

Vjosa River valley - protection study based on IUCN protected area standards

SUMMARY

The study “Vjosa River valley – protection study based on IUCN protected area standards” is prepared by Dr. Andrej Sovinc, IUCN World Commission on Protected Areas (WCPA) Regional Vice-Chair Europe, in the frame of the project [“Saving Europe’s last free-flowing wild river – Vjosa/Aoos”](#). Its aim is to serve national authorities in Albania and contribute to the process of protecting the Vjosa River valley, coordinated by the Ministry of Tourism and Environment of Albania and National Agency of Protected Areas (NAPA). The Study findings are based on the IUCN Protected Area Standards. It considers both the physical and ecological characteristics of the area, as well as the management objectives and appropriate protection regimes arising from the Albanian system of protected area categories, to ensure the long-term protection of the ecological character and biodiversity of the Vjosa River valley.

Vjosa River valley is listed in the draft version of the document "Decision on Approval of Protected Area Boundaries" as a proposed future Managed Nature Reserve/Nature Park (equivalent to IUCN PA category IV) from the Greek border to the Adriatic Sea; the proposed protected area includes only the main river, without its tributaries. EcoAlbania has submitted a proposal to establish a national park (equivalent to IUCN PA category II) covering the entire Vjosa River and all major tributaries.

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Introduction to the Aoos-Vjosa River

The River Aoos-Vjosa stretches for 272 km from its sources in Greece through southern Albania to the Adriatic Sea. The first 80 km of the river are in Greece. Its total catchment area is 6,704 km², of which 4,365 km² are in the Albanian territory.

The Vjosa and its tributaries can be classified as a gravel-dominated, laterally active, anabranch rivers with high sediment yields, where the bedload supply is higher than the actual transport capacity of the channel, which is reflected, especially in the middle section of the river, in extensive gravel plains up to 2,000 m wide, crossed by several lateral and parallel rovers, oxbows and side channels. Another criterion of laterally active anabranch gravel bars are specific forms of break-off at high flow velocities, which is reflected in the rapid abandonment of the main river channel during extreme flood events and the formation of a new and parallel river channels in former floodplains.

Research and studies, implemented in the middle section of the Vjosa River in recent years have revealed a high number and density of species and a variety of endangered habitats at the EU level. The presence of several globally and nationally critically endangered species has been confirmed. The extent of some well conserved EU threatened river habitat types found along the middle section of the Vjosa River and its tributaries is exceptional.

At least 8 habitat types that have the highest conservation importance at the EU level are found in the middle section of the Vjosa River. No less than 1,175 species from all taxonomic groups have been found in this area, including 13 globally threatened animal species and 2 vascular plants. There are at least 148 species of European interest listed on Bern Convention, 41 bird species and 78 animal and plant species listed on the EU Birds List and on Habitats Directives. At least 50 animal species and 24 vascular plants are included in the national Red Lists of Albania.

Importance of the whole river corridor for migratory species (e.g. endangered eel species) and areas where large concentrations of organisms occur for spawning and/or breeding has been determined.

Assignment of IUCN protected area category

The assessment of potential protected area category and status was undertaken for the Vjosa River valley in accordance with the international protected area standards developed by the International Union for Conservation of Nature (IUCN). The aim of the assessment was to explore avenues for effective protection of the Vjosa River valley, and to propose a development model for the area.

The IUCN protected area categories are determined by the physical and ecological description section and the corresponding management objectives for the site. Vjosa River valley corresponds to the IUCN definition of a protected area. The assessment of physical and ecological conditions indicates that the upper section of the Vjosa River and its tributaries is an ecosystem with predominantly native species, characterised by natural processes. In the middle section, undisturbed ecosystem function is concentrated in the narrow riverbed, which is wide enough not to be heavily impacted by external disturbances from agriculture and other human activities. The conservation value of the middle section of the Vjosa River has been the subject of extensive research in recent years, indicating that this is the

last branched and unaltered river of this type in the Balkans and wider Europe. The lower section of the Vjosa River, downstream of the confluence with the Shushica, also retains the characteristics of the natural river: water flows and sediment transport are crucial for stabilising the coastal zone. Any change in these parameters along the entire river would have dramatic effects on the ecological character of the river downstream or upstream.

The Narta brackish lagoon is of significant conservation value on a national and global scale and should be part of the Vjosa River valley protected area; the global conservation importance of this coastal brackish lagoon is critically underestimated.

The nationally, regionally and globally significant native biodiversity and outstanding scenic values of the Vjosa River valley are the result of undisturbed river hydromorphology and fully functioning natural processes that need to be protected along the entire Vjosa River and its main tributaries. Any change in water flow and sediment transport would dramatically alter the last river ecosystem of its kind in the Balkans and on a wider European scale and disrupt the migration route of globally threatened fish species.

The protection of the existing natural phenomena and features, and the rich cultural heritage, should be based on the establishment of a protected area, with the core protection subzone concentrated along the narrow riverbed (wider only in the middle section of the Vjosa River) and its tributaries, as well as the coastal brackish lagoon of Narta.

Protection of the narrow riverbed must be ensured along the entire course of the river in order to achieve basic protection of the "continuity" of the river and sediment transport, as any potential disturbance along the riverbed may have upstream and downstream impacts. It should be noted that the strict protection of the narrow riverbed would relate only to the areas that are predominantly not used or exploited by humans.

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Three proposed protected area models for the Vjosa river and its tributaries

(1) NATIONAL PARK (upper and middle section) and PROTECTED LANDSCAPE (lower section)

This model would be effective both in terms of ensuring adequate protection of natural ecosystems and native biodiversity, and in terms of offering a new development option for the area based on green and cultural tourism. According to this model, the core zone (Zone 1) of the National Park should be established along the upper and middle narrow riverbed sections of the Vjosa River and its tributaries. The lower section of the Vjosa River and the Narta Lagoon should be part of the Landscape Park where appropriate zoning should be established. Zoning along the core area should maintain the traditional activities of local people.

(2) NATIONAL PARK with different zoning for the lower section of the Vjosa River

This model would include the entire narrow riverbed of the Vjosa River and its tributaries in the National Park, but under different zoning concepts: the middle and upper sections are part of the National Park core area subzone (Zone 1), while the lower section is in the National Park subzone (Zone 2 – with the potential establishment of Traditional and Sustainable Use subzone and Recreational subzone). The Narta Lagoon is also supposed to be part of the National Park (Zone 2, as the Recreation subzone). In these subzones, the traditional activities of the local population should be maintained.

(3) NATURE MONUMENT (upper section) and NATIONAL PARK (middle section) and NATIONAL PARK or PROTECTED LANDSCAPE (lower section)

This model is the same as previous models for the middle and lower sections, but allows for consideration of the establishment of the Nature Monument in the upper section of the Vjosa River valley.

The area proposed for protection is large, particularly along the longitudinal profile, so a phased approach should be considered, with protection status achieved for sections of the River Vjosa and its tributaries, and protection secured for the most valuable sections first.

The protection models listed above would allow for the development of green tourism and sustainable forms of agriculture and grazing in the second and buffer zones to the protected area.