

If completed, the EUR 338 million project would violate a Recommendation of the Bern Convention No. 217 (2022) and leave tributaries of the Neretva river without water. People living in the Nevesinjsko karst field oppose resettlement and flooding of their houses and land.

On 26 June 2023, in a ceremony on the beautiful meadows of the **Dabar karst field**, representatives of the Republika Srpska entity of [Bosnia and Herzegovina](#), power utility Elektroprivreda Republike Srpske (ERS) and contractor China Energy Gezhouba Group announced the start of the 'main works' to build the **Dabar hydropower plant**. The cost of the 160 MW plant is at least EUR 338 million, including EUR 180 million in debt to the China Eximbank and around EUR 80 million that has already been spent on a 12-km tunnel. While the European Parliament recently approved the Nature Restoration Law aiming to restore 20 per cent of the EU's habitats, **Republika Srpska plans to destroy the most important wetlands in Herzegovina - impacts that extend to the Federation of BiH and even Croatia**. Two Ramsar sites (Hutovo Blato and Neretva River Delta), three karst rivers (Buna, Bunica and Bregava), one Natura 2000 site (Delta Neretve), four Emerald sites (Gatačko, Nevesinjsko, Dabarsko and Fatničko karst fields) and at least three Key Biodiversity Areas are threatened, with the Fatničko polje already having been damaged by a giant channel crossing it.

Dabar is the largest [hydropower plant](#) of the massive Upper Horizons (Gornji Horizonti) scheme, first conceived in the middle of the 20th century. Upper Horizons consists of three hydropower plants, two reservoirs with multiple dams, four diversion tunnels, one pumping station, and four karst fields drained by large channels. The longest tunnel, Nevesinjsko polje – Dabar hydropower plant, is being built by the company Integral Inženjering PLC, owned by the controversial businessman Slobodan Stanković, a close associate of the Republika Srpska president Milorad Dodik and placed on the US sanctions list.

Bankwatch representatives explored the project area in June 2023 as part of the Neretva Science Week and followed the water flow from the upper poljes (that's where the name Upper Horizons comes from), through the lower poljes and rivers all the way to the Adriatic coast at the Neretva Delta in Croatia.

The karst of Eastern Herzegovina and the natural movement of water - one of the most amazing and unknown natural phenomena in Europe

The mountain areas of Bosnia and Herzegovina have up to four times higher precipitation than the Adriatic coast. After heavy rainfall and snowmelt, the karst fields at higher altitude

become flooded. These fields, called poljes in the local language, contain a complex of wetlands – lakes, marshes, wet meadows and temporary springs. The poljes are enclosed on the surface but incredibly interconnected underground. Karst springs in the poljes give birth to rivers that sink into sinkholes. Multiple sinkholes can drain one polje, forming multiple underground rivers that emerge many kilometres downstream as sources of new rivers in the lower poljes. More than 100 such connections between poljes in Eastern Herzegovina have been discovered so far.

Unique adaptations of animals, plants and humans that live in the poljes

For millions of years the rivers of the karst poljes have fluctuated – discharging millions of cubic metres of water in spring and becoming dry on the surface after summer. The karst hydrogeology is so complex that depending on weather conditions and season, some caves (called estavelles) can serve either as a sinkhole or as a source of freshwater, and some underground rivers can change their flow towards one spring or another. The animals that live in the karst have adapted to these changes – during high water they feed on the biomass that is flushed in the system, migrate and reproduce, during low water they hide in the caves or under rocks.

Many of them are endemic to Eastern Herzegovina or to only a few poljes like the recently described fish Dabarsko dace (*Telestes dabar*) found only in the Dabarsko and Fatničko poljes or the striped dace (*Telestes metohiensis*) from the Gatačko and Nevesinjsko poljes already heavily impacted by pollution. The flora has also adapted to the water fluctuation – the wet meadows and protected plant species of the poljes depend on the spring floods. People have also benefited from the water fluctuations – grazing animals in the green meadows, having good yields from the fertile soils and using traditional fishing techniques during the floods.

The impacts of the Dabar hydropower plant and Upper Horizons scheme

The potential impacts from Upper Horizons are hotly debated and may be extremely far-reaching. It is likely they are not all understood due to the complexity of the karst underground. First, the unique karst fields in Republika Srpska would be completely destroyed. As with the already built Lower Horizons scheme, the idea is to completely control the water movement – from reservoirs to tunnels to hydropower plants to channels to reservoirs and so on. This will stop the natural water fluctuations and dry up underground karst rivers, caves and springs. Three endemic fish species (*Telestes dabar*, *Telestes metohiensis*, *Delminichthys ghetaldii*), several amphibians and invertebrates would probably be driven to extinction.

Second, Upper Horizons would also involve closing or drying several sinkholes, which may

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endanger the water flow to the iconic Buna, Bunica and Bregava rivers that are of crucial importance to towns in the Federation of BiH like Blagaj and Stolac as well as being home to protected species. According to the Dabar plant's environmental impact assessment (EIA) report, 85 per cent of the water of these rivers would be diverted towards the Bileća artificial reservoir, and most of it will not be returned to the Neretva basin. Having in mind the authorities' current inability or unwillingness to control existing hydropower facilities, it is very doubtful whether even the remaining 15 per cent will be left. The already seriously impacted Hutovo blato wetland, which is of international importance according to the Ramsar convention, would receive even less water if all parts of Upper Horizons are built. **Third**, the project would decrease the flow of the river Neretva, whose delta in Croatia is already suffering from salination. As an important wetland and agricultural area, this in itself is a massive impact.

Local, regional and international legal cases

At least three villages would be partly flooded by the Nevesinje reservoir – Lješčice, Solakovići and Kosovača with agricultural land impacted in many more. Some of the people don't want to move – some have been offered compensation they are not satisfied with and some of them are fighting in court against expropriation. An unknown number of villages could be impacted by a second reservoir upstream, which still has no EIA.

The project has faced strong public opposition in both the Federation of BiH and Croatia, and the Federation's government launched a court case against the EIA approval in 2012. Since the competent court was in Banja Luka, it unsurprisingly ruled in favour of the Republika Srpska authorities. Local people from the Mostar and Stolac municipalities are also concerned about the imminent threats to the rivers Buna, Bunica and Bregava they depend on for agriculture, fishing, tourism and recreation.

In December 2022, the Bern Convention opened a file against Bosnia and Herzegovina because of hydropower threats to the Neretva Basin. Point 13 of Recommendation No. 217 (2022) requests the country to implement a ban on development of further hydropower plants in all candidate Emerald sites in the Neretva River basin, including the Gatačko, Nevesinjsko, Dabarsko and Fatničko karst fields. Continuing with the Upper Horizons scheme is clearly in violation of this point.

What can still be done?

Part of the Upper Horizons scheme is already built – the Fatničko polje-Dabarsko polje and Fatničko polje-Bileća reservoir tunnels and the channel through Fatničko polje. The Dabar plant and the Nevesinjsko polje-Dabar tunnel are under construction.

Nevertheless, the whole scheme is far from completed and for some main parts like the

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Zalomka reservoir the permit granting process has not even started. The Federation of Bosnia and Herzegovina and [Croatia](#) need to stand up for the interests of their people and nature threatened by the downstream impacts of the project.

International institutions need to ensure that Bosnia and Herzegovina abides by its obligations under the Bern Convention on Conservation of European Wildlife, Ramsar Convention on Wetlands, Espoo Convention on the Environmental Impact Assessment in a Transboundary Context and the Energy Community Treaty.

Source: Bankwatch