

## **7 x NO to Siarzewo.**

**The construction of the Siarzewo barrage HAS NO overriding public interest. It is a remarkable example of using public funds to privatise the profits from a hydroelectric power plant. Poland is going through the pandemic, the healthcare is underfunded, entrepreneurs have no sufficient support and the amount of PLN 4.5 billion from our pockets is planned for spending on the construction of a barrage that nobody needs (apart from Energa company).** Furthermore, the investment will constitute a breach of the following legislations: Water Framework Directive, the Nature Conservation Act, EU Biodiversity Strategy and the protection of Natura2000 Sites.

### **1. The Siarzewo barrage HAS NO relevance for flood protection**

The Siarzewo barrage has no relevance for the flattening of the wave of flood. In the environmental decision, the Regional Director for Environmental Protection states that its sole flood protection function can be attributed to embankments and lateral barrages that will be built within the area of the new reservoir, but they can actually be constructed without the need to build the whole barrage. In certain situations, the construction of a barrage may even increase the flood risk as modelling results have shown – in consequence of the construction of a reservoir downstream Włocławek, the culmination of the flood wave on the Lower Vistula River may even be higher than before.\* Furthermore, the construction of another barrage on the Vistula River will exacerbate the risk of ice-jam flood, which will be occurring in two places at the same time – on the Włocławek Reservoir and the Siarzewo Reservoir.

\* *WWF Polska Foundation. 2012. Evaluation of the impact of the Włocławek reservoir and of the planned barrage and reservoir in Siarzewo on the conditions for transmission of great waters based on May 2010 flood. Typescript. Warszawa.: <https://tiny.pl/rn2qr>*

### **2. The Siarzewo barrage WILL NOT HELP against agricultural drought**

The Siarzewo Reservoir will not reduce the drought in the region, which was exemplified by the Włocławek and Siemianówka reservoirs: although they were built, the drought hazard in these areas has not diminished by any means. The sole impact of the reservoir on the water supply to the adjoining areas will be negligible as the reach of such supplies will be noticeable in the valley only – due to the conditions within the area (including a large escarp): the water table in the valley will be much beneath the fields. In this case, completely different solutions are necessary, focusing on landscape retention. Moreover, water abstraction can be performed through water intake directly from the river or from below its bed – there is hence no need to build a barrage for this purpose.

### **3. The barrage HAS NO RELEVANCE for the power sector**

The same amount of energy as in the Siarzewo hydroelectric power plant can be produced by installing 44 wind turbines or by using any energy mix from wind sources, photovoltaic and biogas power plants. The same effect can also be reached through the transformation of opencast workings into pumped-storage power stations.

\* Alternative for the hydroelectric power plant planned in Siarzewo in the context of energy security. Prof. dr hab. inż. Jan Popczyk, dr inż. Krzysztof Bodzek. WWF 2020.

#### **4. The barrage in Włocławek needs NO support.**

The investor of the Siarzewo barrage claims that in connection with the **alleged** poor technical condition of the Włocławek barrage, there is a risk that the barrage and the adjoining infrastructure may collapse. However, the evidence proving that it is true has **never** been presented. Whereas, annual reports of the Barrage Technical Inspection Centre indicate that **there is no reason to fear any threat** to the Włocławek barrage. In the years 2013 – 2015, the barrage and the adjoining infrastructure were **renovated: the cost of PLN 115 million of public money**. To ensure Włocławek's permanent protection, its reconstruction and the demolition of the barrage are necessary.

#### **5. Hydro power IS NOT green energy.**

Dammed reservoirs are responsible for **7%** greenhouse gas emissions resulting from human activity. Polish studies show that **the highest methane release rate** in the form of gas bubbles is observed **in the Włocławek and Siemianówka reservoirs**. The Siarzewo reservoir will aggravate this problem.

#### **6. The region WILL NOT BECOME MORE ATTRACTIVE through the construction of the barrage.**

Contrary to some opinions, the construction of the Siarzewo barrage will have a **very negative consequences for the local communities and tourism** (e.g. angling). The residents of the surrounding areas will have to face the **threat of cyanoses that are toxic for humans and animals and massive and disturbing chironomids (Chironomidae) hatch**. The reservoir created near the barrage will be shallow, with a large surface, it will warm up quickly and there will be a large amount of water-flooded and decaying organic matter accumulating on the bottom. All this will create ideal conditions for toxic cyanobacterial blooms. Cyanobacterial blooms already appear in the **Siemianówka Reservoir** virtually every year causing that the Reservoir is out of service for swimming and angling, the main driving force for the local tourism. The massive emergence of chironomids is a headache for the residents of the areas near the **Włocławek Reservoir** already now (e.g. Płock), causing that the investments and places that attract tourists (for example summer houses and marinas) are becoming useless.

#### **7. The Siarzewo barrage is a death sentence for Poland's nature**

The construction of the Siarzewo barrage **will cause that 69 601 km of rivers will be cut off for fish migration**. Migratory fish populations **have already fallen in Europe by as much as 93%** and the barrage will only deepen the decrease and consequently, it will lead to a biodiversity crisis. It will prevent the migration and consequently, it will lead to a collapse or to entire extinction of the population of sea trout, salmon and vimba bream in the Vistula basin. Furthermore, the chance to restore the *Acipenser oxyrinchus* sturgeon in Poland will also be definitely lost to which Poland is committed under the HELCOM Convention and CITES.

**The Save the Rivers Coalition jointly with many other organizations, scientists\* and thousands of Poles that are concerned\*\* is firmly opposed to the construction of the barrage in Siarzewo as it will generate no benefits to the Polish people, it will consume**

**billions of the Polish Zloty and the environmental and social consequences of this decision will be very harmful.**

\* <https://naukadlaprzyrody.files.wordpress.com/2018/01/siarzewo-oficjalne-stanowisko-ruchu-nauka-dla-przyrody.pdf>

\*\*The petition to stop the construction of barrages on rivers has been signed by almost 16 thousand people: <https://www.wwf.pl/stoptamom>