by “Balkanika” Association – Sofia, we would like to express our utter support and hope that the problems described there will be taken into consideration.

The use of river waters for HPP purpose in Bulgaria began during the first half of 20th century. It became largely intense after 1950. Many HPP cascades, as well as other hydrotechnical facilities, were built at the time, mainly on big rivers in the mountains.

In spite of that, until the end of the 20th century, a large part of the national river network still remained unaffected. Since 2002-2003, until present days, a real boom in the construction of different types of HPP took place, which led to a profound deterioration of many river ecosystems. Hydropower was presented as “green” energy produced from a renewable inexhaustible source and a great number of Bulgarian and foreign investors energetically started to build hydropower plants all around the country

We confirm all the problematic issues raised in the complaint of “Balkanika” Association – the cascade construction of hydropower plants, the abstraction of unacceptably large water quantities for derivation type HPPs, leading to the complete drying-up of rivers and ecosystem destruction in many of them, the incorrectly built or nonexistent fish passes, the flooding of

riparian community vegetation and of other riverside habitats by impoundment type HPP lakes, as well as the transformation of rivers into series of dams. In the above-mentioned complaint, these issues are thoroughly exposed and proven by facts, photos and other pieces of evidence.

We will briefly elaborate further on and will supplement the information with some additional data about the HPP negative impacts on biodiversity in different regions of Bulgaria.

The incorrectly built fish passes or the lack of such, combined with the existing for many years now river barrages, have led to serious fragmentation and isolation of the populations of series of rheophilic fish species. For example, the populations of Common barbel (*Barbus barbus*) – a fish included in Annex V of Council Directive 92/43.EEC and in the Red Book of Bulgaria were largely scattered by 11 impoundment HPP built during the last years along the Iskar river in the regions of Karlukovo, Roman, Mezdra, Lakatnik, Tserovo, Svoje a.o. Consequently the migration of barbel populations for the sake of reproduction in the river Danube and upwards along the river Iskar, has been terminated from Karlukovo village upriver. The remaining populations have been divided and have started to decrease in result of isolation, excessive fishing and river pollution. In the near future, these fragmentary barbel population remains will disappear completely. The same effect along this river has been produced also upon the populations of Vimba bream (*Vimba vimba*) and Common nase (*Chondrostoma nasus*), which also enter in large shoals from the river Danube upstream the river Iskar at springtime to reproduce. Despite these sad consequences of HPP construction for the ichthyofauna, there are still investment plans for the construction of approximately 10 more impoundment type HPP from Karlukovo village down the river Iskar, although most of this part of the river is in Natura 2000 network, the "River Iskar" area.

The large-scale construction of HPP affected not only aquatic invertebrates, amphibians and fish, but also protected species of vertebrate animals, like Otter (*Lutra lutra*) and several bird species – White-throated dipper (*Cinclus cinclus*), Grey wagtail (*Motacilla cinerea*), Black stork (*Ciconia nigra*) and Common sandpiper (*Actitis hypoleucos*). Affected by the construction of a great number of hydropower plants, the populations of these species have been stricken and decreased in some river basins, due to the reduction of appropriate nesting places along the rivers and mostly - to the decrease in their nutrition base – aquatic invertebrates and fish, also harmed or destroyed by insufficient ecological river flow. The drying-up of a series of small rivers in summertime also deprives the local birds, mammals and other animals from the vital drinking water.

The construction of impoundment type HPPs at bigger rivers has not only turned out to be a serious obstacle to the migration of rheophilic fish species, but has led to the accumulation of alluvia and silt /toxic in some cases/ in the lakes. In the course of cleaning such silt, serious accidents took place. Such catastrophic water pollution of the river Iskar bellow Lakatnik HPP in 2008 is exposed also in the complaint of "Balkanika" Association.

Moreover, certain invasive and predatory fish species have occupied the still or slowly flowing waters in the lakes of impoundment type hydropower plants, causing additional harm to the autochthonous ichthyofauna populations. A series of riverside habitats have been destroyed due to flooding after the construction of impoundment type hydropower plants, which has also caused negative impacts on series of vertebrate species and invertebrates.

Last but not least, for the sake of HPP construction in mountain areas, roads have been built and equipment has been installed at certain, hard to access, wildlife gorges, where human interference has not appeared so far. It has led to an increase in the anthropogenic impact on these regions and to the driving-away of rare nesting birds and big mammals.

Not a single mountain river in Bulgaria does now exist, that is not subject to investment plans for at least one hydropower plant in the future, endangering the river ecosystem survival or wellbeing. Temporary bans on the construction of hydropower plants have been imposed by the Ministry of Environment and Waters in the river basin management plans for the main river basins in our country, regarding certain river sections, belonging to NATURA-2000 network, but they are insufficient - especially for the west Aegean and the Danube regions. At present, a process of updating these plans is going on. That's why, it is so important that the construction of new hydropower plants and the impacts on the biological diversity they cause, must be subject to a thorough reconsideration once again.

Kind regards:

Prof. Dr. Nikolay Spassov

/Director of the National Museum of Natural History-BAS/



Sofia City,

15.11.2015