

WSCS Statement regarding the Namakhvani Hydropower Project on the River Rioni, Georgia

addressing the Ministry of Economy and Sustainable Development of Georgia and the Ministry of Environmental Protection and Agriculture of Georgia



With this letter, we would like to draw your kind attention to an environmental threat that is building up in the headwaters of the Rioni River, an extremely valuable resource not only for Georgia but for the entire Black Sea region, due to the fact that it is the last refuge of natural populations of several sturgeon populations.

The World Sturgeon Conservation Society (WSCS) is a non-profit association established in 2003. The membership of WSCS is global and includes scientists from various disciplines as well as regulators, administrators, planners, practitioners in fisheries and aquaculture as well as persons with a high interest in species protection. It acts as an international forum for scientific exchange and cooperation.

Referring to the information presently accessible to WSCS, the Board of Directors would like to comment on some aspects of the ongoing development of the Namakhvani Cascade Hydropower Project and wishes to draw attention to the anticipated consequences.

- Recognizing that the Rioni River is the last river in the south-eastern part of the Black Sea that still has sturgeon species actively migrating upstream for reproduction;
- Highlighting that the Rioni River is the only remaining documented spawning river for the endemic *A. colchicus* (c.f. *A. persicus colchicus* or *A. güldenstädtii colchicus*) globally;
- Reminding that, the Rioni River is the only remaining river (!) in the entire Black Sea that has functional spawning habitat available for the Ship sturgeon (*A. nudiventris*);
- Underlining the observation that *Huso huso* and *Acipenser stellatus* in the Rioni River are still considered to be spawning or attempting to spawn on an annual basis;
- Pointing to the fact that the European sturgeon (*Acipenser sturio*) has been native to the Rioni River but is at present considered as missing or even extinct since the early 1990s;
- Noting that the Build, Own and Operate Agreement offers possibilities for a sound and considerate management of the water resources in favour of the sturgeon (and other fish) populations of the Rioni River;
- Reiterating that Georgia as a Party to the Bern Convention has adopted both the Action Plan for the Protection and Restoration of the European Sturgeon and the Pan European Action Plan for Sturgeons, both emphasizing the need for effective protection and restoration of habitats in those rivers where sturgeons are still actively reproducing;
- Emphasizing that substantial efforts have already been made in the past decade by several institutions to implement a collaborative and synergistic program to save the remaining sturgeon populations, reduce the impacts by an uncontrolled, unregulated fishery as well as to secure the critical habitats; and
- Urging that the conservation efforts undertaken so far must not be wasted.

Based upon the previous points, it seems appropriate for WSCS to remind all Parties involved in the project (private sector/regulatory authorities/implementing agencies) of the commitments and resulting responsibilities that rest with them to undertake the utmost measures to avoid any environmental damage that may affect the survival of the highly endangered endemic sturgeon populations. These populations largely depend on the remaining spawning grounds in the Rioni River to prevent their extinction in the Black Sea.

The planned Namakhvili hydropower facilities, due to the dams located downstream of the planned site, are not considered to affect the sturgeon migrations directly, though several indirect effects are anticipated. These new facilities will operate on a system that is highly compromised by existing hydropower utilization already and will contribute substantially to hydrological changes in the entire river system. The sturgeon populations of the Rioni River have already suffered significantly from the construction of the Vartsikhe Dam and its hydropower facilities. The lack of appropriate management with regard to discharge patterns for the historic spawning grounds, the lack of the provision of a fish migration facilitation and the absence of long-term protection and enhancement strategies have continued to deteriorate the status of the sturgeon populations of the Rioni River and adversely affected the critical habitats for the species in question.

It is therefore essential that with this new development, extreme caution and consequent countermeasures must be applied to prevent any further adverse impacts and rather to revert past impacts upon these natural populations which represent a major asset not only for the Georgian state, but also for all Black Sea countries who share this resource. Thus, there is a legal obligation to undertake effective measures to enhance this resource in line with the conclusions and recommendations drawn not only by the UN/FAO CaCFish Commission (Central Asian and Caucasian Fisheries and Aquaculture Commission), to which Georgia is a signatory State (respective documents signed in Istanbul, 2011), but also the obligations deriving from the Bucharest Convention, the Bern Convention, the Convention on Migratory Species, as well as the EU Flora Fauna Habitat Directive, and the Water Framework Directive which Georgia has agreed to implement in the process of becoming an accession state to the EU.

As such, hydropower development on the upper Rioni River has to be evaluated critically not only in itself but also with regard to the cumulative effects resulting from the interplay with the existing facilities on the river. Consideration of the potential risks for the survival of sturgeon populations and conceptualization of the countermeasures to combat any adverse impacts upon the environment of the Lower Rioni River, as well as to develop potential compensation measures to minimize the anticipated damages, must be made.

The impacts, as foreseen from the available planning data, mainly relate to the alteration of seasonal water discharge adversely affecting:

- a) the magnitude and timing of discharge the available habitats in the downstream sections and natural hydro-ecological processes, such as gravel turnover, sediment outwash etc.;
- b) the annual temperature cycle through deep water discharge from the reservoir;
- c) the disruption of the ecological flows of the river during the first phase of operation;
- d) the daily water level fluctuations (hydropeaking) which will affect both the habitats and the faunal elements inhabiting the river sections below the facility;
- e) the sediment transport into the lower river sections resulting in incision of the river into the landscape and the loss of its connection with its floodplain;

- e) the migration of the sturgeon species for reproduction;
- f) the effectiveness of reproduction due to the above mentioned impacts; and
- g) the food base for young sturgeon during the early life phases.

The impact is expected to be further increased by the planned diversion of the River Tskhenistsqali to increase the available water discharge for the power station. To date, the lower section of this river still offers potential habitat, especially for the critically endangered Ship sturgeon, and reports of local fishermen are emphasizing the utilization of the river by sturgeons. The diversion of water from its basin will further diminish the habitat availability and the hydro-ecological process in the river sections below the divider. Adequate compensation measures must be identified and implemented to minimize the anticipated impact. For all of the potamodromous species, the dams and the divider on the river, including the new installations, represent a massive threat to genetic integrity since they are separating their populations leading towards a genetic bottleneck due to a lack of exchange between them.

All of these effects have the potential to be either increased or mitigated by the two facilities below. As such, the operation of these facilities must be integrated in an ecological flow management concept for the Rioni River. WSCS is convinced that with a sound mitigation plan based on solid modelling of the entire hydrodynamic system and subsequent implementation of adequate mitigation measures a solution can be found with long-term benefits to the entire country, while also demonstrating the responsibility as well as readiness for the cooperation and collaboration required from the international obligations aiming for sustainable development.

Furthermore, it is noted that the Build, Own and Operate Agreement dated 25th of April 2019 offers potential for a sound and considerate management of the water resources in favour of the sturgeon (and other fish) populations of the Rioni River. It must be concluded that the practical implementation of these management actions is not prioritized in the contract and as such will follow the examples of other regional hydropower facilities. This conclusion derives directly from the clauses of the contract that provide too little time for an objective and independent assessment of the planning material and as such do not permit any independent impact assessment or any responsible role for the regional administration to influence the construction and operation of the facility by being overruled by command of the Georgian National Government. Such conditions do not allow for reasonable inputs which could help proper consensus building to the benefit of all. The outlined procedure (as presently understood) fuels the worst expectations for the subsequent operation of the facility.

In view of the WSCS Board of Directors, it is highly advisable and actually obligatory that the proposed advisory group for the ecological operation of the facility must already be in place and must have the capacity as well as being given the opportunity to influence the planning and decision-making process from the early stages onward accompanying the process until the facility goes to full operation. This must include the strategic management plan for the downstream facilities to ensure the least possible impact upon the ecosystems. Since this resource use affects also populations thriving in the Black Sea, one should be aware of the internationalization of these resources, and advisory groups should also seek to incorporate international expertise in this field. Such a procedure would be beneficial in the long-run for the entire operation and for Georgia as a member state of the Black Sea Convention.

From a viewpoint of a sustainable development but also with respect to the legal framework agreed upon as an accession country, the planning and implementation process must be open not only for the local administration but also for the civil society to be involved in decisions for construction and operation which is considered a key element for the EU in the accession process. Furthermore, the activities discussed here are dealing with an aquatic resource of high interest to all Black Sea range states as a Biodiversity issue of overarching importance.

On the current basis, this hydropower project can be anticipated as a case example for a non-compliant and ecologically-risky undertaking. Seemingly, the clauses expressed in the above-mentioned agreement leave all disadvantages, costs and obligations to the State and thus to the public, including the impacts upon biodiversity (in particular on sturgeons as key indicator species).

WSCS strongly suggest this project not be continued until a fair, open negotiation process with all stakeholders is established. Utilization of existing high quality expertise to complete a framework for a sustainable development and its implementation is highly recommended and should be required.

We hope to have been able to point out some of the most relevant issues that raise our concern and would appreciate your kind feedback in this matter.

Sincerely,

The WSCS Board of Directors

Statement sent by mail June 10th 2021