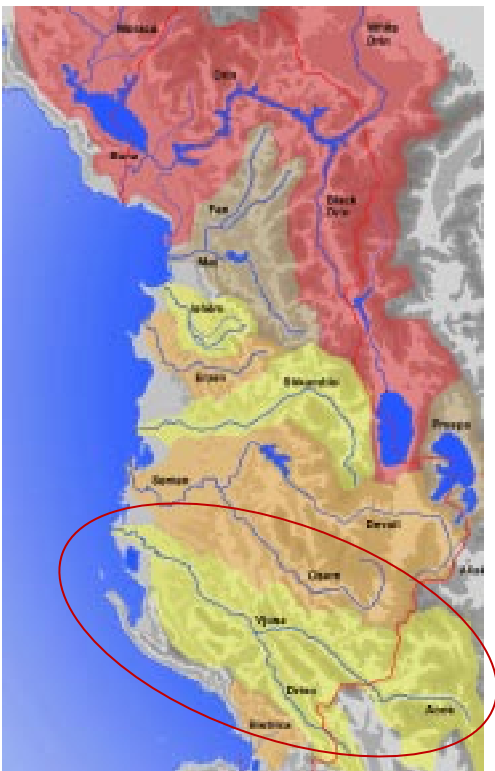


The Vjosa River in Albania

Europe's Wild jewel - beautiful, unknown and threatened



The extensive braided river section near Tepelena would drown in a reservoir of the future Kalivaç dam. (Romy Durst)



The Vjosa River in Albania is one of Europe's last living wild rivers. Along its entire course of over 270 kilometers it is untamed and free flowing and characterized by beautiful canyons, braided river sections, islands, oxbows and meandering stretches. In some areas the riverbed expands over more than 2 km in width. Together with its tributaries, the Vjosa provides a dynamic, near-natural ecosystem. It is without par on this continent - a true, though unknown European natural heritage. On its first 80 kilometres the river flows through Greece and is named Aous. In Albania it turns into Vjosa. The meandering lower part opens up into a valley with extensive wetlands and as such, providing habitats for spawning fish, migratory birds and others. Finally, it drains into the sea just north of the Narta lagoon - one of the biggest and ecologically richest lagoons of Albanian, designated as Managed Nature Reserve. The Vjosa is draining a total area of 6,700 km² in Albania and Greece and discharges an average of 204 m³/s into the Adriatic Sea.

Major river catchments of Albania with the Vjosa River basin marked in red.
Source: Wikipedia

Biodiversity



The critically endangered European Eel. Dams would cut off its main habitats in the Vjosa catchment.
Source: blickwinkel/ A. Hartl

Scientific knowledge about the Vjosa and its biodiversity is very limited. It is one of the least explored rivers in Europe: we might know more about the biodiversity of river systems in South America or Asia than we do about the Vjosa. Very few studies are at hand so far. But these few existing studies underscore the importance of the river valley as Albania's biodiversity hotspot providing ideal aquatic habitats for numerous species.

It hosts a viable population of the near threatened Otter (*Lutra lutra*) and various migratory fish species, among them the critically endangered European eel (*Anguilla Anguilla*), as well as sub-endemic fish species like the Ohrid loach (*Cobitis ohridana*) and the Pindus stone loach (*Oxynoemacheilus pindus*). The flora of the Vjosa ecosystem is also impressive. The uppermost river section hosts a variety of endangered endemic plant species, such as the endangered *Solenanthus albanicus*. The lower valley is characterized by mixed Oak forests (*Quercus* sp.) and Strawberry trees (*Arbutus andrachne*); for the latter the Vjosa valley represents the only habitat in the country.

Social and cultural values

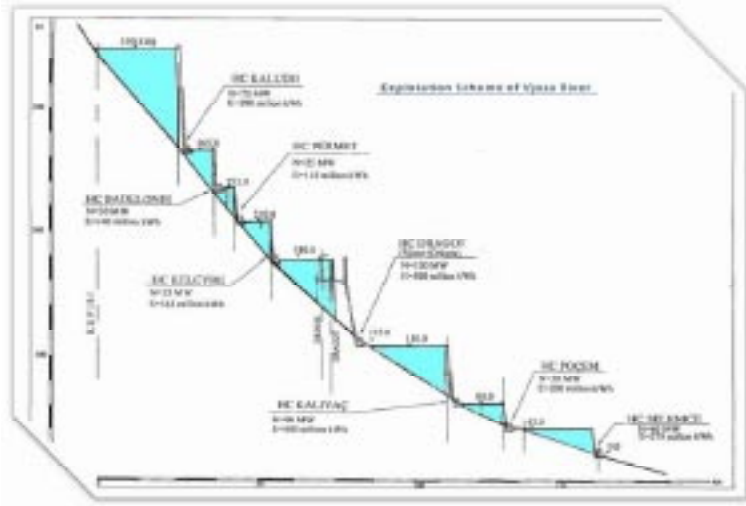


Rafting along the Vjosa.
Source: Albanian Rafting Federation

The Vjosa River has a special and crucial place in the daily lives of the people that live along its banks. Its terraces provide the villages with fertile land for agricultural activities such as crop production and livestock farming. The abundance and diversity of fish is vital for the economy and the well-being of local fishermen. Recreational tourism on the Vjosa and its tributaries is ever-increasing, particularly in recent years in which enthusiasts have started to enjoy activities such as rafting, canoeing, kayaking, swimming, etc.

Many small-scale businesses and new emerging eco-tourism companies have based their existence on the free-flowing waters of the Vjosa. Moreover, the Vjosa and its crystal-clear water have had an impact on the hearts of Albanians and their cultural values. Naming newly-born girls after the Vjosa continues to be very popular among Albanian parents since the name stands for the beauty of the river and its untouched nature.

The threats



The future Vjosa through the eyes of the hydropower lobby.
Ministry of Trade and Energy of Albania, 2008

The biggest threat for rivers is hydropower. More than 100 new hydropower dams are to be built in all of Albania. Along the Albanian river section of the Vjosa, the Ministry of Energy intends to build eight dams. In the upper part, the Greek government is planning a dam project with the aim to divert about 70 million cubic meters per year through the River Kalamas for irrigation purposes.



The uppermost dam construction site. The dam would flood parts of the old village of Kaludh.
(Romy Durst)

The construction of these dams - or of just a single one of them - would destroy the incredible ecological value of the Vjosa River. It would alter its hydrological regime entirely and inhibit its natural sediment transport - the elementary force which shapes the highly dynamic morphological processes.

The Vjosa is a European treasure. Its greatest value lies in its uncompromised intactness. The dams would destroy this unique ecosystem and its high potential for sustainable nature tourism in the future.



The Kalivaç project



Highly dynamic meandering section in the middle river course - these habitats would be lost after dam construction. (Romy Durst).

The first hydropower plant that entered the implementation process is the Kalivaç project close to the city of Tepelena. The construction of the Kalivaç dam started in 2007, but was halted several times. Initially, the main source of funding was the Italian Becchetti Group and the Deutsche Bank. (<http://www.begspa.com/eng/idroelettrico.htm>).



The whole river stretch below the future Kalivaç dam - 100 km in length - would be impacted by erosion and altered hydrology. (Ulrich Eichelmann)

Currently, construction works are on hold once again (which they have been for the past two years), and the level of completion is still only at 30%. The Vjosa River is still free flowing - but for how much longer? The Kalivaç dam would stop the natural 'heartbeat' of the whole river system by blocking the sediment transport from the mountains down to the Adriatic Sea.

The blocking of the sediments would lead to intensified riverbed erosion in the entire stretch downstream of the dam. This would impact even the river delta at the Adriatic Sea. The alluvial ecosystem would be degraded along almost 100 km. All aquatic and riverine habitats would be affected.

The Vjosa River and its tributaries are particularly important to migrating fish species which depend on clean, cold, and gravel-rich mountain streams, characteristics that the 85 km long Drinos River - the Vjosa's main tributary - provides. The Drinos, as well as the upper Vjosa would be cut off from the lower Vjosa valley as well as from the Adriatic Sea, destroying the major remaining habitat for the European eel and numerous other migrating fish species in Albania.



Facts & Figures

Dam height:	45m
Dam length:	350m
Reservoir size:	1,700 ha of submerged area
Capacity/ annual output:	90 MW/ 400 GWh
Average discharge at Kalivaç:	145 m ³ /s
Costs:	119 million €

Conclusions



In the upper river section, pristine gorges, crystal clear, cold water and gravel-rich river beds provide invaluable spawning sites for fish.
(Goran Šafarek)

- The untouched Vjosa River is an ecosystem without par in Europe. It is one of the last natural, wild rivers on the entire continent.
- Scientifically, this river is almost like a “blank page”. The knowledge about its biodiversity, hydrology and sediment transport is very limited.
- Dam projects like Kalivaç are the river’s major threat, putting its biological wealth, ecological functions and hydrology at risk.
- One single dam along the river would destroy all these intrinsic values and functions, undermining the great ecotouristic potential of the area.
- Until now, the environmental impacts (biodiversity, natural flood protection and river bed erosion, etc.) of the Kalivaç project have not been properly assessed.



We Demand

- The Albanian government and the Albanian president to abandon the plans of hydroelectric developments along the Vjosa River.
- The protection and preservation of the Vjosa River valley by the Ministry of Environment and
- To establish a Vjosa River protected area in order to preserve its integrity.

Save the Blue Heart of Europe Campaign

The rivers on the Balkan Peninsula are among the best preserved in all of Europe. More than 60 % of all rivers in the region are in good or very good hydromorphological condition. Additionally, these rivers are major biodiversity hotspots. 69 fish species are endemic and more than 50 % of all European freshwater-mollusc species live on the Balkans.

However, this “Blue Heart of Europe” is threatened by hydropower development: more than 570 new dams (> 1 MW) are projected from Slovenia to Albania.

Therefore, the international NGOs Riverwatch and EuroNatur have launched the campaign “Save the Blue Heart of Europe” in cooperation with several national partner organizations, aiming to protect the most valuable rivers and river stretches in South Eastern Europe from destruction through uncontrolled hydropower development.

More information:

www.balkanrivers.net
www.riverwatch.eu/balkan-rivers
www.euronatur.org/Blaues-Herz-Europas
http://ppnea.org/albanian_rivers.html

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