



Vjosa Wild River National Park

Vision, Road Map and Feasibility Study
December 2022

Based on IUCN-protected area standards

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About the Ministry of Tourism and Environment

The Ministry of Tourism and Environment is the government department responsible for drafting and implementing policies aimed at environmental protection, climate change protection, sustainable use of natural resources, protection of nature and biodiversity, sustainable development of forests and pastures, water quality monitoring, as well as the design and implementation of tourism policies. The Ministry of Tourism and Environment operates under the relevant legislation, concerning nature and biodiversity, including flora and fauna, soil protection from erosion and degradation, protection of the natural landscape, protection of wild fauna and endangered species, and protected areas.

In September 2021, Mirela Kumbaro Fuxhi was appointed Minister of Tourism and Environment, the first woman in Albania to hold a position as Minister of Tourism and Environment.

About Patagonia, Inc.

Patagonia, Inc. is in business to save our home planet. Founded by Yvon Chouinard in 1973, *Patagonia Works (Patagonia)* is a certified B Corporation based in Ventura, California. A founding member of '1% for the Planet', the company is recognized internationally for its product quality and environmental activism. Its unique ownership structure reflects that Earth is its only shareholder: profits not reinvested back into the business are paid as dividends to protect the planet.

About IUCN

IUCN is a membership Union uniquely composed of both government and civil society organizations. It provides public, private, and non-governmental organizations with the knowledge and tools that enable human progress, economic development, and nature conservation to take place together.

Created in 1948, IUCN is now the world's largest and most diverse environmental network, harnessing the knowledge, resources, and reach of more than 1,400 member organizations and some 15,000 experts. It is a leading provider of conservation data, assessments, and analysis. Its broad membership enables IUCN to fill the role of incubator and trusted repository of best practices, tools, and international standards.

IUCN provides a neutral space in which diverse stakeholders, including governments, NGOs, scientists, businesses, local communities, indigenous peoples' organizations, and others can work together to forge and implement solutions to environmental challenges and achieve sustainable development.

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Acronyms

NTPA	National Territorial Planning Agency
AGS	Albanian Geological Service
ASIG	State Authority for Geospatial Information
BBC	British Broadcasting Corporation
CEO	Chief Executive Officer
CTF	Conservation Trust Fund
DCM	Decision of Council of Ministers
EUNIS	European Nature Information System
GDP	Gross Domestic Product
GNSP	General National Spatial Plan
GO	Governmental Organization
HPP	Hydropower plant
HQ	Annual Maximum Discharge
IBA	Important Bird Areas
INSTAT	Institute of Statistics
INTERREG	EU programs to stimulate cooperation
IPA	Important Plant Areas
IUCN	International Union for Conservation of Nature
LGP	Local General Plan
MIE	Ministry of Infrastructure and Energy
MoTE	Ministry of Tourism and Environment
MoU	Memorandum of Understanding
MP	Management plan
NAPA	National Agency for Protected Areas
NGO	Non-governmental organization
NSDI	National Strategy for Development and Integration
ODA	Official development aid
PA	Protected area
RAPA	Regional Agency for Protected Areas
SD	Strategic directions
SLLC	State Limited Liability Company
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
VANT	Vjosa-Aoös Nature Trust
DCM	Decision of Council of Minister
VWRNP	Vjosa Wild River National Park



Figure 1: Aerial view of the Vjosa River (photo by Nick St. Oegger)

Introduction

The Albanian Government is committed to establishing a Vjosa Wild River National Park (VWRNP) that will encompass and protect the entire course of the Vjosa River from the Greek border to the Adriatic Sea, including its free-flowing tributaries.

A Memorandum of Understanding (MoU) between the Ministry of Tourism and Environment (MoTE) and Patagonia, Inc., a California-based company with a deep commitment to protecting nature, was signed on 13 June 2022 to support the process of designating the National Park. The purpose of the MoU is to strengthen cooperation between MoTE and *Patagonia, Inc.* toward the common goal of permanently protecting the ecosystems of the Vjosa River and its tributaries. In particular, the MoTE is developing a comprehensive plan to enhance the level of protection of the Vjosa River from category IV: Natural Park to the level of the IUCN Category II: National Park, by Law No 81/2017 "On Protected Areas," and also following the IUCN protected area standards. The parties – MoTE and *Patagonia, Inc.* – are committed to creating the most durable and inclusive National Park possible.

The most important document required for the establishment of the protected area in Albania is the Declaration of the National Park, which includes, among others, the following main chapters: the legal basis and management objectives; values and pressures; vision and goals of the area; boundaries and zoning (including maps); permitted uses; park operating activities, including financial and budgetary assessments; priorities and schedule for implementation and monitoring.

The project components and steps necessary for the preparation of the Declaration on the Vjosa Wild River National Park for adoption by the Council of Ministers are prepared by a group from among the best local and international experts. Their contribution is defined by specific terms of reference (ToRs). The group is led by the two coordinators of the project: (i) the national coordinator, and (ii) the international coordinator, being the lead expert. In addition, a focal point is appointed to ensure the regular and effective participation of the Ministry of Tourism and Environment in the process. A Steering Committee composed of representatives of the MoU partners (MoTE and Patagonia) and a representative of IUCN will be monitoring the progress and deciding on all strategic issues related to this project.

To achieve the final expansion of the National Park, a phased approach is envisaged. In the first phase, only the water and land areas that form the main river channel and narrow adjacent areas of the entire Vjosa River and its main three tributaries (Drino, including Kardhiq, Bënça and Shushica), designated as public lands, will be included within the boundaries of the new National Park.

The declaration of the National Park will be adopted by the Council of Ministers of Albania following a process of thorough consultation among the institutions and with the public at a local level. This document – Vjosa Wild River National Park: Vision, Road Map and Feasibility Study, based on the IUCN protected area standards – features all the necessary content required in the supplementary documentation to the Declaration on the National Park. It will enable Albanian ministries to decide on whether to establish the Vjosa Wild River National Park and provide a guide and road map for the development of the Park over time.



Figure 2: Signing of MoU in Tirana, 13 June, 2022 (photo by Nick St. Oegger)

I. Vision and Road Map for Establishing the Vjosa Wild River National Park

1.1 The vision: for Albania, for Europe, for Planet

The Vjosa River in Albania is one of the last large, free-flowing wild rivers in Europe. The river and its tributaries run unfettered from the Pindus Mountain Range in Greece, where it is called Aoös, to the Adriatic coast in Albania.

This Vjosa River Basin is made up of an enormous mosaic of different habitat types, ranging from the narrow gorges in the upper part to the wide braided river sections in the middle part, to the near-natural delta at the Adriatic Sea. The middle stretch alone is host to at least eight habitat types that are of the highest importance in terms of conservation, at the EU level.

The Vjosa River and its free-flowing tributaries form an ecosystem with substantial biodiversity of national and global significance, and the outstanding scenic values of the valley are the result of undisturbed major natural processes and the predominantly harmonious settlement by local people. The ecosystem is host to more than 1,100 species of animals, including 13 globally threatened animals and two plant species.

The ecological and cultural values provide great opportunities for eco- and sustainable tourism and other economic benefits to the people in the region. The surrounding watershed provides the villages with fertile land for agricultural activities such as crop production and livestock farming. The abundance and diversity of fish are vital for the well-being of local fishermen, especially in the lower part of Vjosa.

This wild riverscape is alluring, engaging, and complex. The vision for Vjosa-Aoös is simple:

The Vjosa-Aoös River, from its source to the sea, including all tributaries, is afforded full national and transboundary protection, to the highest international standards, and is effectively conserved as a living, wild, free-flowing river, to the benefit of people and nature in Albania, Greece, and the world.

1.1.1 The creation of the Vjosa Wild River National Park

In June 2022, a Memorandum of Understanding was signed between the Minister for Tourism and Environment and the CEO of Patagonia. Then, an international team of experts was pulled together to explore how to create and manage this unique protected area model, based on the wild river and its tributaries.

The Park will be created in two phases, first, for Vjosa's full length in Albania, including its tributaries: Drino, Kardhiq, Bënça, and Shushica. Then, in the following years, all the free-flowing rivers and streams, as well as a wider area around the rivers will be added to capture the important ecosystems that feed into and affect the river's health and its biodiversity, or are affected by the river, such as key areas of the delta. In addition,

the aspiration is to include the river as the source in the Pindus Mountain Range in Greece, as the future transboundary protected area.

National parks are important to help maintain the ecological integrity of larger areas that are large enough to allow natural processes to occur and to sustain populations of all native species.

The IUCN protected area category II designation and ongoing management of the park assure the protection of large-scale natural processes and native biodiversity, together with environmentally and culturally friendly visitation and some forms of recreation, which include spiritual, scientific, educational, and recreational visitor opportunities, all of which will be thoughtfully set to align with the capacity of the area.

The national park idea will balance the needs of nature and visitors. The gate into the Vjosa Wild River National Park will be a large modern Visitor Center. That's where most of the tourists start their trip and get information about the National Park's values, hiking trails, tours, places to sleep, and so on. In addition, several other information centers or points along the river will serve as focal points for tourists. The visitors will be directed by marked trails, guided tours and organized activities, so that they have wonderful experiences without harming sensitive areas, such as breeding zones for rare birds or spawning sites for fish.

At the same time, the Park center will be the base for the National Park director, his/her management team and the park rangers. The first batch of the National Park rangers and staff will be trained as early as 2023, which will help provide job opportunities for the local community.

1.1.2 What the Park will bring to Albania

The VWRNP is the place where the Albanian people protect, study, and learn about the living diversity of natural and cultural heritage sites. The Albanian's pride and their spiritual attachment to the land will be expressed where nature unfolds, as it has always been the case, and where nature is appreciated as such and not only for its benefit to humanity.

People have been leaving their homes in the Vjosa valley over the years. This Park will create more opportunities, so residents, and in particular young people, can stay or, those who have left, come home. It will help attract more visitors from Albania, Europe, and around the world, and create new economic opportunities for locals, mainly through sustainable tourism and agriculture.

A healthy environment in the VWRNP provides for human quality of life in the form of safety, supply of goods and materials, health, and well-being. Nature in the Vjosa valley provides food and water, and regulates the climate. The cultural aspects of the natural areas have a stress-reducing effect: enjoying the National Park, its landscapes, and wildlife is instrumental in improving people's health and well-being.

Additionally, the National Park will speed up solutions to some of the most fundamental problems in the area. The three big challenges to solve are water and land pollution, waste management, and deforestation.

Bringing back the forest to Vjosa and the slopes along the valley is one of the most important restoration issues of the Park. Based on scientific expertise, a re-forestation plan will be prepared. The re-forested areas will help create valuable ecosystems and landscapes for recreational purposes, minimize soil erosion, and reduce flooding.

Rare species like the Loggerhead turtle (*Caretta caretta*) could return and nest regularly in larger numbers on the beaches of the Vjosa Delta. The population of the globally endangered Egyptian vulture (*Neophron percnopterus*) could increase, after decades of continuous decline. Even species that are extinct in the region, such as the Adriatic sturgeon (*Acipenser naccarii*), might return. This up to 2 meters long fish species lived in the lower stretch of Vjosa, the last evidence was in the 1990s. Today this species is extremely rare, and according to IUCN, it might be extinct in the wild.

1.1.3 Across borders for the Planet

Living rivers are almost extinct in Europe, therefore, the creation of the Vjosa Wild River National Park to the highest international standards is historical. It will be one of the biggest achievements in terms of Europe's nature conservation in decades.

This journey feels like a gift from Albania to the planet. It took more than a decade to get to this point. With Vjosa as a model, we hope it will take less time to save the other precious rivers across Europe and beyond.

1.2 Definition of the goals for establishing the National Park

The purpose of the goals is to outline the philosophy that will guide the management of the Vjosa Wild River National Park, and to provide a framework for consistent decision-making.

1.2.1 The goals

The legally protected area gazettelement will correspond to an IUCN Category II – National Park designation. This will include provisions for zoning for core protection of at least 75% of the whole target area, with sustainable use, and recreation and restoration zones, among others, in the associated landscape. The overall focus of all zones will be effective nature protection. The protected area would benefit from the full range of legal provisions and regulations under Albanian law.

The purpose of the goals is to outline the philosophy that will guide the management of the Vjosa Wild River National Park, and to provide a framework for consistent decision-making. Three goals and desirable outcomes consistent with the VWRNP vision are the following:

GOAL I.

Conserving ecological integrity of the VWRNP to IUCN Category II standards

GOAL II.

Offering recreational activities and cultural experiences to connect people with nature and with Albanian culture

GOAL III.

Promoting collaboration and shared responsibility for sustainable local development and protection of the VWRNP

1.2.2 Strategic directions

Strategic directions (SDs) guide the management of the work and the focus for the VWRNP, and contribute to the achievement of the three main goals of the Park. The following are the strategic directions within the above goals:

GOAL I.

Conserving ecological integrity of the VWRNP to IUCN Category II standards

- Ensure protection of ecosystems, native species, and their habitats and natural processes, including all free-flowing tributaries and other functionally important hydro-geomorphological and biodiversity areas of the Aoös/Vjosa River Basin through effective management of existing areas and inclusion of additional areas. In doing so, the aim would be to improve transborder cooperation between the Greek and Albanian sides of the Aoös/Vjosa River Basin.
- Maintain ecological connectivity among natural areas within the VWRNP and outside the park boundaries (National Park Region).
- Reduce infrastructure impacts on natural resources and biodiversity, and limit habitat fragmentation.
- Reduce the negative impacts of invasive alien species on natural ecosystems.
- Promote research and monitoring of the natural and social environment.

GOAL II.

Offering recreational activities and cultural experiences to connect people with nature and with Albanian culture

- Provide unobtrusive recreational opportunities supported by environmentally friendly visitor infrastructure and places to enjoy wild nature, solitude, and well-being.
- Protect and showcase the cultural heritage, traditions, and rich archaeology in the VWRNP.

- Raise awareness of users of the National Park on respectful use of recreation infrastructure.
- Provide quality information about the area's nature, culture, and history by engaging visitors in educational and interpretative activities.
- Guide visitor flows and access to natural areas regardless of their mobility or financial means.

GOAL III.

Promoting collaboration and shared responsibility for sustainable local development and protection of the VWRNP

- Assist in the development and promotion of the sustainable use of natural resources, recreational areas, and tourism facilities in appropriate areas outside the boundaries of the VWRNP to provide income for local people within the National Park and provide space for activities that are incompatible with the main objective of the National Park, ideally in line with the Sustainable Development Goals.
- Involve local communities in programs that incorporate their knowledge of nature and culture into the management of the National Park.
- Promote the natural and cultural values of the area and its importance for nature conservation, locally and internationally, to attract visitors and mobilize support.

1.3 Park boundaries – the MAP

Key principles used in establishing the methodology for determining the boundaries of the VWRNP – Phase I and II – include:

1. Ensuring the integrity of hydro-morphological conditions:
 - No large dams or reservoirs, no further hydropower development, long-term removal of existing facilities (sustainable solutions must be found);
 - Reducing excessive industrial gravel mining (except possibly for local needs);
 - Avoidance of excessive irrigation (except for existing systems where water withdrawals should be carefully agreed upon);
 - Reducing soil degradation, especially reducing grazing pressure in forest and grassland areas.
2. Including all major riparian features throughout the Vjosa River Basin, like:
 - River channels and adjacent floodplains;
 - Karst features (springs, ponors, poljes, caves, underwater flows, and connectivity to other watersheds);
 - Canyons (tributaries only, where there are no HPPs);

- Hydrological linkages between the Vjosa Delta and the coastal area, and inland plains, and mountainous areas;
- All remaining floodplain forests (including future reforestation areas).

The approach to this exercise has been extracting meaningful delineations for the riparian system and protecting the integrity of the river continuum across the entire catchment. This delineation cannot be done in one single step, so, in the first phase, the focus is on the active channels, floodplains, and public land.

The proposed long-term boundaries for the Park are shown below. The boundaries for the first phase of the Park are shown in Section 3.2.

The IUCN requires that 75% of the land in a park be managed to the highest standard of park protection. For the core areas of the Park in the Phase I declaration, this is achieved. When the wider Park area above is declared, as part of Phase II, it is acceptable that the goal of 75% of the land being managed to that standard is reached over time. As part of the Phase II planning, stakeholders will be engaged in how this will be done, and over what period.

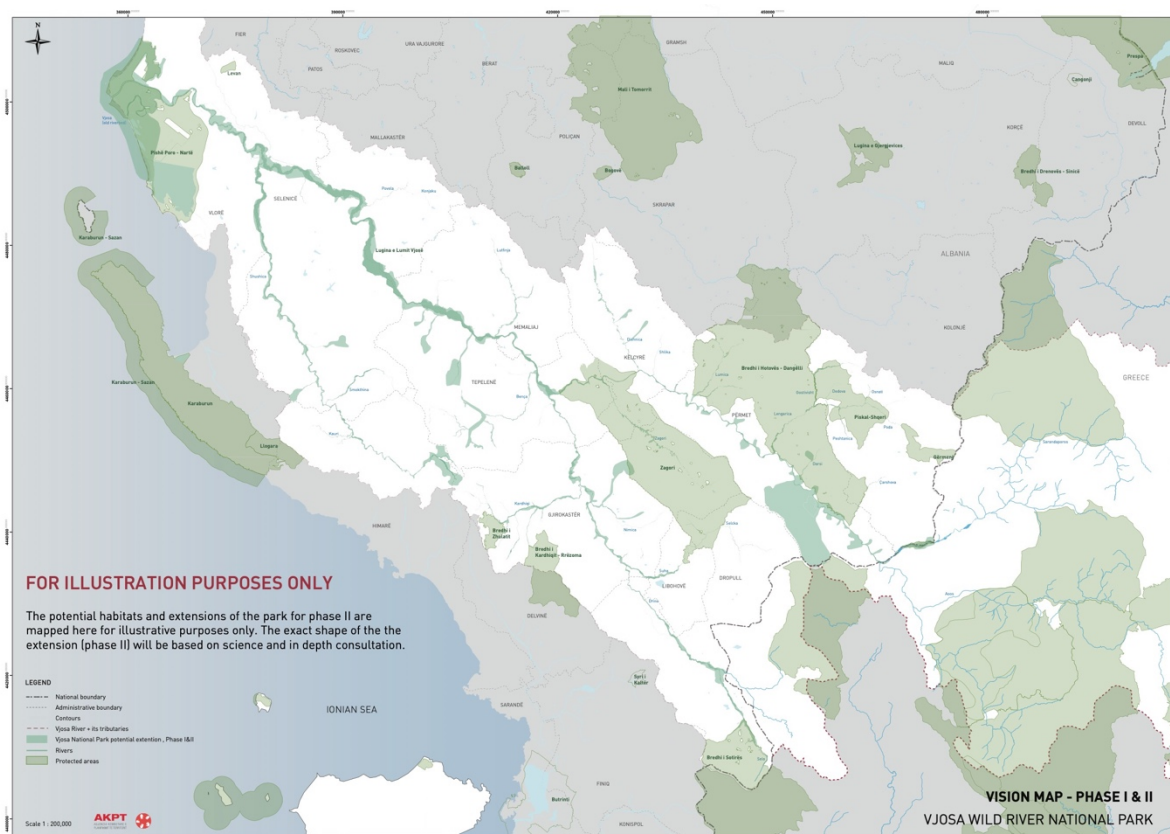


Figure 3: Vision for a Vjosa Wild River National Park (map by NTPA)

1.4 Action plan

A phased approach to comprehensive protection, management, and restoration of the Vjosa River Basin is foreseen: the design, gazettelement, and establishment of the VWRNP will lay the foundation for an initial operationalization phase, and then,

consolidation and further development of the Park and its capacities. The MoTE will proceed in four distinct phases, with the support of national, regional and international partners:

2022

- Feasibility studies and site assessments will form the basis for the VWRNP designation.
- Vision and road map are set and agreed upon.

2023

- The formal declaration of boundaries, zones, buffers, and ecological corridors of the core area (Phase I)
- VWRNP is assigned IUCN PA Category II – National Park
- Partners commit to longer-term engagement
- Implementation work begins:
 - o Establish the institutional arrangements for the operation and management of the VWRNP Phase I under the existing national protected area management framework; this includes the initial appointments of the VWRNP staff.
 - o Planning activities for the Park's essential infrastructure (planning documents for the Park office and visitor center), the VWRNP identity, corporate design and advertising, and park visitation and interpretation concept.
 - o Capacity development, including training for Park staff and tourism providers.
 - o Modification of the legal background for the implementation of an effective management model for the VWRNP.
 - o Development of management direction for the VWRNP and an annual management plan.
 - o Assessment of the financial needs for the operation of the VWRNP in 2024.
 - o Preparations for the VWRNP – Phase II with a detailed work plan, including delineation of all free-flowing tributaries and other areas of special conservation value on public and private lands, especially the river delta components, to ensure the ecological integrity of the Vjosa River ecosystem.
 - o Implementation of pilot projects, such as the reforestation of selected floodplains.
 - o Fundraising: begin applying for large-scale Interreg projects and other funding; reach out to philanthropic donors.

2024 – 2027

- The VWRNP is operational with core capacities and technical support.
- The initial management plan is developed and tactical operations are underway, including monitoring systems.
- Sustainable tourism development and park financing and business plans are in place.
- Wider conservation designations reinforce the protection of all tributaries.
- Transboundary cooperation with the Aoös section in Greece continues to develop and takes the form of direct cooperation.
- Certification of the VWRNP according to IUCN Green List standards.

2028 – 2031

- The VWRNP achieves proven success in conserving its most important natural, ecosystem, cultural, and climate values.
- All tributaries remain free-flowing and ecologically intact.
- Transboundary cooperation with Greece allows the entire river system to benefit from protection and conservation.
- Sustainable tourism development and related business opportunities provide consistently growing economic benefits directly and indirectly to the VWRNP stakeholders and local communities.
- The VWRNP complies with the IUCN Green List standards.



Figure 4: Vjosa River Basin - a tributary near Përmet (photo by Nick St. Oegger)

II. The Rationale for Establishing the Vjosa Wild River National Park

The Vjosa Wild River National Park will play a crucial role in the sustainable development of Albania. Given its importance as a natural ecosystem and its potential to shape the region's social, cultural, and economic identity, Vjosa and its free-flowing tributaries must be recognized as a National Park. Failure to protect the area would increasingly jeopardize its territorial and natural integrity, and mean the loss of an enormous asset for future generations.

2.1 General description and sections of the area

Vjosa is the second largest river in Albania and closes the series of six major rivers entering the Adriatic Sea, which form the entire alluvial coastal plain, beginning in the north with the large Drin-Moraca-Bojana-Buna system, and further down, with Mat, Erzen, Shkumbin and Seman Rivers. Together with Seman (Devoll and Osum), Vjosa forms a huge connected delta plain.

The transboundary catchment of Vjosa covers approximately 6,800 km² (4,540 km² in Albania), and the river flows in a SE-NW direction over a length of 272 km (190 of which are located in Albania) from the Pindus Mountain Range in Greece to the Vjosa Delta, and then the Adriatic Sea. Albania's catchment area crosses into the districts of Gjirokastra, Vlora, Fier, Korça, and Berat. Figure 5 provides an overview of the Vjosa catchment, its main tributaries, and major cities.

Vjosa and its tributaries form a functioning natural ecosystem large enough to mitigate the external disturbances of other altered areas found adjacent to and along the river corridor, without significantly affecting natural hydrological processes. However, the ecosystem is extremely fragile and sensitive, so it can be dramatically altered by any changes to the water regime upstream or downstream (Sovinc, 2021).

In the geological, hydro-morphological, hydrological, and ecological context, the Vjosa River valley can be divided into three subareas:

- The upper section of the Vjosa River is characterized by steep gorges among Përmet, Këlcyra, and Dragot, crossed by areas with depositional cones and large gullies. The valley of the Vjosa River expands in the upper reaches of the Dragot area, except for the gorge of Poçëm.
- The middle section, spanning the stretch which includes the confluence with the Drino River, where the city of Tepelena is located, is known for the large sand and gravel banks formed by the branching river. Downstream of Selenica, the river's catchment area shrinks, the valley widens, and the river begins to meander. The floodplains of the Vjosa River are known as one of the most magnificent coastal ecosystems of the Balkan Peninsula, characterized by their natural hydro-morphodynamic river processes. The wide branching stream, the large gravel

banks and islands, and the pioneer plant species, willows, poplars, and tamarisks give the Vjosa valley an extraordinary character.

- The lower section is characterized by the stretch of the Vjosa River and the formation of wide meanders. Between the cities of Fier and Vlora, the Vjosa River passes through the Myzeqeja lowlands and flows towards the Adriatic Sea. The Vjosa Delta is located north of the Narta Lagoon, where it reaches the sea.

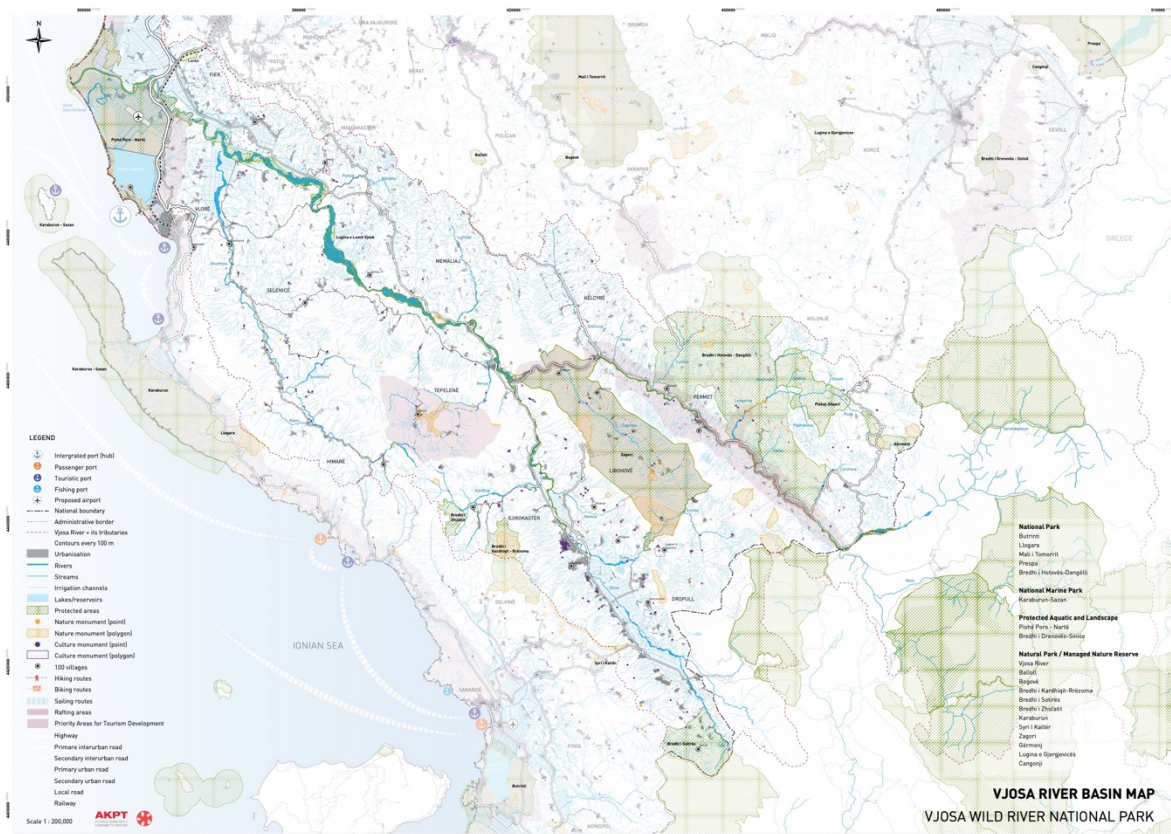


Figure 5: Vjosa River Basin map (map by NTPA)

2.2 The legal basis for establishment of the Park

2.2.1 Law on protected areas

From a legal perspective, the designation of Vjosa as a national park is well-supported. As per the international standards for protected areas covered by the Albanian legislation as well, it is recommended that areas whose biodiversity has been preserved, and which are overwhelmingly characterized by unchanged ecological processes, according to the International Union for Conservation of Nature (IUCN), are declared as Category II "National Park" protected areas.

Law No 81/2017 "On protected areas" includes the declaration, protection, administration, management, and sustainable use of protected areas and their natural-biological resources, based on the principle of sustainability. Protected areas are created for the protection and preservation of biodiversity, landscapes, and

natural and cultural heritage, and are managed on the basis of legal instruments, according to management categories.

The Albanian Protected Areas Act (81/2017; section IV) defines eight protected area categories in Albania, referring to the IUCN protected area category system, including National Park, Category II.

The description and objectives of a national park under the Albanian law are given below:

1. A national park shall be declared for *extensive territories, usually not less than 1,000 hectares, unique for their national and international values, which are protected and managed for the preservation of the ecosystems and species, and for education and recreation purposes (leisure, entertainment), and which regulate the sustainable use of resources by humans.*
2. The level of environmental protection of the area is applied to the national park to preserve the territory *in its natural state, conserving the biotic communities, species, and genetic resources to ensure ecological stability and diversity, and where:*
 - a) *human intensive occupation or exploitation is excluded;*
 - b) *use of land by employing intensive technologies, means and manners that cause fundamental changes to its biodiversity, structure, and functions of ecosystems, or that irreversibly damage the land surface, is prohibited;*
 - c) *construction of urban areas, highways, railways, electricity production lines, such as hydropower plants, high voltage power lines, and long-range oil and gas systems is prohibited;*
 - d) *alteration of the natural state of water reserves, sources, lakes, and wetland systems is prohibited;*
 - e) *any activity contradicting the objectives for the protection of the area which are outlined in the management plan.*
3. Activities that provide creating visitors' *spiritual, scientific, educational, and recreational opportunities.* in compliance with the environmental and cultural, and management plan requirements, may be carried on in this area, but only after the approval of state institutions is obtained, and if their aim is:
 - a) *to conserve the area in its natural state or as near to its natural state as possible;*
 - b) *to treasure the ecological and geomorphological values, sacred or aesthetic objects, for which the area is taken under protection;*
 - c) *to take into consideration the local residents' rights, including fishing, grazing, and [securing] the firewood, to the extent that they do not harm other objectives of management.*
4. Upon the written and justified proposal of the protected area authority, the National Agency of Protected Areas (NAPA) may approve:
 - a) *grazing and passing through of livestock, and construction of light or temporary structures to house them;*
 - b) *putting up stands, signboards, advertisements, signs, and posters;*
 - c) *sailing boats, canoes, and other means of non motorized sailing, always in cases where such activities do not require prior investments that would affect the amount of water or water streams flowing in the proposed site;*
 - d) *non-military flights in helicopters, balloons, delta planes, etc.;*
 - e) *driving and parking vehicles out of the designated roads and areas;*

- f) mountain climbing, skiing, camping, and lighting of fires outside the designated places;
 - g) collecting plants, fruits, seeds, and fungi;
 - h) *performing seasonal tourism activities, that do not require the permanent occupation of the land.*
5. Where the Park conservation authority notes that the purpose for which the Park was declared a national park is violated, it may temporarily restrict or prohibit the movement of vehicles, fishing, and other allowed activities.
 6. Upon the proposal of NAPA, the Minister shall adopt an instruction on procedures for the temporary prohibition of allowed activities where the purpose for which the area was declared protected, is violated.
 7. The Park management plan, shall, according to management sub-zones, shall clearly and in detail define the activities that are allowed, prohibited, or that require permission from responsible authorities, under the applicable Albanian legislation.

2.2.2 Important legal steps to follow

According to Law No 81/2017, any state, central or local body and institution, legal or natural person, non-profit association or community, has the right to submit to the Ministry responsible for protected areas proposals for the declaration of protected areas.

The procedure for declaring a protected area is defined in Article 12 of Law No 81/2017, and includes the following steps:

- Inclusion of the area proposed to be declared a national park in the plan;
- Draft declaration of a protected environmental area where its status is defined in advance;
- Internal boundaries and zoning, the buffer zone around it, the conservation administration of the area and its dependence, the processing and exploitation possibilities of the area, the income that can be generated and their use for the benefit of the area;
- Publication of the plan for the declaration of protected areas at the ministerial and municipal level;
- Public consultation among the interested parties on the announcement plan (municipality where the proposed protected area is located, and the civil society and land owners that will be included in the protected area), and submission of comments to the Ministry.
- Approval of the boundaries and sub-zoning of the protected area by the National Territorial Council.
- Approval of the announcement of the protected area by the Council of Ministers;

2.2.3 The spatial planning and sectoral context

Spatial and territorial planning is governed by Law No 107/2014 "On territorial planning and development." At the national level, the main plan in terms of spatial planning instruments is the General National Spatial Plan, Albania 2030 (GNSP), which is

supported by sectoral plans and detailed plans of areas of national importance. GNSP is instrumental in supporting and strengthening the importance of areas of national interest, expanding the declared areas for their protection, as well as in proposing other areas that should be protected based on the procedures defined in the legislation. In the GNSP, the creation of the Vjosa Park is identified as the new potential green corridor.

At the local level, the main document is the Local General Plan B. In the Vjosa River Basin, the Municipalities of Kolonja, Përmet, Këlcyra, Gjirokastra, Libohova, Fier, Vlora, and Himara have approved their LGPs, while the LGPs of the Municipalities of Dropull, Tepelena, Memaliaj, and Selenica are in the process of being finalized. In the approved LGPs, the idea of the Vjosa River as a protected area and as a powerful potential tourist center is strengthened.

The Document of Strategic Policies for the Protection of Biodiversity 2016-2020 foresees the expansion of the system of protected areas by increasing the area of protected areas. In the re-evaluation of protected areas made by NAPA in December 2019, Vjosa was not proposed as a future new protected area in its full integrity. However, some experts and documents show that, in the reassessment, not all of the outstanding values and importance of preserving the Vjosa valley were taken into account.

Several important strategic sectoral documents outline the future development of the Vjosa valley. They are: *The National Strategy for Integrated Management of Water Resources 2017-2027*, *The National Strategy for Sustainable Tourism Development 2019-2023*, and *The National Energy Strategy 2018-2030*.

Some of the above strategic documents support the proposed protection and development of the Vjosa River Basin, based on some green forms of tourism; for example, even in the LGPs see the Vjosa River is defined as a main corridor and center for the development of tourism and the economy of the local communities.

The designation of Vjosa as a National Park would ensure a higher level of environmental protection by preventing intensive development activities, better preserving the outstanding genetics and biodiversity that characterizes the region, and securing the preservation of the unique flora and fauna that call Vjosa their home.

The planning, coordination, and management of the creation of the national system of protected areas are defined in "Strategic policies for the protection of biodiversity 2016 – 2020", drafted by the National Agency of Protected Areas (NAPA).

2.3 Natural, cultural and heritage values of the area

2.3.1. Geology

The Vjosa valley represents an area of international interest for geological studies. Situated on the southern part of the Albanides, the Vjosa River crosses several geological structures consisting of successive anticlines and synclines affected by a series of active tectonic and neo-tectonic lines. As a result of this unique composition,

Vjosa offers a spectacular view of outcrops of rocks, as well as characteristics of geodynamic phenomena. The carbonate formations, under the effect of the karst phenomenon, form groundwater flows draining along the Vjosa valley in 47 permanent water springs (Durmishi et al., 2018).

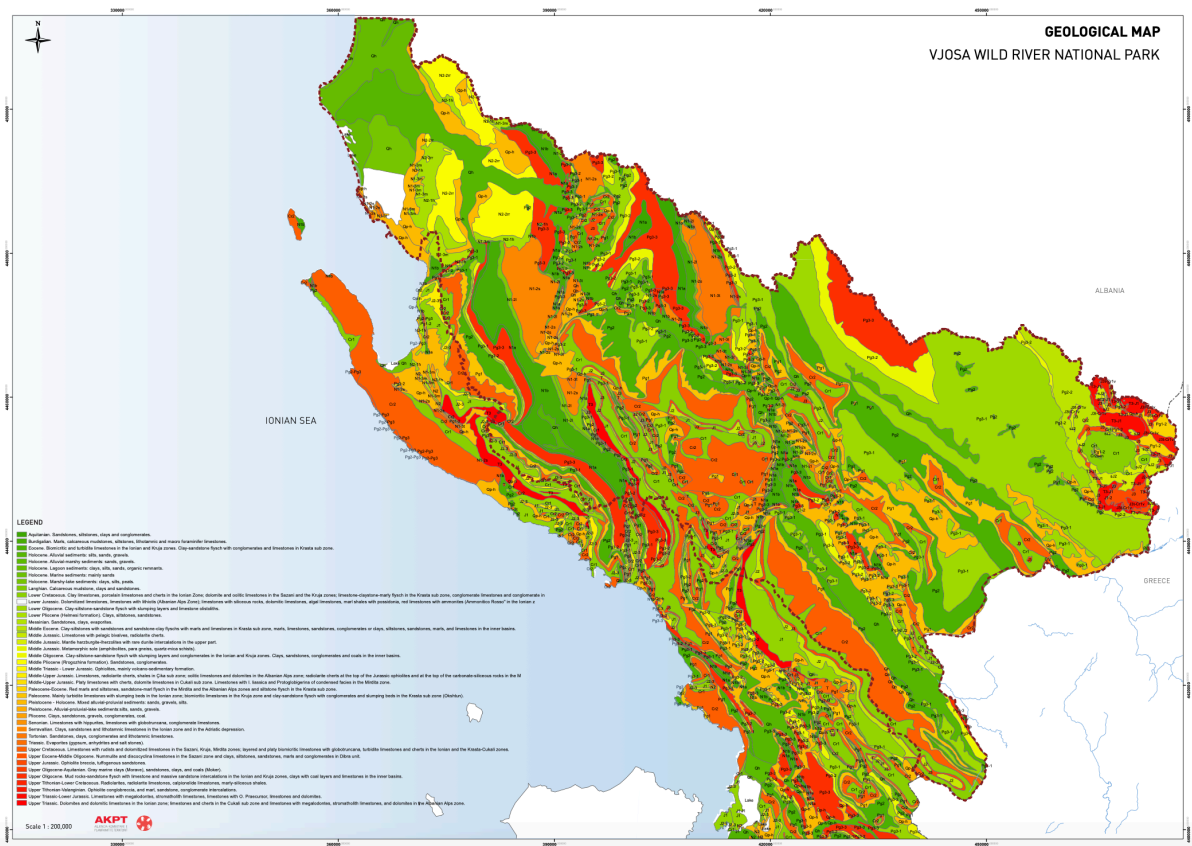


Figure 6: Geological map of the Vjosa River Basin, Albanian Geological Service (AGS)

Geologically, the Vjosa catchment is embedded within five tectonic zones, the largest of which is the Ionian zone. These tectonic zones are part of the Albanides-Hellenides chain, which, together with the Dinarides, make up the dominant mountain range in the Western Balkans. The complex tectonic structure consists of two domains, the eastern or Internal and the western or External Albanides (Aliaj, 2006; Schiemer et al., 2018).

The Vjosa/Aoös River is divided into three geological sections. The upstream section of the river valley, frozen during the Last Glacial Maximum, drains ophiolites, flysch deposits, carbonate, and limestone deposits. In the middle course section, between Dragot and Poçëm, the river flows mainly over the flysch deposits of the Ionian tectonic zone. The downstream section extends from Poçëm to the Adriatic Sea, with the river flowing over the Ionian tectonic zone and the quaternary deposits of the pre-Adriatic lowland tectonic zone, mainly consisting of gravel, sand, silt, and clay (Skrame, 2020; EcoAlbania, 2021). As a result of this geological context, channel types display a remarkable variety of geological forms: the river forms gorges and incises the terraces in the upper and middle catchment forms into braiding channel patterns as the valley widens and transitions to a meandering state towards the mouth (Bizzi et al., 2021).

The Vjosa Delta represents the most important area in the Myzeqeja lowlands, 2/3 of which is a result of delta progradation over a period of 500 years (Fouache et al., 2010). Previous archaeological studies show the displacement of the Vjosa mouth south of its actual location in the Vlora Bay (where the Narta Lagoon was created), and to its north, along the foot of the Frakulla structural ridge, less than 1 km southwest of the ancient city of Apollonia. The Vjosa Delta is wave-dominated, characterized by sand banks, mud flats, salt marshes, reed beds, small lagoons, and temporary marshes. Using historical topographic maps from the 19th century to the present, shoreline dynamic analysis indicates the fluctuation of the coastline position, with the trends of recent years hinting towards future erosion (Durmishi et al., 2018).

The catchment is dominated by mountains averaging some 300-1500 m a.s.l., but reaching peaks of 2600 m. The relief and slopes are steep and only the big rivers accumulate and shape terraced or even flat valleys, such as Drino.

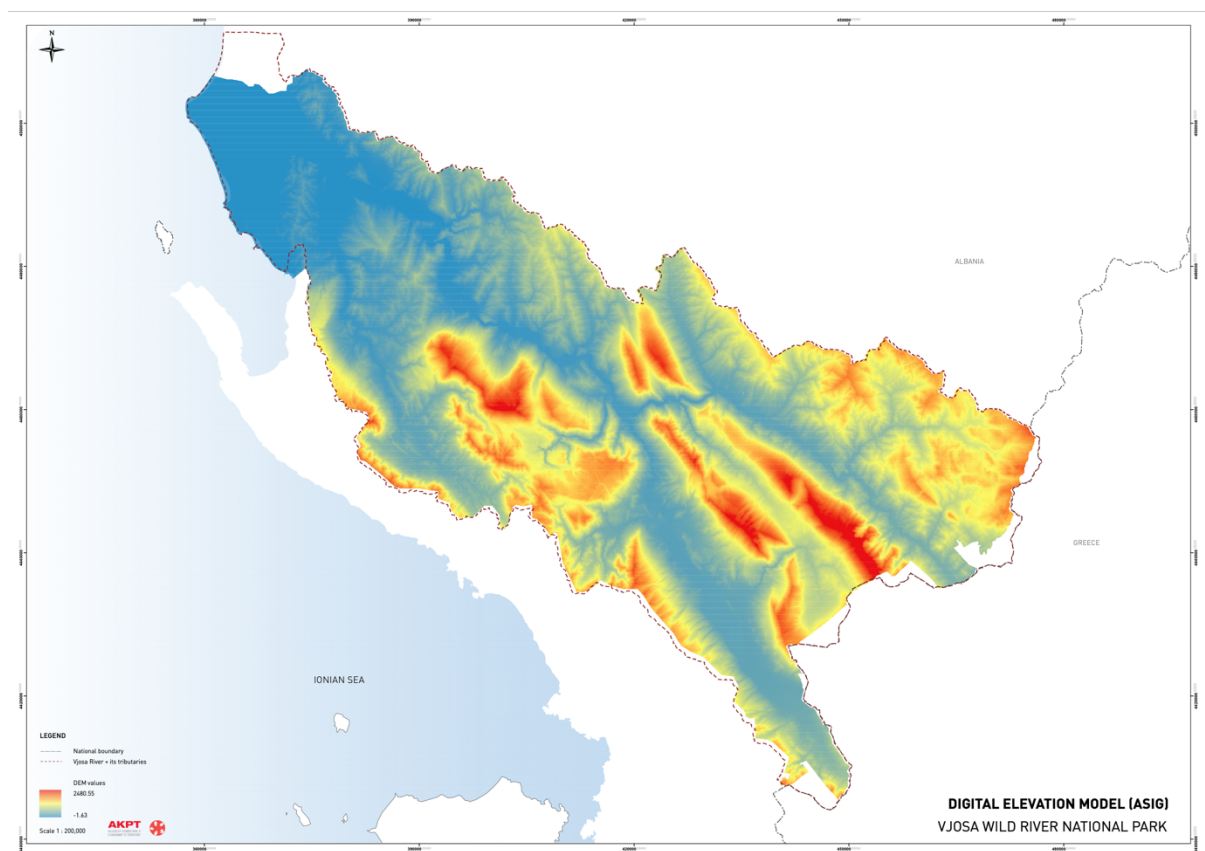


Figure 7: Digital Elevation Map of the Vjosa River Basin, ASIG

The river flows through several neo-tectonic zones (mainly in the Ionian zone), and the river systems can be dated back to the upper Pleistozän (long period of alternating ice ages), some 150,000 years ago, starting erosion and transport of material from the mountains to the sea.

Geological formations and features are diverse and originate beginning with the Triassic Period (before 200-250 million years) up to the Quaternary Period today, generating magmatic rocks, carbonates, and terrigenous sediments (flysch and molasse). They are subject to weathering and the subsequent consolidation of alluvial deposits, karst phenomena in the limestone rocks, the movement and sliding of

colluviums (unconsolidated sediments at the base of hill slopes), as well as tectonic activity. The mountain ridges are mainly built of limestone rocks, while lower hills persist of flysch rocks. The Drino valley, the field of Gjirokastra, is built of Quaternary deposits of molasses. Along Vjosa conglomerate deposits can be found in the upper reach, while the delta and the coastal plain are developed by alluvial deposits. Most of the lower hills and foot mountains are built of various materials transported by the rivers in previous times, including all kinds of gravel, sand, silt, and clays. In the high mountains, karst erosion in the limestone produced steep crests and sharp slopes. On the other hand, small karstic depressions, like poljes, can be found (Çajup is the largest one with some 90 ha).

2.3.2. Geomorphology

The geomorphological history of the Vjosa valley can be traced back to the glacial periods, where the limited ice layer that formed over the valley had nevertheless a noticeable influence on the hydro-morphological characteristics of the Vjosa River. This influence is reflected in two different processes: the clear sectioning of the river in fluvial deposits, indicating that the historical sedimentary stock was higher than today, and as seen in other sections of the river, that those sedimentary stocks are currently equal or higher than during the Ice Age or earlier. The section of Poçëm and Përmet has a linear longitudinal profile, which indicates the stable transport of sedimentary deposits rather than the downstream connection. Previously, such findings were known only from laboratory experiments (Hauer, 2021; *EcoAlbania*, 2021).

The overall geomorphology of the Vjosa basin is distinguished by an NW-SE orientation of the folded structures and tectonic plates, with the valleys and their tributaries aligned along the tectonic lines of the Alpine thrust system. This configuration results in significant fluctuations in the elevation of the mountain ranges surrounding the Vjosa valley. In Greece, the elevation of Aoös varies between 2,636 to 400 meters above sea level, while in Albania, the elevation ranges from 2,500 m to sea level (CNR Cereg, 2015). The mountains flanking the middle stretch of the valley vary in elevation from 300 meters in the north to nearly 2,000 m in the south. The Grike Mountain Range, which peaks with Mt. Kudhës (1907 m), separates Vjosa in the north and northeast from the Shushica valley in the southwest. At Poçëm, the river is situated between two parallel mountain ranges composed of limestone and flysch. (Schiemer et al., 2018).

The Vjosa River itself runs through an assortment of landscapes. The mean catchment slope is 28%, while the riverbed slope is about 4%. Low gradients are characteristic of the lower course of the river, surrounded by a wide, flat floodplain with terraces shaped during the Quaternary Period, roughly 2.59 million years ago. This region includes the Myzeqeja floodplain located near the city of Vlora, the Kota valley, which forms part of the Shushica River tributary basin, and the Drino valley with the areas of Gjirokastra and Dropull. The gradients of the river in these zones are shallow - up to 5° (CNR Cereg, 2015). The river's middle course is characterized by hills of highly fragmented, terrigenous, sedimentary rock, which the Vjosa tributaries have eroded over time. These include areas with very high slopes around the highland of Kurvelesh and the mountains of Nemërçka, Lunxhëria, Bureto, Postnan, and Melesin. Gorges and deep canyons can be found in Bënça, Këlcyra, and Langarica. The river's upper course is surrounded by large mountains, with abrupt crests and very steep slopes resulting from water erosion and limestone terrain (karst). In Greece, the Aoös

tributary, Voidomatis, flows through the Vikos Gorge, listed as the deepest canyon in the world (UNDP Albania, 2017).

2.3.3. Hydro-morphology

The Vjosa River and valley are one of the most magnificent riparian ecosystems in the Balkans, exceptional for their natural hydro-morphodynamic fluvial processes. They represent important points of reference for the hydro-morphological characterization of the Balkan rivers and the resulting processes of landscape formation (Hauer, 2021; *EcoAlbania*, 2021). The channel pattern shows significant variations over the length of the river in Albania (Daja et al., 2018). In the upper section, Vjosa follows a sequence of steep canyons among Përmet, Këlcyra, and Dragot, entrenched in gorges intersected by areas with large alluvial fans and islands. Past Dragot, the river valley widens, narrowing only for the gorges of Kalivaç and Poçëm. Near the city of Tepelena and around the confluence with the Drino River, the fluvial landscape is distinct for its large gravel bars and sandbars formed by the braiding river. The watershed slope of the river decreases after Selenica, the valley becomes wide, and the river starts meandering.

Valley forms: The afore-mentioned conditions in the catchment lead to a wide range of valley formations, not always in consecutive order (from up to downstream), but also with breakthrough sections and widenings in the headwaters. Most of the valleys are only partially confined and the canyon reaches, like Langarica and upper Bënça (Nivica and Lekdush canyons), are limited in length. Long reaches of upper Vjosa and middle Bënça are incised into terraces of conglomerate, and therefore, also bank confined. Aside from the upper Drino plain, large widenings of the Vjosa valley downstream of Memaliaj and upstream of Poçëm, with associated breakthroughs (at Kalivaç and Poçëm), lead to broad active river channels.

Channels: Various channel types from straight canyons and V-shaped valleys of tributaries and breakthroughs over pendular, terrace entrenched river courses, with alternating gravel bars to widenings with braided sections, to anabranching middle and even meandering lower courses (only in the case of Vjosa) cover the full spectrum of river systems. In addition, the karst phenomenon of underground streams, caves, and springs can be found in several places. Channel patterns, width and depth variations, flow velocities, substrate conditions, and the structure and condition of the riparian zones are rather intact in Vjosa and most of the tributaries.

River banks: A large variety of bank compositions can be found from the steep canyons along the Langarica and Bënça headwaters in rock or conglomerate, over huge monoliths and boulders in the Shushica breakthrough, to broad gravel channels with alternating river branches delimited only by natural banks and terrace edges towards frequently eroding steep banks in the middle courses, and even shallow banks with fine sediment (sand, silt, and clays) in the lower course and delta.

Floodplains: While floods in the higher sloped upper and middle course are flashy, they take in the lower Vjosa for up to several weeks. As mentioned, the bed-building annular floods regularly cover the entire active channel, and are responsible for the shifting channels and the rejuvenation of young pioneer stands on gravel bars and

islands. Regular but less frequent floods (floods all >1-5 years) are of utmost importance for the ecological conditions in low-lying floodplains. They form and shape floodplains adjacent to the active channel and on major islands. Shrubs of willows, and poplars on the upper courses, and plane trees build the initial vegetation, often stabilizing the land at least up to the next major flood. On a higher elevated areas of the active floodplain (floods all >5-30 years), only remnants of floodplain forests, mainly of poplars, are found. Most of those forests were converted to agricultural land over the years. In the remaining morphological floodplain (floods all >30-300 years), many settlements and a lot of infrastructure can be found.

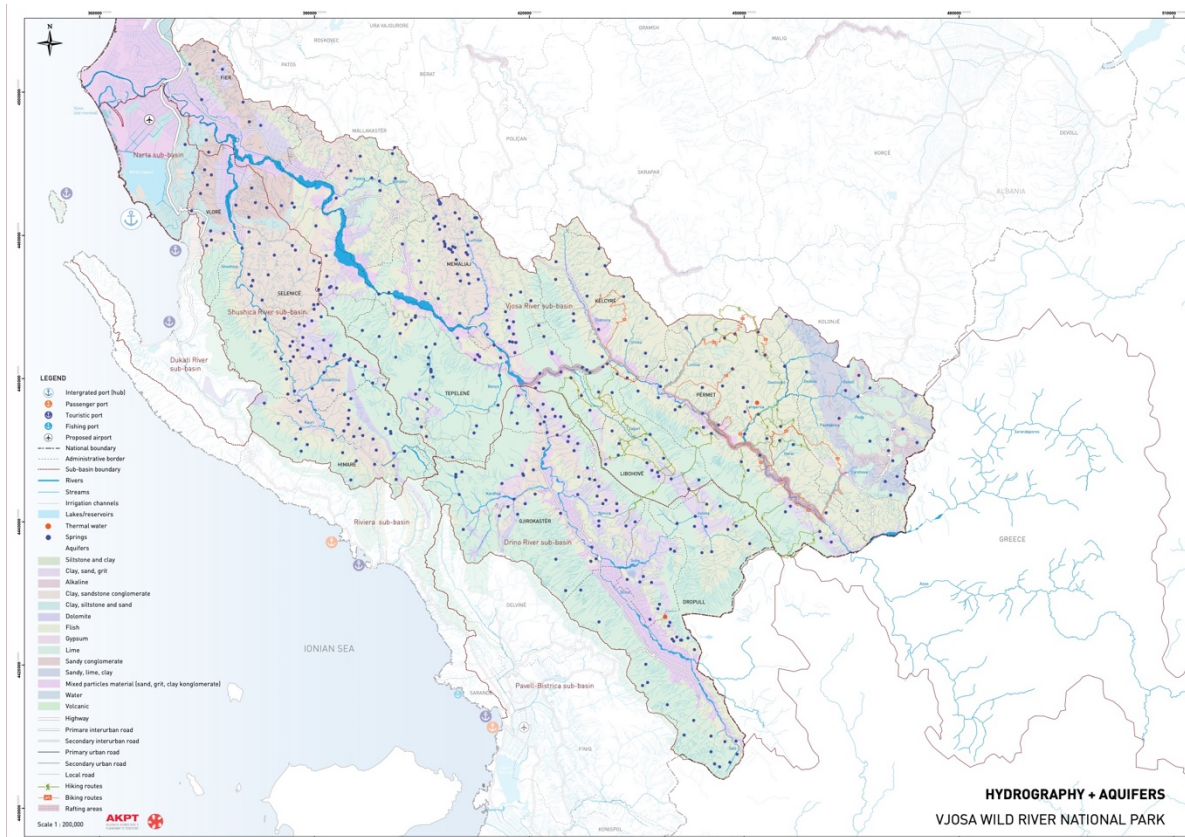


Figure 8: Vjosa River map and its tributaries (map by NTPA)

Overall, the corridor of the Vjosa River valley and its surrounding habitats are characterized by high spatial and temporal heterogeneity, continuous habitat change, and vast biotic heritage. The key to the exceptional biodiversity of Vjosa is in its hydro-morphological dynamics, particularly the longitudinal continuity of the water flow (otherwise known as “the natural flow regime”), which remains undisturbed throughout the length of the river. The flooding and high sediment transport in particular create a continued turnover of the landscape (Tockner & Stanford, 2002; Thorp et al., 2006), facilitating the recycling of matter and the specific routing of nutrients and carbon (McClain et al., 2003; Décamps et al., 2004; Pinay et al., 2007). The mosaic structure of floodplain rivers, characterized by a dynamic equilibrium of different habitats responding to water level fluctuations, provides the habitat conditions for a highly specific and diverse biota (Pickett & White, 1985; Décamps, 1996; Townsend et al., 1997; Winemiller et al., 2010; Ward et al., 1999). These unique

river dynamics, which have remained intact in the catchment area, contribute to creating well-adapted biota with high levels of alpha, beta, and gamma diversity.

However, this diversity, while significant, is highly vulnerable to changes in the river dynamics. In particular, the terrestrial species of highly dynamic riverine systems are exceptionally sensitive to hydro-morphological changes in discharge, flow regime and sediment budget. Any impacts on these parameters may lead to the decrease or extinction of these highly vulnerable taxa found in Vjosa. This scenario must be averted as the breadth of diversity of species in the Vjosa valley, expressed in the river's natural features, can no longer be found in any other Central European country (Schiemer, 2020; *EcoAlbania*, 2021).

The intact hydro-morphological dynamics make Vjosa a highly attractive case study for international river science. Over the past 150 years, up to 90 per cent of these floodplains in Central and Eastern Europe was lost as a result of the development of HPPs (particularly on the Danube, Rhine, and Po). To reverse this trend, restoration measures have been undertaken over the last 25 years or so (Mosimann, 1992; Schiemer & Reckendorfer, 2000 and 2004; Woolsey et al., 2005). The virtually untouched condition of the Vjosa catchment, characterized by its unobstructed fluvial morphology, continuity of water flow and sediment transport processes, can help us to understand the connection among the hydrological preconditions, river bed morphology and distribution of species. This understanding can in turn yield new knowledge for restoration projects of floodplain areas in the Mediterranean (Schiemer et al., 2018; Rössler et al., 2018).

The protection of Vjosa is therefore critical not only for safeguarding the river biodiversity of Europe, but potentially serving as a beacon for the future restoration and regeneration of Europe's other river ecosystems.

2.3.4. Climate and precipitation

The Vjosa River Basin is part of the southeastern hilly climate zone, and plays an important role in the region's climate, affecting the temperatures and rainfall. The climate of the Vjosa River Basin can be characterized as Mediterranean, with dry and hot summers, and mild and wet winters. The western part of the Vjosa River Basin is warmer than its eastern part due to the lower altitude and proximity to the sea. The mean temperature values vary from 10.7°C to 17.5 °C along the river valley, and from 6°C to 10°C in the mountainous areas. The mean maximum temperatures in the upper, middle, and lower parts of the catchment area range between 26.9°C and 35.8 °C.

The hottest months are June, July, and August, with daily mean temperatures between 20°C and 24 °C. The highest mean maximum values are between 26°C and 36 °C, and the observed absolute maximum values are 41.6°C recorded at Fier (6 July 1988) and 43.5°C at Selenica (18 July 1973). The coldest months are from December to February, with daily mean temperatures of less than 5°C. The average annual rainfall in the river basin ranges from 950 to 1,600 mm, while the long-term annual rainfall reaches 1,076.2 mm, of which about 66% rains in autumn and winter. The minimum precipitation typically occurs in the summer months (June, July, and August), while the maximum rainfall is evident in November and December. The number of rainy days ranges from 85 to 100 days a year. Climate data in the area was obtained from Climate 6 Explorer (Trouet & Oldenborgh, 2013, in Wickel & Galaitsi, 2017).

Precipitation in the Vjosa valley ranges on average from less than 1,000 mm in the coastal region and the most northeastern region up to 1,600 mm predominantly in the mountain ridges of Drino catchment. The highest precipitation, dominated by the Mediterranean climate zone, which is subdivided into orographic zones (from coast to high mountains), occurs at the first high ridges towards the Adriatic Sea, where through convection and raising of wet air masses over the winter most of the rainfall can be expected. The wettest month is February, while August-September is the driest period of the year.

2.3.5. Hydrology

Discharges in the rivers vary strongly, but the relation of average low to flood water discharges is not as pronounced as for other rivers in the Mediterranean. In the upper course, the mean water discharge has some 60 m³/s in Vjosa, while the lower course has some 175 m³/s on average (200 m³/s in the delta). More important for shaping the active channels is the regular and frequent annual flood discharge of some 900 m³/s, while the 100-year extreme flood can reach 3,000 m³/s in the upper course and up to 6,000 m³/s in the lower course. Karst springs are frequent and lead to a good baseflow also during the dry season (e.g., Këlcyra Black Water Spring within the bank of Vjosa). In Drino, even some water is sinking in the karst underground and appears outside of the catchment towards the coast ("Blue Eye" (*Syri i Kaltër*) with some 15 m³/s spring yield). The Viroi Spring near Gjirokastra is one of the biggest springs in the catchment with some 25-30 m³/s, and significantly contributes to the discharges of lower Drino, another indicator for the strong groundwater resource in the basin (those aquifers are used for all major settlements in and close to the basin, such as Fier, Vlora, Saranda, and Butrint along the coast and Gjirokastra).



Figure 9: Aerial view of the Vjosa River (photo by Roland Dorozhani)

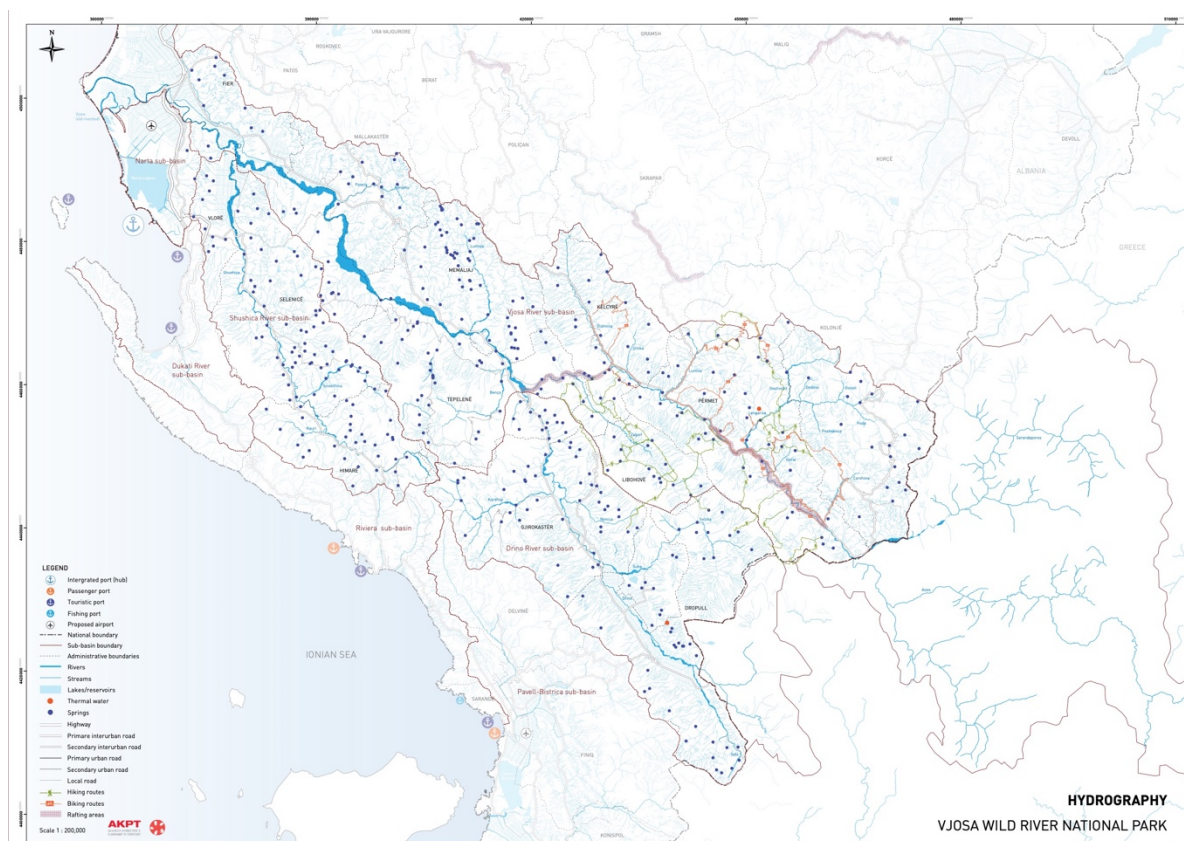


Figure 10: Map of the Vjosa River network (map by NTPA)

Vjosa is not just one of the many similar rivers in Albania. The exceptional biodiversity of the river is very rich and is complemented by the extraordinary value of the unique water regime along the entire river, underlining the importance of the Vjosa River as one of the last free-flowing and intact anabranching river ecosystems in Europe.

2.3.6. Characteristics and value of biodiversity

Habitats/ Ecosystems

The Vjosa catchment is an essential area for conservation due to the myriad of habitat types it provides (MoE, 2009; Mullaj et al., 2017; Rössler et al., 2018). Researchers have identified more than 15 priority habitat types of European interest in the valley (European Commission, 2013), of which four hold particular conservation interests. An additional seven habitat priority types in the area are endangered and possess significant floristic values (European Commission, 1992; Meulenbroek et al., 2018).

A preliminary study of the middle section of the Vjosa River revealed eight river habitat types of EU conservation importance: 3,220 alpine rivers and herbaceous vegetation along their banks, 3,250 Mediterranean rivers with the constant flow with *Glaucum flavum* (yellow poppy), 3,230 alpine rivers and woody vegetation with *Myricaria germanica* (German tamarisk), 3,240 alpine rivers with woody vegetation with *Salix eleagans*, 9,200 southern coastal corridors and thickets (*Nerio-Tamaricetea* and *Securinegion tinctoriae*), 6,210 semi-natural dry grasslands and scrubland areas on calcareous substrates, 9,130 alder forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*), 9,200 *Platanus orientalis* and

Liquidambar orientalis (*Platanion orientalis*) forests (Egger et al., 2019; Meulenbroek et al., 2021).

Albania is currently in the phase of "transposing" (or integrating) the EU legislation into national legislation. The rare and characteristic habitats mentioned above are also defined as areas of special protection importance in their own right. The territory of Albania represents only 0.00064% of the surface of the EU; however, some of the above habitat types found along the Vjosa River cover no less than 1.8% (HT 3,250) or 1.2% (HT 3,230) of this particular type of habitat across the territory of the EU. The habitats of the Vjosa valley are of great European importance for nature conservation according to the criteria listed in the directive on habitats (*EcoAlbania*, 2021).

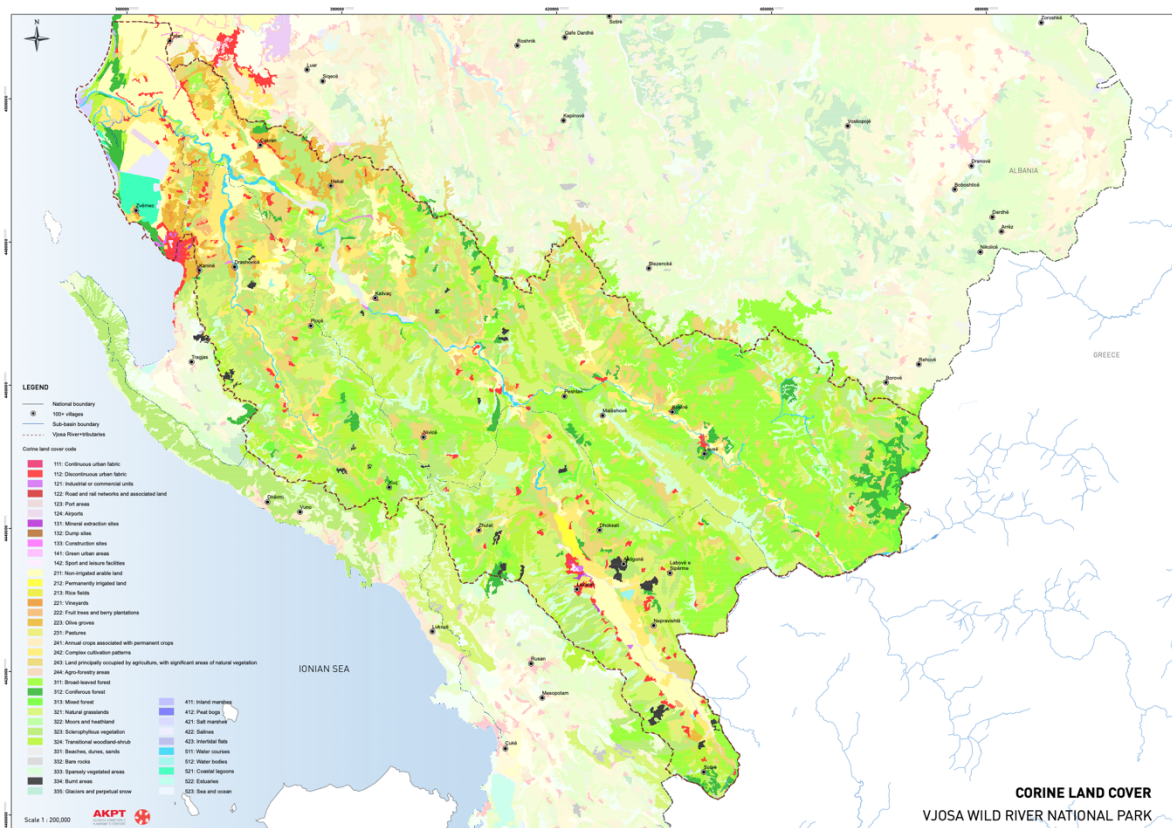


Figure 11: Corine land cover data for the Vjosa River Basin (map by NTPA)

Species of flora

Due to the lack of extensive studies, it is difficult to pinpoint the precise number of higher plant species found across the Vjosa catchment. However, experts confirm that it could be more than 1,500 taxa, from which more than 570 species of higher plants and 68 species of mushrooms are featured in the coastal habitats of the Vjosa-Narta Lagoon. In the Gjirokastra region, according to Malo (2011), 700 higher plant taxa are reported, where 12 taxa are new for Albania, 40 taxa are sub-endemic, and 30 are rare or endangered species (Tan et al., 2011; Shumka et al., 2018).

Moreover, three additional threatened species on the IUCN Red List, *Aesculus hippocastanum*, *Galanthus reginae-olgae*, and *Solenanthes albanicus*, which are categorized as Vulnerable C2a(i), Vulnerable B2ab(iii,v), and Endangered B1ab(v) +

2ab(v), respectively, are found in the river banks and on the rocky faces along the tributaries, as well as the alpine limestone grasslands of the watershed. The dunes or wetlands are also home to several rare or relict species, including *Anacamptis morio* ssp. *Caucasica*, *Ephedra distachya*, *Narcissus tazetta*, *Nymphaea alba*, *Nuphar lutea*, *Nymphoides peltata*, and various species of *Orchis*, *Ophrys*, *Limonium*, and *Scilla*. Other species with a more restricted range can also be found there (Shumka et al., 2018).

In addition, about 380 species of MAPs (Medical and Aromatic Plants) have been recorded within the watershed, 330 of which are wild species (Miho & Shuka, 2017). About 46 of these species are designated as endangered, threatened, or protected, and yet continue to be harvested in the wild, while roughly 70 species grow near water courses. Some of these species belong to the National Red List of species, e.g., *Adiantum capillusveneris* (VU A1b), *Dryopteris filix-mas* (LC), *Alnus glutinosa* (Vu), *Capparis spinosa* (VU A1b), *Galanthus reginae-olgae* (CR B1), *Populus alba* (VU A2b), *Quercus robur* (VU A1b), *Salix fragilis* (VU A1b), *Sambucus nigra* (VU A1b), *Symphytum officinale* (VU A1b), *Ulmus minor* (VU A2b), *Anacamptis morio* (EN A1b), *A. pyramidalis* (EN A1b), *Colchicum autumnale* (EN A1b), etc. (Meulenbroek et al., 2018).

Species of fauna

The Vjosa River Basin is home to a vibrant and extensive diversity of fauna and includes many endemic species of great national and international importance in terms of conservation. The diverse populations of fauna in the Vjosa River Basin include:

- More than 150 species of winged insects (*Pterygota*) from different aquatic and terrestrial habitats in the IUCN Category V (protected landscape/ seascape) in the Vjosa-Narta zone (Paparisto, 2001; Shkëmbi et al., 2015; Shkëmbi et al., 2018; Cuvelier et al., 2018).
- About 60 mollusk species were reported in the coastal habitats of the Vjosa Delta to the Narta wetlands; among them, 27 gastropods (snails), 29 bivalves (mussels), and four cephalopods (octopus, squids, and cuttlefish). Of these, 42 species originate from marine habitats, 12 from freshwater, and six from terrestrial sites (Beqiraj, 2001, 2004; Beqiraj et al., 2002; Dhora, 2002).
- At least 31 species of fish inhabit the river system, 27 of which are native, including eight species endemic to the Balkan and four non-native species (Shumka et al., 2018). The Vjosa River, its delta, and the Narta Lagoon make the more general area important for fish diversity, fishing, and aquaculture (Shumka et al., 2010, 2014; Markova et al., 2010; Snoj et al., 2009). The Vjosa River provides ideal aquatic habitats for a variety of migratory fish species, as well as certain critically endangered species, such as the European eel (Jacoby & Gollock, 2014).
- At least 32 of the 37 reptile species have been identified in Albania.
- A total of 257 recorded bird species across the various ecosystems and habitats of the Vjosa River Basin (MoE, 2009; Bego, unpublished data).
- The area also harbors around 70 of the 86 registered terrestrial mammal species in Albania (MoE, 2009; Bego, unpublished data), including the European otter, which is significant for the entirety of the Vjosa River system, as well as large carnivores, such as the brown bear and the wolf. Large mammals in the Vjosa watershed also include the Chamois (*Rupicapra rupicapra balcanica*), the roe deer (*Capreolus capreolus*), and the wild boar (*Sus scrofa*). The study area is also a welcoming habitat for both cave-dwelling and forest bats; 29 out of 32

bat species recorded in Albania are present within the Vjosa watershed (Meulenbroek et al., 2018).

Many species that make the Vjosa River Basin their home are listed in *Appendix 1 - 3 of the Bern Convention*: 41 are found in the *Appendix of the Birds Directive*, and 78 in the *Habitats Directive*. Annex I of the *Birds Directive* lists 36 bird species, and Annex II of the *Habitats Directive* lists one amphibian, three arthropods, 12 fish, ten mammals, three mollusks, and five reptiles. Two species of fish and two mammals found in the Vjosa River Basin and listed in Annex II of the *Habitats Directive* are considered priority species and of very high conservation importance at the EU level. At the national level, the National Red List includes five arthropods (VU); 30 birds (6 CR, 6 EN, 18 VU), six fish (5 RR, 1 VU), six mammals (2 RR, 4 VU), and three reptiles (CR).

The Vjosa River Basin holds some of the largest national habitats of particular species or those not found anywhere else in Albania, while studies carried out so far have also discovered the existence of several new species. The fauna of Vjosa comprises typical elements of highly dynamic large rivers, all of which have lost large areas of their former distribution in Europe. These riverine faunal elements are highly sensitive to changes in the natural hydro-morphology. These points attest to the national (and international) importance of the Vjosa River Basin in terms of species conservation, and emphasize the necessity of its protection (*EcoAlbania*, 2021).

Evaluation of the biodiversity values of the Vjosa River Basin

The biodiversity values of the Vjosa River valley are assessed based on the range of its habitats and the richness of its species, through various assessment criteria and instruments (national red lists of endangered species, Bern Convention appendices, Appendices of EU Habitats and Birds Directives, IUCN global red lists) (*EcoAlbania*, 2021).

With its largely unobstructed fluvial morphology, longitudinal continuity in water flow, and sediment transport processes from its headwaters to the Adriatic Sea, Vjosa represents a key reference system for dynamic floodplains already lost across Central Europe (Schiemer et al., 2018). Moreover, as one of the last intact river systems in Europe, Vjosa is a sanctuary for numerous species lost or endangered across the rest of the Continent. In addition, Vjosa has also been designated a "No-go" river stretch because it meets the criteria for hydro-morphology, key fish species, protected areas, and significant wetland systems (Chamberlain, 2018).

According to the scientific consensus, Vjosa and its surrounding habitats are of remarkably high conservation value for several interconnected reasons. The mosaic of various habitat types forms a highly dynamic natural river ecosystem of a scale unique in Europe. These habitats harbor viable communities of animals that have significantly or entirely disappeared from other European rivers. If Vjosa's habitats are not sufficiently protected, many of these communities will face irreversible endangerment due to their dependence on the highly dynamic river system. Moreover, the declaration of the VWRNP will exert significant positive effects on the iota of the area, not only on the Albanian side of the river, but also on the entire river ecosystem, in particular the environmental parameters of the transboundary areas (*Shallari, S&L, 2022*). The protection of the Vjosa River system in its present form is

therefore not solely an essential matter for Albania and Greece, but rather an objective of pan-European importance.

To date, a total of 1,175 species have been documented in the Vjosa River (Meulenbroek et al., 2021; Schiemer et al., 2018; Egger et al., 2019; and Fontes et al., 2019), including 516 arthropods, 157 birds, 37 fish, 24 mammals, 109 mollusks, 19 reptiles, 9 amphibians, 299 vascular plants, and 5 non-vascular plants.

Of all the 1,175 species documented so far, 39 of them are on the IUCN Red List and 119 on the Red List of Albania. No less than 15 species of the IUCN Red List and 74 species of the National Red List are classified as "at risk" (CR - critically endangered, EN - endangered, VU - vulnerable).

According to the IUCN Red List, globally threatened species in the Vjosa Valley include:

- one amphibian (*Pelophylax shqipëris* - EN),
- two birds (*Neophron percnopterus* - EN and *Streptopelia turtur* - VU),
- seven fish 4 CR (*Acipenser naccarii*, *Acipenser stellatus*, *Acipenser sturio*, *Aphanius iberus*), 2 EN (*Anguilla anguilla*, *Gobio scadarensis*) and one VU (*Oxyngoemacheilus pindus*),
- one mammal (*Myotis capaccinii* - VU),
- two molluscs (*Unio crassus* - EN, *Vertigo moulinsiana* - VU), and
- two vascular plants (*Aesculus hippocastanum*, *Galanthus reginae-olgae*, both VU).

The presence of the above endangered and vulnerable species on the IUCN Red List indicates the international importance of the Vjosa River in terms of nature protection. Moreover, around 150 species of previously identified flora and fauna are listed in the Appendices of the Bern Convention, including three species of higher plants, nine insects, five amphibians and reptiles, 107 birds, and 17 mammals (Annex I- https://www.researchgate.net/publication/329118705_The_Vjosa_catchment_-_a_natural_heritage; Shumka et al., 2018).

In addition, Vjosa is an important ecological corridor as various protected areas are connected by the Vjosa River and its tributaries. More than 15 priority habitat types of European interest have been identified (EU Habitats Directive – NATURA 2000), including seven types (EUNIS, IPA) with a high floristic value. The Vjosa-Narta wetland area is of particular significance as the second most important site for bird diversity in the country, with about 80 species recorded. The area serves the function of being the wintering site for many water bird species, such as the Greater Flamingo, Audouin's Gull, and the Dalmatian Pelican (Shumka et. al., 2018).

The existence of a considerable number of endangered species, together with the extraordinary natural ability of the Vjosa ecosystem to contain and grow endangered and rare types of habitats, proves how important the Vjosa River network is and how necessary the protection of its natural integrity is. As it prepares for integration into the European Union, where Member States are obliged to guarantee a favorable protection status for these species and designate protected areas and/or Natura 2000 areas for their population, Albania must prepare for the fulfillment of these environmental conditions.

2.3.7. Protected areas

Vjosa is located in proximity to several other protected areas. Given proper organization and suitable management structures, these areas, in sync with the Vjosa Wild River National Park, could form a network of protected zones and a comprehensive itinerary of ecotourism in the South of Albania.

The National Park Fir of Hotova-Dangëlli near Përmet (34,361 ha; IUCN Category II) is known for its fir forests mixed with oak and, in some parts, with Mediterranean shrubs, and shelters rare and endangered plants and animals.

Gërmenj-Shelegura (430 ha; Erseka, an area of Habitat/Species Management (Category IV), renowned for its high mountains and deep valleys, wetlands, and torrents, and particularly for its dense forests of fir and oak, dominated by black pine.

The Strict Nature Reserve of Kardhiq (1,800 ha; Category I) (Gjirokastra) is ecologically connected with tributaries of the Kardhiq River, particularly Drino.

The Managed Nature Reserve 'Bredhi i Kardhiqit', part of the Gjirokastra District, with Decision No 60 by the Council of Ministers of 26 January 2022, the change of the surface area of the natural ecosystem 'Bredhi i Kardhiqit' from "strict nature reserve" (Category I of protected areas) to "managed nature reserve" (Category IV of protected areas) was approved, with surface area from 1 800 ha to 4 303.6 ha. The reserve is located on the slopes of the Wide Mountain, along the valley created by the flow of the Kardhiq River's right branch.

There are many forms of karst relief, of which the Pika canyon stands out, with its length of 100 m, its depth of 50-60 m, and its width of 2-3 m. The canyon was formed by the collapsing ceilings of the former underground passage of the Pika River, a branch of the Kardhiq River. In certain spots, the canyon turns into natural tunnels, remnants of its former state.

In some river sections, the surface flow has disappeared due to karst development in the riverbed. The karst Kacojth Lake, formed in the Permo-Triassic gypsum, can be found in one of the karst funnels near the village of Kolonja. It has an ellipse shape 100 m in length and 60 m in width. For their great scientific, ecological, aesthetic, and didactic values, the Pika Canyon and the Kacojth Lake have received the status of MN (www.akzm.gov.al).

The wetland complex of the Vjosa Delta - Narta Lagoon (19,738 ha), being the southern part of the Vjosa Delta (Vlora), is classified as a Protected Landscape (Category V), and in addition, is also an Important Bird Area (IBA) in Albania.

Located just beyond the Vjosa estuary, Karaburun-Sazan (Vlora, 12,600 ha; Category II) was declared a Marine National Park in 2010, the first of its kind, and currently the only one in Albania (Meulenbroek et al., 2018).

Piskal-Shqer, located in the region of Korça (54,00ha), was designated a Resource Reserve (Category VI), according to the IUCN Management Category with Decision No 102 by the Council of Ministers of 15 January 1996. It represents a hilly-mountainous territory dominated by eroded and slippery surfaces. This region captures the entire

zonality of soils, from black-brown to forest brown. The parent rock varies from shale, siltstone, and sandstone. From the climatic point of view, it presents a dry and warm region, typical of the Mediterranean. Hydrology is poor. In the area of Piskal-Shqer, a leafy forest (*Quercetum cerris -frainetto*) grows.

As a result of the degradation of the natural plant formation, the area has been invaded or replaced by rare xerophilous oaks of the bulgrit (*Quercus trojana*), the menishta bush (*Cystus villosus*), as well as the *Quercetum trojanae*, the red juniper (*Juniperus oxycedrus*), stehelina (*Staezelina uniflorescens*), black belisma (*Chrysopogon gryllus*), woolly doricnia (*Dorichium hirsutum*), spartum (*Quercus frainetto*), horsetail (*Quercus frainetto*), black sedge (*Carpinus orientalis*), etc. Most of the area still maintains the importance of the wild fauna, especially the wild boar (*Sus scrofa*), and other faunal elements associated with the oak forests. At the same time, it is an important area for providing timber (for heating and construction), grazing, and sport hunting. Though the area carries natural, landscape, cultural, historical, and tourist values, it does not currently have a management plan, according to the information collected (<https://pine.al/activity/parqe-kombetar/piskal-shqeri>).

The status of the Managed Nature Reserve 'Bredhi i Zhulatit' (936.2 ha), part of the Gjirokastra District, was changed from "natural monument" (Category III of protected areas) to "managed nature reserve" (Category IV of protected areas) with Decision No 60 by the Council of Ministers of 26 January 2022.

Also, part of the Kardhiq valley, the reserve is made of limestone formations rich in phosphates. Evaporite, flysch, and in sectors limited by Quaternary deposits. The Cretaceous limestones, which are heavily karstified, are the most widespread among the limestone formations. Structurally, the Kardhiq valley represents a graben, which is differentiated into a series of other structures of a lower rank.

The region has a rather jagged and steep relief, with significant contrasts, extending from 600-1, 600 m, rising gradually in the form of stairs, starting from the lowest part of the valley, at the northeastern end, to the highest quotas on the outskirts. The bottom of the valley is irregular, divided by the Kardhiq River and its tributaries. There are many forms of karst relief, of which the Pika Canyon stands out, formed by the collapse of the ceilings of the former underground passage of the Pika River, a branch of the Kardhiq River (www.akzm.gov.al).

The Natural Park of the Vjosa River valley, declared a "natural park" (Category IV of protected areas) with Decision No 60 by the Council of Minister of 26 January 2022, is part of the natural ecosystem of the Vjosa River Basin, and has an area of 7,989.5 ha.

The Vjosa River flows freely from the Pindus Mountain Range in Greece to the Adriatic Sea in Albania, almost untouched. Over its course, the river offers all kinds of river ecosystems, including canyons, large island expanses, meandering paths, and the complex estuarine area together with the Narta Lagoon in the estuary. However, what makes Vjosa particularly unique is that most of its tributaries, such as Bënça, Shushica, and Drino are also still intact. The river and its tributaries constitute the most intact river system of this size in Europe.

The Zagoria Natural Park was declared with Decision No 60 by the Council of Ministers of 26 January 2022, which also changed the area of the Natural Ecosystem of Zagoria,

from 24,590 ha to 24,607.63 ha, and declared it a Natural Park, Category IV of protected areas.

The Zagoria Natural Park is part of the southern mountainous region. The mountain ranges are made of Paleogene limestones instead of Cretaceous limestones. The valleys that separate them and the lower parts of the slopes are reveal terrigenous formations and Quaternary deposits. Their main morphostructural elements are the Trebeshina-Dhëmbel-Nemërçka and Shëndëllia-Lunxhëria-Bureto anticlines, separated by the Zagoria-Pogon-Maricaj syncline.

The relief is distinguished by a wide spread of karst forms. In the highest parts of the mountain ranges, mainly on the eastern slopes of Nemërçka and Mount Lunxhëria, over 1,700 m high, traces of Quaternary ice are still preserved in the form of cirques and periglacial deposits. The mountains are separated from one another by valleys and gorges, which often extend to high altitudes. Thus, the Zagoria-Pogon valley separates the Dhëmbel-Nemërçka range from Lunxhëria-Bureto, while Trebeshina is separated from Shëndëllia by the small Maricaj and Mezhgoran valleys.

The valley has many mountain passes, the most important of which being 'Qafa e Çajupit' (in the center of Lunxhëria Mountain), 'Qafa e Dhëmbelit' (between the Dhëmbel and Nemërçka Mountains), 'Qafa e Kiçokut' (north of Mount Trebeshina), and Martin Pass, separating Nemërçka from Mount Makrikambo (www.akzm.gov.al).

The Managed Nature Reserve of Gërmenj, located in the Korça District, was declared a Managed Nature Reserve (Category IV of protected areas) with Decision No 60 by the Council of Ministers of 26 January 2022. This changed the area under protection from 430 ha to 1,410 ha. Located on the Kamenik mountain ridge – 'Mali i Vashës', at an altitude ranging from about 1,000 to 2,043 m, the reserve continues along the state border and, descending, reaches up to 'Mali i Vashës'. It is separated from the southern part of the highlands by several extended extensions: Shelegur, Sotira, and Gërmenj.

The reserve is made of magmatic, while the steep peaks are made of limestone. The peaks, including Kamenik (2,043 m), Koziak (1,600 m), Kabash (1,651 m), and Vasha (1,638 m), take the form of horsts, differentiated as a result of the movements and different speeds. Koziak Mountain dominated the entire magmatic slope of Gërmenj in the form of a large cliff. To the southeast, this ridge dips into the flysch. It is a rugged and mountainous land, combining deep valleys, slightly steep and steep slopes, high peaks over 2,000 m high, polyphyte meadows, and glades in the forest (www.akzm.gov.al).

'Bredhi i Sotirës', part of the Gjirokastra District, adopted with Decision No 60 by the Council of Ministers of 26 January 2022, that change the status and surface area of the natural ecosystem of 'Bredhi i Sotirës' from Natural Monument (Category III of protected areas) to Natural Park (Category IV of protected areas), with surface area from 1,740 ha to 4,927.67 ha.

It lies on the northeastern slopes of Stugara Mountain, in the watershed of the Sotira stream, the left branch of the Drino River; from about 550 m to 1,806 m above sea level, as well as to the northwest of Murgana Mountain. The entire relief has the shape of a funnel with a bottom in the village of Sotira (www.akzm.gov.al).



Figure 12: Map of Protected Areas in the Vjosa basin (map by NTPA)



Figure 13: Map of natural monuments in Vjosa (map by NTPA)

Natural Monuments - Furthermore, Vjosa is home to more than 110 Natural Monuments (Category III) spread throughout the catchment area, some close to river courses or the Vjosa Delta.

Some of the more prominent Natural Monuments in the region include Postenan, Leskovik, and Bënja Thermal Baths, Langerica Canyon, Atos Stone, Stone of Përmet, Bokërima Spring, Black Water Spring, Mezhegoran Cave, Pika Canyon, the River Terraces of the village of Nderan, the Spring of Nepravishta, the Spring of Libohova, the Spring of Viroi, the Cave of Lekli, the Spring of Tepelena Cold Water, the Nivica Canyon, and the Plane Trees of Vurg, among others (Figure 13).

2.3.8. Cultural and heritage values

The Vjosa valley has numerous archaeological and cultural assets, the most famous of which is Gjirokastra, which is part of the UNESCO World Heritage. In addition, Antigonea, Amantia, and Bylis are considered to be archaeological centers, while a series of monuments created in different periods can be found in Korça, Gjirokastra, Fier, and Vlora.

Historical, cultural and heritage significance of the Vjosa River Basin

The river valleys of Vjosa, Drino, Shushica, Langerica, and Bënça and all the other tributaries of Vjosa have played a vital role in the movement of people and goods since ancient times. A myriad of prehistoric sites, ancient settlements, medieval fortresses, churches, monasteries, mosques and tekkes, aqueducts and water springs, as well as countless bridges, give a good indication of the wider region's historical identity and importance, a place of vibrant life, which continues today. The welcoming atmosphere, traditional food, and uniquely adorned dresses; the co-existence of three major religions (Christian Orthodox, Muslim, and Bektashi), as well as the plethora of tangible cultural heritage resources and pristine nature make the Vjosa/Aoös basin a vibrant nexus of cultural and historical identity (Lafe, 2019).

Monument stock

The number of monuments recorded in the Vjosa surrounding areas is also significant, with a total of 110 natural monuments and 300 cultural monuments. These are distributed as follows:

- in the Gjirokastra District, there are 81 natural monuments and 223 cultural monuments;
- in the Vlora District, there are 19 natural monuments and 67 cultural monuments;
- in the Fier District, there are 10 natural monuments and 10 cultural monuments.

In addition to these monuments, we have 3 historic centers (Gjirokastra, Përmet, and Bënja) and 3 archaeological parks: Antigonea, Amantia, and Bylis (Lafe, 2019).

Heritage and customs in the Vjosa valley

Vjosa, the largest river basin in Southern Albania, is home to one of the most famous folk music genres in the world, known as Albanian Folk Iso-polyphony, which, in 2005,

was declared and officially registered on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity (*EcoAlbania*, 2021).

The legacy of Iso-polyphony is strongly tied to the traditional garment of Albania, the fustanella, widely used by men up to the end of the 19th and early 20th centuries. Fustanella, also referred to as a kilt, was widespread throughout the Balkan Peninsula. Archaeological evidence in Albania points to fustanella as a rather ancient form of clothing, with some samples found in ancient sites in Durrës and the village of Smokthina near Vlora, at the heart of the Vjosa River Basin.

Historical areas

Vjosa is near many important cultural landmarks and historical locations. Among these, the historic center of Gjirokastra holds the distinction of being the first UNESCO World Heritage Site in Albania, in 2005, followed thereafter by the Historic Center of Berat, in 2008 (UNESCO, 2008a). These historic centers, located in Central and Southern Albania, were cited to be highly representational of the legacy of the Ottoman-style architecture and "the integrity of their vernacular urban landscape" (Dipasquale et. al, 2021).

Home to over 500 monuments, the historic center of Gjirokastra is the cultural crown jewel of the South of Albania (Lafe, 2019). Founded on the slopes of the Drino valley, Gjirokastra occupies a strategic position satisfying the historical need for defense, while also presenting significant difficulties in construction, which then shaped the morphology and the city's development (Mezini, Pojani, 2015). The city's structure consists of two ridges projecting from the massif, with the southern ridge being dominated by the Castle. The bazaar district is located at the junction of the two ridges, characteristic of the old town of Gjirokastra with its signature crossroads.



Figure 14: 19th-century aqueduct over the Bënça River, a tributary of Vjosa

Also, characteristic are the cobblestone streets and the prevalence of stairways to account for the slope of the settlement. The city, on top of being a World Heritage Site, is rich in its monument stock owing to its long history and importance - some 300 natural and cultural monuments in total.

Berat was inscribed as a World Heritage Site as a result of being "a rare example of a well-preserved Ottoman town" (UNESCO, 2008a). Located in Central Albania, about 120 km from Tirana, Berat is a testament to the coexistence of various religious and cultural communities over its 2400-year long history, having been under the Roman, Byzantine, Bulgarian, and Ottoman influence over the centuries (UNESCO, 2008a; Dipasquale et al., 2021). Berat features a castle, locally known as the *Kala*, most of which was built in the 13th century, although its origins date back to the 4th century BC. Various Byzantine churches (St. Mary Vllaherna, Holy Trinity, and St. Michael) from the 13th century can be found in the castle area, several of which have valuable wall paintings and icons (UNESCO, 2008b). Berat also has several mosques built during the Ottoman era (UNESCO, 2008a). During this era, the city also saw the development of its present-day quarters: *Kala* (the castle), *Mangalem*, and *Gorica* on the opposite bank. The housing stock also includes residences from the 18th and 19th centuries, "which embody important innovations to traditional Balkan housing stock...adapted to accommodate life in the town" (UNESCO, 2008b).

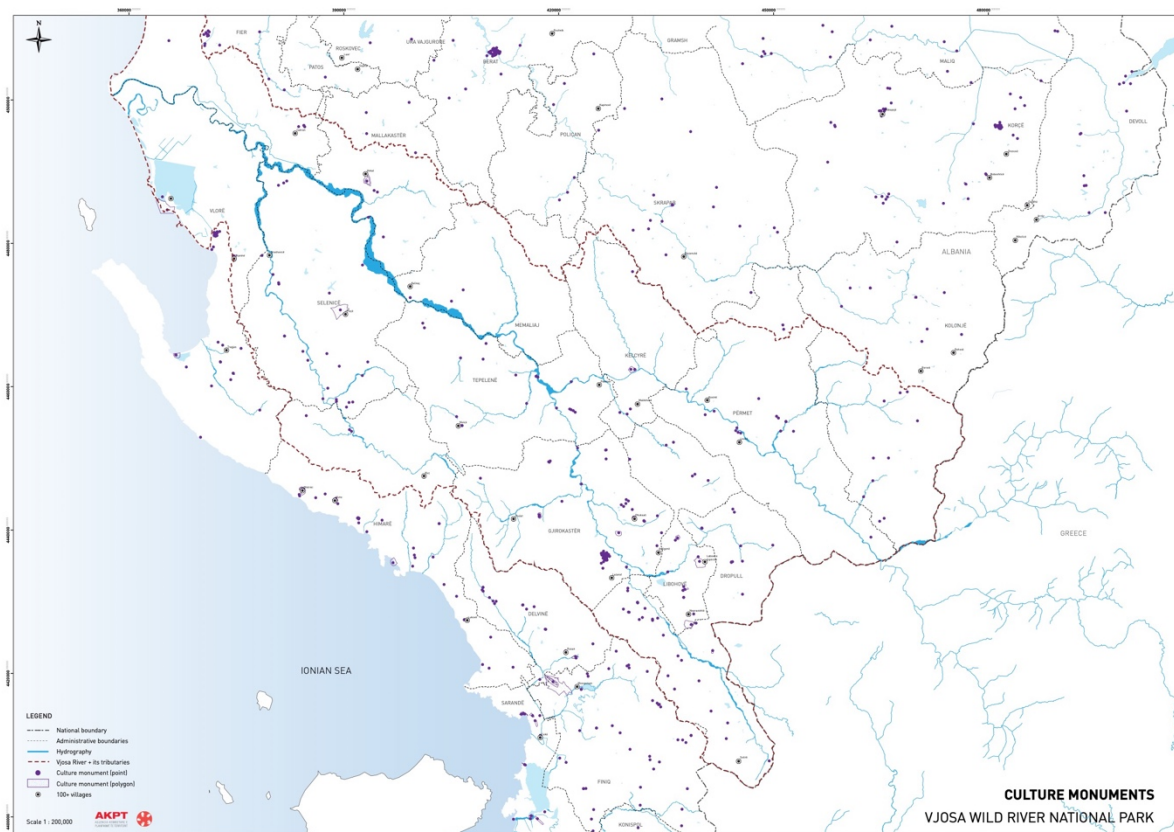


Figure 15: Map of listed cultural monuments (map by NTPA)

The city of Përmet, located nearby, also has a Historic Center characterized by a unique architectural heritage. The Center includes different types of construction, such as folk housing, cult objects, and social amenities. The Historic Center overlaps mainly with the neighborhoods of Shënkoll (Varosh) and Teqë, which, in terms of the

composition of buildings and cobbled streets, are where the oldest traces of the city can be seen. Two cult objects are included within the Historic Center: the Church of Saint Friday (1776), a cultural monument of the first category, and Saint Koll Church (built during the 19th century). The built ensemble presents a fascinating typology that includes many dwellings next to one another, with small courtyards, a network of narrow cobbled alleys, and external wooden gates with a stone wall perimeter. The buildings are generally two-storied and built with stone walls. The architecture is characteristic of the area's traditional villages, and most of the buildings are from after the Second World War (DCM No 32/2017).

The Historic Center of the village of Bënja is another local area with significant cultural, historical, urbanistic, architectural, and landscape heritage values, which are physical evidence of the historical development of the village. The overwhelming part of the village consists of the distinct road network and old buildings, which have unique architectural and heritage value. In the Historic Center, one finds a variety of physical and cultural assets, including cultural monuments of the first category, such as the Church of Saint Mary, second-category objects, and objects without status (DCM No 832/2021).

Culinary heritage

As a result of its proximity to several settlements, each renowned for its unique history and cultural identity, the Vjosa valley has the potential to integrate a diverse array of culinary offerings into its tourism offer. Moreover, given the ease of access to fresh food products and ingredients available in the area, Vjosa's culinary tourism can embrace the Slow Food Movement, ensuring the sustainability of this particular mode of tourism. The Slow Food Movement can be defined as "agriculture and food production with strong consideration for environmental sustainability, biodiversity conservation, and social aspects" (Shumka et al., 2022). As previously mentioned, Vjosa is distinct for its high levels of biodiversity. Several studies show that biodiversity is positively linked to the resilience of agricultural systems, helping to protect against environmental shocks and providing key ecosystem services for agricultural production (Rahawarin, 2017, in Shumka et al., 2022). Given that the potential benefits of linking the Slow Food Movement to Albania's national parks have already been made evident, it is critical to valorize and facilitate this modality of culinary tourism in the new Vjosa Wild River National Park as well.

In the Vjosa valley, Gjirokastra and Përmet are particularly renowned for their culinary culture, being one of the unique selling points of Përmet in particular. The area's culinary culture has distinct Ottoman roots with its reliance on local oils, spices, herbs, and especially sauces. Thanks to the ample presence of organic, locally sourced ingredients, this region has very few barriers to a "farm-to-fork" approach, which could prove a critical asset in promoting the culinary tourism of the area (NTPA, 2017).

Some typical dishes for Gjirokastra include *pashaqofte*, a soup with small meatballs; *qifqi*, rice balls cooked in a hollow frying pan and mixed with herbs; *shapkat*; *sarma* or *japrak*, stuffed grape leaves with rice and mint; and *qahi*, tiny spinach pies. A must-try local dessert in Gjirokastra is *oshaf*, with sheep milk and cinnamon, as well as Turkish baklava, prepared according to local methods. Another important local product in Gjirokastra is the local cheese, which is renowned throughout Albania. This cheese is made from the milk of goats, sheep, or cows. The most common cheeses are called

djathë i bardhë, a soft white cheese that is similar to, but a bit harder than, feta, and *kaçkavall*, a hard yellow variety (Visit Gjirokastra, 2022).

Përmet, on the other hand, is renowned for the preparation of *gliko* (a type of traditional jam), as well as the production of *rakia* and wine (NTPA, 2019). To better capitalize on its culinary reputation and boost economic growth, some Përmet businesses have joined a Slow Food Movement, which has about 80 members throughout the country, and a Slow Food Alliance, which counts among its members 27 influential Albanian chefs (Slow Food Foundation ND). The Slow Food Movement is a broader initiative in which everybody is directly or indirectly connected to food production (restaurants, agribusinesses); the Slow Food Alliance is more selective, including only the best restaurant chefs (International Labor Organization, 2020).

2.4 The socio-economic potential of the area

Vjosa's importance is not limited to its biological and scientific novelty as a river, valley, and ecosystem. It is also of critical importance for the people of the region. The river extends into 13 of the 61 municipalities of Albania (defined with Decision No 360, by the Council of Ministers of 29 May 2019), positioned in three regions with more than 130,000 inhabitants. These areas have experienced persistent depopulation over the past decade, and the creation and effective management of a national park with the potential significance of Vjosa could be the lifeline needed to reverse this trend and secure a better future for the region. This is reflected in various strategies across multiple sectors and levels of government, which present a unified vision for the role Vjosa is to play in Albania's future.

The General National Spatial Plan, the document at the highest level of the planning hierarchy, emphasizes the need for increasing natural areas through the expansion of protected areas and natural connecting corridors along river valleys and, in pursuit of this goal, recommends the inclusion of "The Park of Vjosa" in a system of national parks. (GNSP (p. 91), NTPA 2016).

This recommendation is echoed by the National Tourism Strategy, highlighting the need to leverage natural and protected landscapes as a channel for sustainable tourism. At a higher strategic level, the National Strategy for Development and Integration (NSDI), which charts the priority areas tied to the country's development agenda and integration road map, also underscores the need to effectively and rigorously manage protected areas through an integrated approach. Achieving this will require management and action plans for species and habitats, a demand that will be addressed through the Vjosa Wild River National Park Management Plan (VWRNP MP). The NSDI also cites the need for water resource management, particularly through the implementation of management plans for river basins. The designation of Vjosa as a national park and subsequent implementation of the VWRNP MP will also help facilitate this goal.

Demographics

The total population of the Vjosa valley is estimated to be around 130,000 inhabitants, which constitutes 4.6% of the total population of Albania. The main socio-economic activities of this area are agriculture, livestock farming and tourism. During the last 30

years, the area of the Vjosa River has faced great depopulation. In the last twenty years, only in the region of Gjirokastra (which includes the Municipalities of Përmet, Këlcyra, Tepelena, Memaliaj, Gjirokastra, Libohova, and Dropull), the population has decreased by almost half (47%) (2001-2020) (INSTAT). The drastic decline in the population of these areas has led to a significant decline in economic activities and industries in the Vjosa valley (*EcoAlbania*, 2021).

The Vjosa valley overlaps with three districts (Fier, Vlora, and Gjirokastra) and 13 municipalities: Libohova, Përmet, Këlcyra, Gjirokastra, Tepelena, Memaliaj, Mallakstra, Fier, Vlora, Selenica, Himara, Kolonja, and Dropull.

Municipality	Number of villages	Surface area (km²)	Population census 2011	Registered population (2019)
Përmet	49	602	10,614	20,301
Këlcyra	48	305	6,113	12,468
Gjirokastra	38	469	25,031	52,024
Tepelena	24	431	8,949	16,371
Memaliaj	53	372	10,657	21,476
Mallakstra	41	329	27,062	43,033
Selenica	47	561	18,476	35,793
Vlora	37	617	104,827	194,147
Kolonja	76	864.06	11,070	19,919
Dropull	41	466.67	3,503	23,131
Himara	25	399.62	7,818	21,247

Over the past 30 years, the population in the Vjosa valley has nearly halved. According to INSTAT 2011, the population is estimated to be around 130,000 inhabitants, or 4.6% of the total population of Albania.

The data on the population of the basin from the 2011 census shows that out of 352,580 residents registered in the municipalities, 140,851 have left mainly through emigration abroad, and they have not changed their residence permit in Albania. The trend of population reduction in this area has continued even after 2011.

While the population trend has unfortunately been on the decline, the municipalities found alongside the Vjosa River and basin are not without economic potential. Of these municipalities, the ones standing to benefit the most from the introduction of a new National Park as a catalyst for economic development, include the following:

Municipality of Përmet: Currently, the main economic activities include agriculture, agro-processing, services, tourism, and less fishing, construction, etc. Based on the project plan for the development of the territory, the Municipality of Përmet has identified agriculture, agro-processing, and tourism as priorities.

Municipality of Këlcyra: It engages in various activities related to agriculture, production of goods, forestry, and fishing, as well as some industrial activities operating in Këlcyra. Tourism programs are underdeveloped and should be promoted by protecting natural resources and cultural heritage (bridges, churches, etc.).

Municipality of Gjirokastra: Part of UNESCO World Heritage, the primary economic activities in Gjirokastra are tourism, clothing, and footwear production. Tourism in the city of Gjirokastra has grown significantly in recent years. However, there is a need for capacity improvement and promotion. The rural area near the city is known for cattle breeding and high-quality livestock products.

Municipality of Tepelena: The main economic activity is focused on agriculture, tourism, fishing, and forestry. The collection of medicinal plants also provides income for a section of the population. Significant tourist resources include Vjosa, Ali Pasha Castle, Bënça Canyon, Beçisht Bridge, Nivica Agrotourism, and Cold Water.

Municipality of Memaliaj: The city was known for the coal mine, which has been closed. Many residents have emigrated, while those who still live in Memaliaj deal with services or small businesses. Economic activity is related to agriculture, livestock farming, and services. Other sources of income come from viticulture, medicinal plants, river tourism, and historical and cultural tourism.

Municipality of Selenica: The municipality lies in a hilly area on the left bank of the Vjosa River and along the Shushica River, a tributary of the Vjosa River. Within the municipality's territory, there is also the historical bitumen mine in Selenica, where residents of the surrounding villages are employed, and the oil-bearing area of Vlahina. Agriculture, livestock farming, and services are the main economic activity.

Additional municipalities lying closer to the periphery of the Vjosa River and basin include the Municipalities of Vlora, Kolonja, Dropull, and Himara. These municipalities, while important in their own right (particularly Vlora, which is Albania's second largest port city and an important commercial and trade center), will likely benefit more indirectly from the declaration of Vjosa as a Wild River National Park.



Figure 16: Administrative borders along the Vjosa River system (map by NTPA)

Tourism potentials

The Vjosa River courses through a stretch of over 272 km, from the Pindus Mountain Range in Greece to the Adriatic Sea in Albania, fueling life for the surrounding ecosystems and their constituent species. Renowned for its considerable physical, geological, and biological diversity, Vjosa's outstanding natural traits grant it the capacity to establish a sustainable natural and ecotourism economy (Schiemer et al., 2018).

The Vjosa valley presents a tremendous untapped potential for economic activity that will inevitably become an object of attention as the country continues its development journey. What is yet uncertain is how effectively and sustainably this tremendous asset will be integrated into future economic scenarios. (Muço, 2020). The current situation is not fully activating the ecological and economic potential of the region (Metabolism of Albania, 2015).

A key industry that has experienced extremely rapid expansion in recent years is tourism, which is regarded as crucial to the continued development of the Albanian economy. In total, tourism contributed 14,3% of Albania's GDP to the economy in 2019. Roughly, in 2019, hundred thousand people were employed in this industry, and this number increased by about 26% in the third quarter compared to the second. Some INSTAT predictions from 2018 are that, by 2025, this industry will employ up to 220 thousand people, or around 20,4% of all workers, with an average growth of 2% per year (Muço, 2020).

Tourism is also one of the most dynamic and resilient sectors of Albania's economy. Even during the economic crisis following the Covid-19 Pandemic, this sector, while among the worst affected, still provided significant economic returns. The influx of foreign tourists to Albania in recent years has shown that foreign tourists are the country's primary source of foreign income and have contributed indirectly to 15% of last year's domestic economy. Referring to the above-mentioned facts, it is important to highlight that they demonstrate how Albania's long-term strategic development plan calls for the tourism industry to be the foundation for the nation's economic growth (Muço, 2020).

From the perspective of developing tourism in the South, enlarging the area and scope of the touristic product would be strategic: the coast may be one of Albania's unquestionable natural assets, but the mountains and rivers that lie beyond it are also attractive and valuable assets. A focus on alternative forms of tourism (ecotourism, agrotourism, hiking tours, cycling tours, and so forth) could differentiate and expand international tourism in Albania. This proposal concentrates on the Vjosa River and its tributaries, all free-flowing rivers with biodiversity and landscape quality rarely found in Europe (Metabolism of Albania, 2015).

Tourism is already of very significant importance to the Vjosa valley. Of Albania's approximately 20,000 lodging establishments, about 4,750 lodges or nearly 1/5 of the country's, are found in Gjirokastra, Vlora, and Fier. According to the Municipality of Gjirokastra, in 2020 tourism contributed to about 30% of the region's revenue, and both Përmet and Vlora benefited from it (Muço, 2020).

Two particularly interesting modalities of tourism in Vjosa are ecotourism and agritourism. The high potential for ecotourism focused on Vjosa's various landscapes is worth further investigation. The inclusion of agricultural activities and promotion of agrotourism could provide a complementary asset and also facilitate food production in the proximity of national parks and other tourist destinations in the region (Metabolism of Albania, 2015).

The scenario of declaring the Vjosa valley a National Park and the resulting benefits start from the fact that the area of Përmet-Gjirokastra-Tepelena has about 200,000 registered tourists per year, and their number has increased on average by 15% per year in the last 5 years. While the Vjosa valley is visited by an average of 5,000 adventure tourists a year, a good portion of these tourists also visits Gjirokastra, Tepelena, or Përmet. Though the Vjosa Wild River Valley has attracted increasing levels of domestic and foreign attention year after year, promoting the Vjosa valley as a national park would likely further consolidate this trend. This would ensure that a more significant proportion of the tourists in the area also stops at Vjosa, driving tourism revenue and, over time, fostering a new sustainable economy (Muço, 2020).

2.5 Description of the pressures on the area

The assessment of pressures is based on the screening and collection of available and updated information as regards the key issues and topics on the Vjosa River Basin, mainly focusing on the threats and pressures on the nature conservation features.

Intensive information exchange with all the relevant authorities occurred to collect the latest updated information available. As a second step, all the information was organized and analyzed to conduct a mapping process of all the values and threats relevant to the Vjosa River Basin. The above resulted in several threats to nature conservation, including:

- Urbanization
- Mining and quarries
- Hydropower
- Industry
- Agriculture and aquaculture



Figure 17: Status "0" map (2022) of the Vjosa River network (map by NTPA)

Urbanization

Urbanization exerts pressures on water resources through the production of wastewater, urban waste, as well as water abstraction to cover household usage. In this context, these 3 key human activities have been analyzed for their effect on water ecosystems along Vjosa. In all 13 municipalities being part of the Vjosa River Basin, the water supply covers the needs of around 82% of the population, while the wastewater treatment coverage appears to be very low, with an average of 32%, and no municipality is fully covering its jurisdiction area with wastewater treatment services. In this context, the Vjosa River is suffering from pollution caused by untreated wastewater.

Solid waste generation is approximately 0.4-0.5 kg/inhabitant/day. From a sanitation point of view, disposal places are not controlled and placed in proper locations, and there is a lack of disposal technology. In villages, there are no landfill sites or any other type of organized collection. Only in some cases, farmers are using composting processes to produce organic fertilizer. Overall, the waste collection and management rate across the Vjosa River valley vary considerably among municipalities, with Këlcyra collecting only 37% of the generated waste, while Vlora collects 99%.

Mining and quarries

The Vjosa River Basin is rich in non-metallic resources, such as clay, inert, gypsum, phosphorites, limestone, dolomite, and energy resources, such as oil, gas, and coal. However, there are no metallic resources in the area (Albanian Geological Service, 2022). This section provides a list of the identified mining activities in the area that poses an existing threat or a potential to be taken into consideration during the declaration of the VWRNP. In the Vjosa River valley, in addition to oil and gas and bitumen, some of the non-metallic minerals have been exploited and continue to be used for the interests of the economy. The non-metal minerals are limestone and gravel inert on the bed of the Vjosa and Shushica Rivers. The limestones are carbonate rocks, occupying about 60% of the sedimental rocks. For the most part, the limestone sources result in high and very high purity in the lower part of the Vjosa River (Selenica). Overall, around 40 mining licenses are issued in the respective municipalities of which the Municipality of Selenica leads, having issued almost 23% of them or 9 mining licenses.

One of the main activities in the industry with big pressure on the Vjosa basin is gravel extraction. Gravel extraction from riverbeds has been a major economic activity in the Vjosa watershed. Gravel extraction reached its peak during the 2000s with more than 56 gravel extraction points during that time (Cukalla, 2000), 16 gravel extraction points in the Shushica riverbed and about 14 gravel extraction points in the Drino riverbed. The most active gravel extraction points were situated in the lower region of the Vjosa River, from the estuary until the joining point with the Shushica River. In this part of the Vjosa bed, there have been 11 gravel extraction points.

However, in recent years, the gravel extraction activity has been minimized and targeted only for public works, due to the construction/reconstruction of the roads in the region.

The mining activity seems to be very important in the Vjosa River. According to the Albanian Geological Service, the Municipality of Selenica is rich in types of bitumen, which is an asset of great economic value. The bitumen mines are ubiquitous near the town of Selenica. The bitumen of Selenica has been known since ancient times. The Selenica mine is one of Europe's oldest mines. Its products are of very good quality and are used in different branches of the economy. There seem to be 11 companies that use the resource of Selenica, while in total there are only three main bitumen sources: i) bitumen source, ii) bitumen gravel, iii) and bitumen sand.

Industry

The industrial activity also places constant pressure on the resources of the Vjosa River Basin. The three regions of Vjosa (Gjirokastra, Fier, and Vlora) have inherited some

industrial pollution from the past and face serious concerns at the present, despite the fact that pollution is mainly concentrated in the lower Vjosa, where most of the mining activity, oil and gas production is taking place. Quite often the discharges from the operation and separation of waters from the oil industry go directly to the Vjosa River and its tributaries, or are re-injected into the subsurface, which risks pollution of underground water.

Oils extraction: In the territory of the Vjosa River Basin, there are various oil and gas reserves, which are situated in the Municipality of Selenica. Drashovica oil well, situated in the village of Penkova, is the first discovered in Albania since 1918. The source is extended up to the village of Tragjas along the Shushica River. The depth of oil wells in this area starts from 125 m up to 700 m, and their surface is approximately 114 ha and 700 ha. Even though the oil well in Gorisht-Kocul has extracted 11.5 million tons of oil out of 14.5 million extractable reserves, there are still 3 million tons of oil to be extracted. The well is at its end of life until it becomes a dead well. However, the oil infrastructure, and the associated wells and depots are extended across a large territory.

Water bottling: The water bottling business is widespread in the Vjosa basin. The companies have no direct activity within the proposed boundaries of the RNP. In total, there are about 15 companies that abstract water from the sources of Vjosa or its tributaries. In this respect, they must meet the biodiversity and nature conservation requirements in terms of the amount and method of water abstraction. The companies may also contribute to the National Park management in the future.

Energy production trends

The water resources of Albania, apart from the recreational and tourist aspect, are highly important for the energetic and geo-energetic development of the country. Ninety-nine per cent of the electricity used in Albania comes from the exploitation of water resources (GNSP Albania, 2030; NTPA, 2016). Most electricity is generated in the north and east, where several reservoirs with large hydroelectric plants are situated. Scattered over the mountainous parts of Albania, hundreds of additional, smaller “free fall” generators are in use. In the south, in the valley of the “unspoiled” Vjosa River system, studies have been conducted on the construction of hydroelectric plants (Metabolism of Albania, 2015).

However, the Albanian climate also offers good opportunities for the production of solar and wind energy. Several areas on the coast have been earmarked as potential wind energy areas. And, on the other hand, diversification of energy production through other forms could better suit seasonal demand (Metabolism of Albania, 2015).

The growing demand for energy and the high potential for energy production from the water of Vjosa and its tributaries, through HPPs, has been and is the most serious threat to “Vjosa – the last wild river in Europe” (GNSP Albania, 2030; NTPA, 2016).

A total of 59 hydropower plants were planned to be built in the Vjosa watershed between 2000 and 2022. However, only a few of them have been completed: 3 HPPs under construction phase, 11 in operation, and 45 pending approval (MIE, 2022). The operational HPPs are placed in the Vjosa tributaries, while the most damaged ones appear to be the Çarshova and Langarica ones. For this reason, both tributaries are

proposed not to be included in the future Vjosa Wild River National Park. The rest of the HPPs are still at an early planning stage.

The construction of the hydropower plants in the Vjosa valley comes with environmental hazards. Referring to Schiemer et al., 2018, these hazards would be:

- the immediate endangerment of the high conservation value of the area and this national heritage by damming;
- a loss of groundwater resources in terms of quantity and quality;
- a deterioration of surface water quality (eutrophication processes at high water residence times can be expected to lead to toxic algal blooms);
- methane production as a result of anaerobic processes in flooded areas;
- coastal erosion due to the reduction of sediment transport by the river;
- catastrophic floods, especially considering the increase in flood risks due to global warming.

It is important to emphasize the preservation of surface water resources, mainly the rivers, from use for hydropower purposes (GNSP Albania, 2030; NTPA, 2016).



Figure 18: HPPs in the Vjosa basin, MIE, 2022 (map by NTPA)

Agriculture trends

One of Albania's most significant economic sectors is agriculture; it accounts for around one-fifth of the country's GDP, and employs about 37% of all Albanian workers (INSTAT, 2021).

There are over 41,000 registered farmers in Albania, of whom 15,500 are located in the Vjosa valley. Agriculture has a role in the development of the nation's regional character. The Vjosa valley is primarily focused on this industry, where the area planted with cereals in 2018 was 46,900 ha, out of 140,000 ha across Albania, with the Fier region occupying the majority of the space with 34,600 ha. From the 289,500 ha of field crops (potatoes, beans, vegetables, etc.) planted nationwide in 2018, 70,300 ha were planted in this region, where Fier once again dominates with an area of 56,000 ha. Out of the 675,200 tons of grains produced nationwide, 233,300 tons are produced in this region. Over 2.3 million tons of field crops were produced in Fier in 2018, with 2,921,100 tons produced in the Vjosa valley out of 8,543,100 tons produced nationally. When compared to the national average of 3.69 tons per ha, Vlora's cereal production of over 4 tons per ha puts it in the first place. Fier also outperforms the national average (3.79 tons per ha) (Muço, 2020).

The above-mentioned details affirm that agriculture is very present in the Vjosa region and an important industry for the economy. This is also emphasized by Muço, 2020, in the first part of his socio-economic analyses of the Vjosa valley. He presents the current situation, and based on research, states that the Vjosa valley and its surroundings, from an economic point of view, are oriented towards the agriculture-livestock farming and tourism sector.

On the other hand, as much as agriculture is an important driver for the economy of the area, it is also a threat to the future Vjosa Wild River National Park. The impact of agriculture on Vjosa can be seen in 3 separate aspects: land use, pollution, and water abstraction, which can have an equally significant negative impact if not properly managed and controlled. As for land use, the most impacted are the lower section of the river basin and the lower section of Shushica, where agriculture appears to be more intensive.

Regarding water abstraction, the irrigation system is not properly managed and does not provide services to all the farmers in the valley. In most cases, especially in the upper part of the river, irrigation is facilitated on an individual basis, usually with pumping systems. While in the middle and lower sections, the main irrigation channel is Vjosa-Levan-Fier, which provides water for agriculture applications in this part of the basin. In the lower Shushica, there is also a major channel used for irrigation. In the future, water abstraction processes will also need to conform to the nature conservation rules once the Vjosa National Park is in place. The analysis of agriculture pressure on the Vjosa basin should also be made in the context of diffusive pollution of surface and underground waters due to agricultural inputs, such as pesticides, herbicides, and nutrients.

Aquaculture is also present in the Vjosa River tributaries, i.e., in Kardhiq, Bënça, Hormova, and Shushica. The main negative impact caused by trout aquaculture is *water pollution* due to the use of the fish food, concentrated fish excrement, and antibiotics. Another negative impact is the water abstraction for enabling the fish farming. However, the activity is not widespread in the Vjosa watershed.

"Some existing activities identified as threats to the area, such as water and gravel extraction for industrial use and intensive agriculture, should be regulated in the future protected area to prevent disruption of the hydrological regime" (Sovinc, 2021).

Table 9. The actual agricultural water demands of the Vjosa catchments

	Km ²	Actual Discharge (m ³ /s)	Annual rate (m ³ /ha)	Annual Discharge (MCM)
Drinos	36.10	0.56	4892	17.66012
Memaliaj	18.80	0.485	8136	15.29568
Permet	10.25	0.24	7384	7.5686

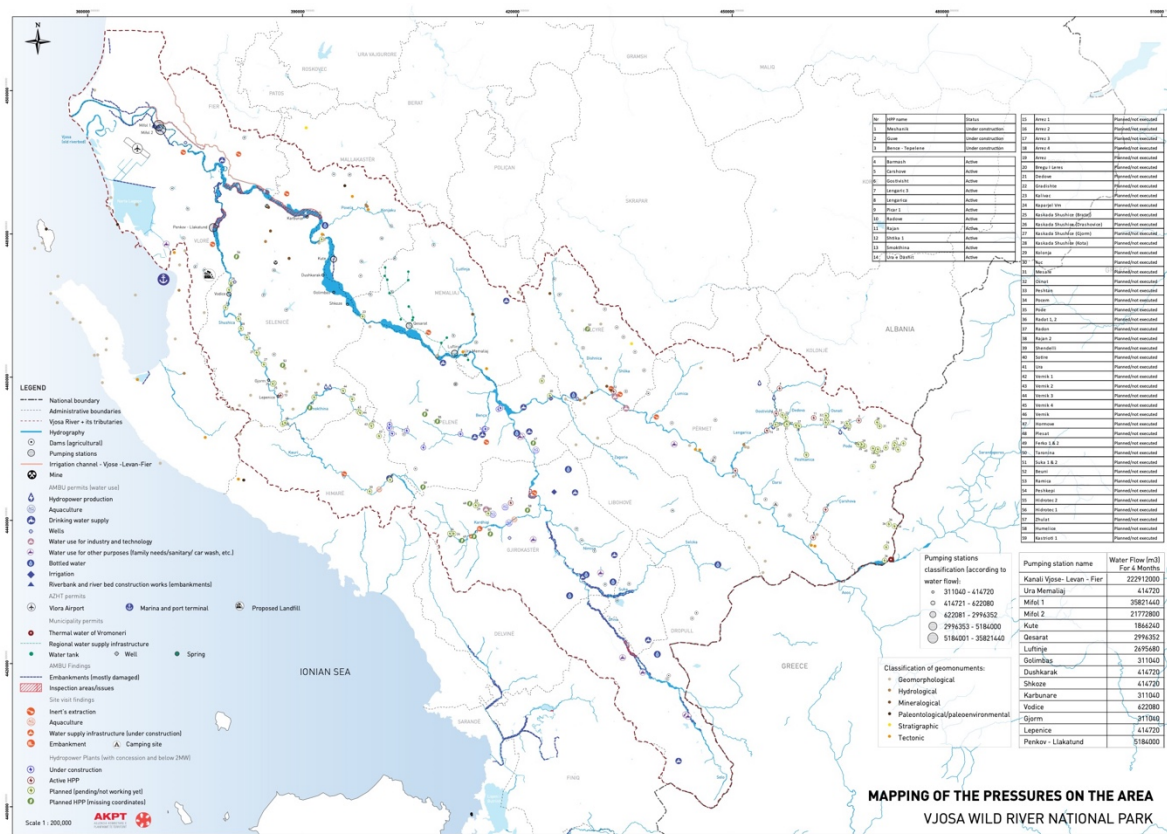


Figure 19: Mapping of the pressures on the Vjosa River Basin (map by NTPA)

2.6 Climate change and impacts on the area

Climate change is happening and we see its consequences very often now. Albania has currently experienced less rain than ever, therefore dryness of the reservoirs. The climate change scenarios for Albania project an average increase in annual temperature up to 2.0°C (2050) and 4.0°C (2100). High warming during summer, up to 2.8°C (2050) and 5.6°C (2100), might be expected. As far as precipitation, the annual scenario leads to a decrease in annual value (average) up to 6.1% (2050), and 12.4% (2100). A drastic decrease in precipitation total is likely to occur in summer (Petto et al., 2014).

Albania is a disaster-prone country exposed to geological and hydro-meteorological hazards. The Vjosa River Basin is especially vulnerable to storm surges and river flooding. The Fier and Vlora regions have seen regular flooding, which has seriously damaged the area's housing stock, infrastructure, agriculture, and animals.

According to the climate change predictions, the maximum precipitation return periods over the Vjosa River Basin area are anticipated to shorten. As a result, larger economic losses are anticipated, and more frequent, heavier rains with longer durations have the potential to intensify floods in agricultural areas (MoTE, 2022).

Given the importance for the country and the high likelihood of significant climate impacts, the Vjosa River Basin has been selected as a pilot area. The analysis resulted that the most important climate change effect in the Vjosa basin is a change in the timing of streamflow throughout the year (Petto et al., 2014).

Referring to the analyses from the Fourth National Communication of Albania to the UNFCCC, floods, flash floods, and forest fires are the most frequent disasters caused mainly by hydrological and meteorological conditions (accounting for more than 90%). The greatest number of reported floods, during the period 1995-2018, coincide with observed extremes in heavy precipitation.

Several of the municipalities within the Vjosa River Basin are among the most severely impacted by these events. This includes the Municipalities of Fier (45% of all incidents), Vlora (19%), Gjirokastra (19%), Përmet (7%), and Mallakastra (5%). The most vulnerable places to flooding are those in the areas in Vlora and Fier downstream of the Vjosa River. Because of the Drino River floods, the Gjirokastra area is also at risk.

Understanding that flooding is not solely a result of heavy rains is crucial. Degradation of the environment, improper watershed management, and maintenance (or lack thereof) of measures intended to regulate flood water influx – all have a significant influence (MoTE, 2022).

In addition, deforestation, the conversion of forested areas into agricultural and urban areas, as well as the long-term effects of climate change – all play a significant role in exacerbating the effects of flooding.

Forest vegetation in the catchment, along the valleys, and particularly in the floodplains, is very important against erosion and directly influences channel types and the foot-net (organic material).

While in the upper catchment up to 40% of forest cover still exists, in the middle and lower areas deforestation, local fires, uncontrolled grazing, weed invasion, clearing and logging of sites even in the active channel, and active floodplain, lead to increased erosion and even alterations of rivers' flow regimes.

There are many things local communities and local and central governments can do to deal with those issues and their impacts. A way to go forward is to extend the network of protected areas, especially by declaring rich biodiverse areas as national parks. And Albania has been committed to doing so in recent years.

The declaration of the VWRNP creates the conditions for large-scale nature restoration. The restoration of nature or its return to its truly natural state, when done on a large scale, not only connects people with nature and provides circumstances where human activities can take place in harmony with nature, but also provides for continuous, long-term and sustained recovery of biodiverse land and increases climate mitigation and adaptation. *"The world needs large-scale nature restoration*

to tackle biodiversity loss and reduce the impacts of climate change," said Alberto Arroyo Schnell, Head of Policy and Programme at IUCN Europe, in June 2022, when European Commission proposed a new restoration law. And nature-based solutions should be a cornerstone of these efforts going forward (www.iucn.org/news/europe).

III. Feasibility Study for Phase I of the Vjosa Wild River National Park

3.1 Executive summary

The Vjosa-Aoös River runs for 272 km from its sources in the Northern Pindus National Park in Greece to its mouth in Southern Albania, where it flows into the Adriatic Sea. The entire catchment area covers 6,704 km², of which 4,365 km² is on Albanian territory.

Vjosa and its tributaries can be classified as gravel-dominated, laterally active, anabranching rivers with high sediment supply, where the bedload supply is higher than the actual transport capacity of the channel.

The upper section of Vjosa is characterized by a steeper watershed gradient and a succession of steep gorges interspersed with areas of large alluvial fans and islands. The river valley in the middle section is wide, and the floodplains of Vjosa are considered one of the most magnificent river ecosystems of the Balkan Peninsula, characterized by its natural, dynamic hydro-morphological processes. Before flowing into the Adriatic Sea, Vjosa forms wide meanders. The river delta is located north of the Narta Lagoon, where the river reaches the sea.

The Albanian Government has been committed to establishing a Vjosa Wild River National Park that will encompass and protect the entire course of the Vjosa River from the Greek border to the Adriatic Sea, including its free-flowing tributaries.

The park will be created in two phases. This document contains the results of the first phase, which includes the entire length of the Vjosa River in Albania and three main tributaries: Drino, including Kardhiq, Bënça, and Shushica. In subsequent years, all free-flowing rivers and streams, as well as a larger area surrounding the rivers, will then be included to map the important ecosystems that flow into the river and affect its health and biodiversity or are affected by the river, such as important areas of the delta. In addition, efforts are underway to include the river as far as its source in the Pindus Mountain Range in Greece in the future transboundary protected area.

3.1.1 Legal basis and management objectives

The Albanian law on protected areas stipulates that extensive areas unique for their national and international values may be declared a National Park, protected and managed for the preservation of ecosystems, species, education and recreation (leisure, entertainment). More on the legal and administrative basis for the establishment of the National Park is presented in section 2.2.

3.1.2 Values and pressures

The Vjosa River Basin contains representative examples of significant biological and ecological features or landscapes where native plant and animal species, habitats,

and geodiversity sites are of special spiritual, scientific, educational, recreational, or tourism significance. At least eight habitat types of 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 recorded in this area, including 13 globally threatened animal species and 2 vascular plants. There are at least 148 species of European interest listed in the Bern Convention, 41 bird species and 78 animal and plant species put on the EU Birds List and in the Habitats Directive. At least 50 animal species and 24 vascular plants are included in the National Red List of Albania.

The Vjosa River system is a natural ecosystem in dynamic equilibrium, governed solely by natural forces. The floodplains of the Vjosa River in Southern Albania are considered one of the most magnificent river ecosystems in Europe. There are several unique or rare natural, historical or cultural resources at the national, regional and even global/universal scales, and traditional activities and intangible cultural values that show relevant or significant examples of harmony and integration between socio-economic activities and natural landscapes.

The biggest threats to the Vjosa Wild River National Park, mapped in all 12 municipalities along the main river and the tributaries, are urbanization, mining and quarrying, hydropower, industry, and agriculture.

3.1.3 Vision and goals - for the whole area

The vision for the VWRNP:

The Vjosa-Aoös River, from source to sea, including all free-flowing tributaries, is afforded full national and transboundary protection, to the highest international standards, and is effectively conserved as a living, wild, free-flowing river, to the benefit of people and nature in Albania, Greece, and the world.

The primary management objective of the VWRNP is:

- Protection of natural biodiversity, together with the basic ecological structure and supporting environmental processes in line with IUCN Category II standards, as well as the promotion of recreational and educational activities compatible with the concept of sustainable tourism, and the promotion of the development of local communities.

Other objectives include:

- Managing the area in such a way that representative examples of physiographic regions, biological communities, genetic resources, and intact natural processes are maintained and preserved in as natural a state as possible;
- Maintaining populations and functional ecological collections of native species at a sufficient level of density to guarantee the protection of the integrity and long-term resilience of the ecosystem;
- Specific contribution to the protection of species, ecological processes and migration routes;

- Preserving visitor areas for inspirational, educational, cultural, and recreational purposes at the level to not cause significant biological or ecological degradation of natural resources;
- Addressing the needs of local communities, including the use of livelihood resources, when the main objective of management is not compromised;
- Contribution to the local economy through tourism.

Three goals, desirable outcomes that are consistent with the VWRNP vision, are:

- Conserving ecological integrity of the VWRNP to IUCN Category II standards
- Offering recreational activities and cultural experiences to connect people with nature and with Albanian culture
- Promoting collaboration and shared responsibility for sustainable local development and protection of the VWRNP.

Phase I

The aims of Phase 1 are to deliver the overall vision and goals of the VWRNP within the initial core zone of the Park, while at the same time, planning for widening the area of the Park. The following boundaries and management approaches refer to the core initial core zone.

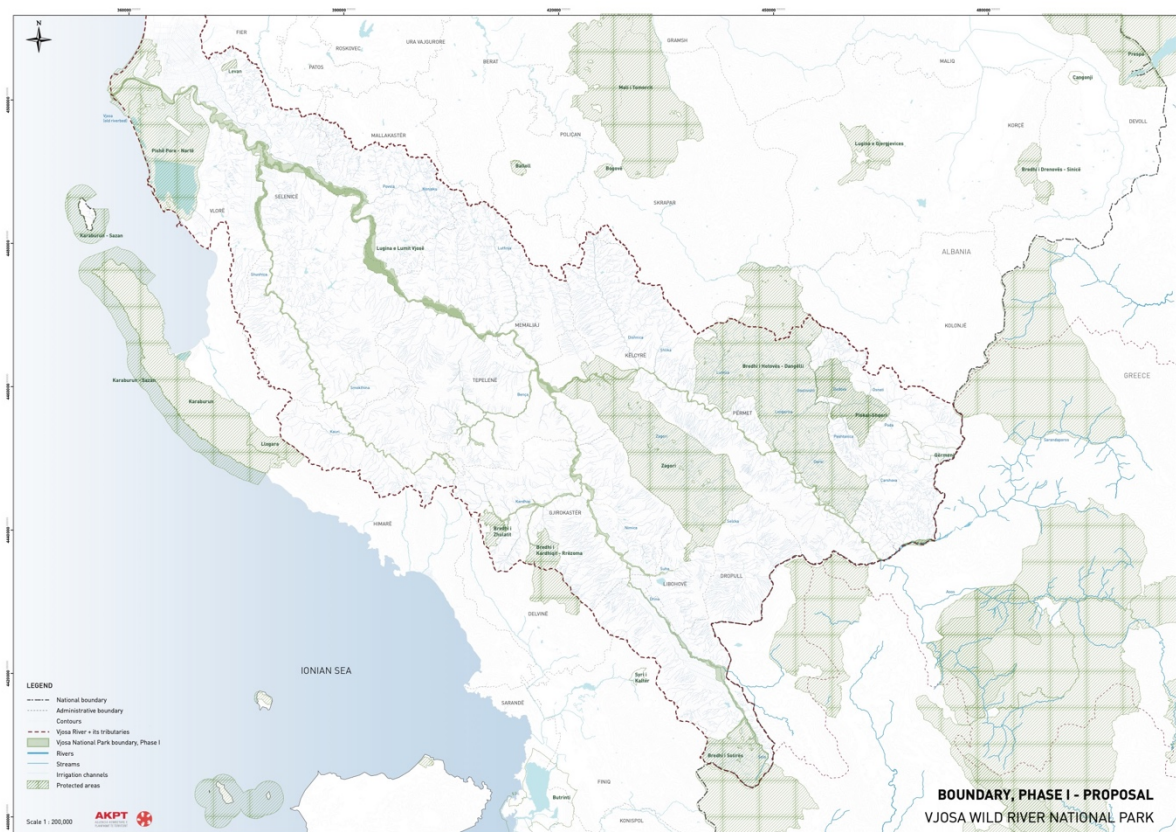


Figure 20: Vjosa Wild River National Park, Phase I, delineation (map by NTPA)

3.1.4 Boundaries and zoning

The park boundaries are based on the best available knowledge of the Vjosa River, its tributaries and its catchment area. Therefore, to preserve the unique hydro-

morphological integrity of the Vjosa River Basin, the boundaries include the necessary hydro- and morpho-dynamic processes that shape the diversity of the valley forms, river types, and riparian and barrier features that host riparian habitats and species, all active channels and low-lying active floodplains, areas of sediment origin, adjacent steep erodible slopes, as well as intact adjacent forest and upland slopes, and linkages to all existing protected areas in the catchment.

The methodological approach for defining the boundaries was based on finding meaningful boundaries for the riparian system and protecting the integrity of the river continuum throughout the entire catchment. This delineation cannot be done in a single step, so the first phase focuses on active channels, active floodplains, and public lands only.

Table: VWRNP area overview, including the core subzone and “the other subzones”

Type	ha
Active channels	6,030
Active floodplains and riparian habitats	4,593
Adjacent bank strips, such as canyon and erosion slopes, indifferent buffer strips (e.g., road slopes, but also hill slopes, nat.)	1,199
TOTAL (core subzone)	11,822
+Buffers (erosion buffers, mostly agricultural areas immediately adjacent to the river and prone to erosion within the next 5-10 years). This will make for the “ other subzones ”	905
VWRNP Phase I 2022 – the proposal	12,727

VWRNP Phase II 2023 – the VISION	
+adjacent areas (natural areas along rivers), connection areas to tributaries/ other protected areas, sediment origin areas (“soft” delineation criteria)	app. 10,000
Consideration of overlapping delta areas/categories	6,000
Estimation for additional tributaries (Phase II 2023, all aforementioned categories)	app. 2,000
Total expected area after Phase II 2023	~30,700

3.1.5 Permitted uses

Sustainable human use of resources in the National Park in Albania is regulated, and intensive exploitation of natural resources, use of intensive technologies, and construction of urban and infrastructural areas are excluded. Activities that provide spiritual, scientific, educational, and recreational opportunities are allowed and encouraged.

Upon the written and justified proposal of the protected area authority, the National Agency of Protected Areas may approve:

- grazing and passing through of livestock, and construction of light or temporary structures to house them;
- putting up stands, signboards, advertisements, signs, and posters;
- sailing boats, canoes, and other means of sailing (not motorized);
- non-military flights in helicopters, balloons, delta planes, etc.;
- driving and parking vehicles out of the designated roads and areas;
- mountain climbing, skiing, camping, and lighting of fires outside the designated places;
- collecting plants, fruits, seeds, and fungi;
- performing seasonal tourism activities, that do not require the permanent occupation of the land.

3.1.6 Sustainable tourism in the VWRNP – permitted use of natural resources

The VWRNP is seen as a future **tourism destination** with a specific vision:

Environmentally, culturally and socio-economically sustainable tourism development in the Vjosa Wild River National Park that both meets IUCN conservation standards and enhances the lives of communities along the river in a manner consistent with the Sustainable Development Goals.

Objectives for tourism management in the VWRNP:

- Build a diverse portfolio of activities and sites distributed throughout the Vjosa River Basin that will provide sustainable economic opportunities for local communities and tourism businesses;
- Increase conservation and education efforts to maintain a mutually beneficial relationship between locals and nature.;
- Increase the number of visitors and length of stay, and encourage year-round visitation by offering high-quality experiences;
- Increase the number of local tourism businesses in the Vjosa basin;
- Invest in infrastructure (waste management, transport management, visitor management, reforestation) that will not only lead to a controlled increase in tourism, but will also enable local communities to become self-sufficient through sustainable growth opportunities in the tourism business, support the public health of local communities, and improve the pride and well-being of local people;
- Address the exodus of Albanian youth from villages to cities, as well as the exodus of young people from Albania as a whole, by providing economic and sustainable business development opportunities;

- Become a lighthouse model that can be used by the international community, thereby establishing Albanian leadership in the field.

Twelve key nodes were identified as starting points for the existing activities, and twelve different types of tourism were outlined as potentially applicable in the broader Vjosa River Basin; a total of 41 activities in 34 locations were listed.

The potential "STARS" or highlights (sites - activities - infrastructure), identified in the Vjosa River Basin, are as follows: Wildlife Conservation Tourism, "Twenty Villages" Agro-Ecotourism and Rural Sustainable Tourism, experiences including Culinary, Canoeing/Kayaking/Paddleboarding, Horseback Riding, Cycling, Climbing, Camping, including Mobile Homes and "Van Life", Ecolodges/Eco-Glamping, Guest Houses, Visitor Center, Information Centers, Stargazing (guided), and Festivals.

3.1.7 Park operating activities, including financial and budgetary assessments

3.1.7.1 Park operating activities

The administration of the future National Park is organized at several levels and units capable of fulfilling the needs and tasks of a National Park of Category II, as defined by the IUCN. The administration is organized with a director, two directorates and five departments. To ensure a comprehensive approach, the following departments will be part of the management of the VWRNP: Tourism and Public Relations, Community and Local Development, Education and Visitor Guidance, Monitoring and Research, and Law Enforcement and Patrolling.

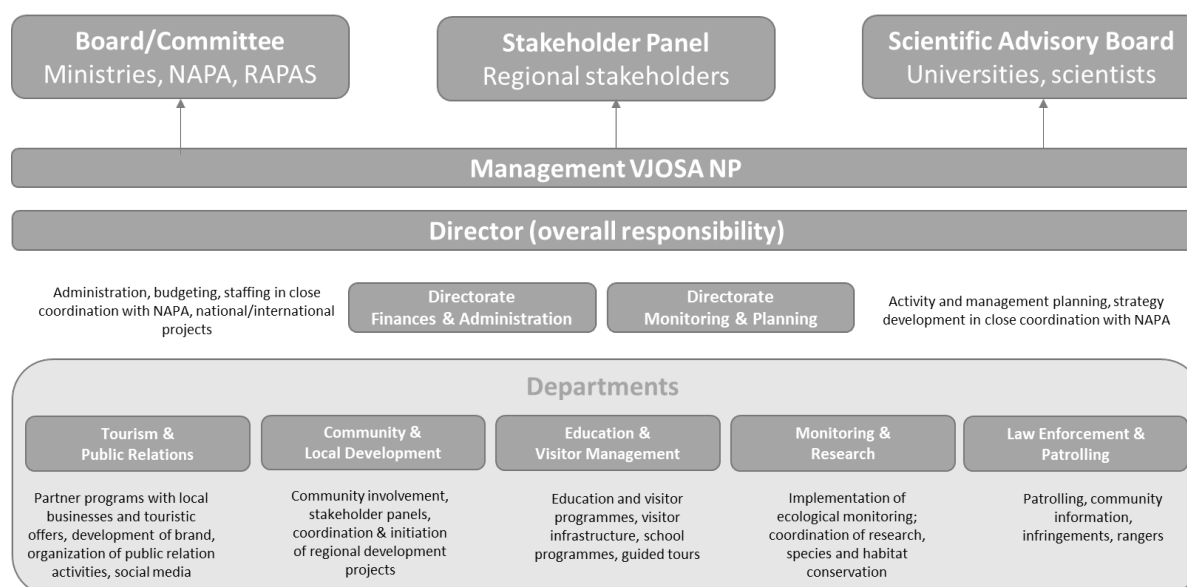


Figure 21: Organigram of management

The VWRNP budget for the first three years is shown in the table below and is composed of different cost categories that take effect in different years:

- o Operational costs are incurred annually and should be covered by the national budget

- Investment costs are incurred selectively and should be covered by the national budget
- Support financing includes pre- and co-financing costs for funding projects
- Studies/plans/infrastructure can be financed by funding projects

		1st year	2nd year	3rd year
Operational Costs	Staff	10 644 480,00 Lekë	15 120 000,00 Lekë	20 813 520,00 Lekë
	Running costs	4 686 573,32 Lekë	5 526 732,00 Lekë	4 604 614,30 Lekë
	Maintenance of technical equipment	0,00 Lekë	891 010,80 Lekë	965 261,70 Lekë
	Maintenance of infrastructure	570 490,80 Lekë	834 519,60 Lekë	1 057 293,90 Lekë
	TOTAL OPERATIONAL COSTS	15 901 544,12 Lekë	22 372 262,40 Lekë	27 440 689,90 Lekë
Investment costs	Technical Equipment	28 222 439,19 Lekë	2 853 711,28 Lekë	1 826 513,52 Lekë
	External support	1 435 500,00 Lekë	2 200 000,00 Lekë	2 400 000,00 Lekë
	Infrastructure	3 889 710,00 Lekë	7 072 200,00 Lekë	0,00 Lekë
	TOTAL INVESTMENT COSTS	33 547 649,19 Lekë	12 125 911,28 Lekë	4 226 513,52 Lekë
TOTAL BUDGET VWRNP		49 449 193,31 Lekë	34 498 173,68 Lekë	31 667 203,42 Lekë
Support Financing		12 965 700,00 Lekë	14 144 400,00 Lekë	15 323 100,00 Lekë
Studies/Plans/Infrastructure (project based)		14 262 270,00 Lekë	236 918 700,00 Lekë	375 710 625,00 Lekë

Figure 22: VWRNP budget for the first three years

3.1.7.2 Financial and budgetary assessments

The sources of the financing of the management activities of the VWRNP and the chosen financing system will evolve according to the different phases of the life of a national park.

For the year 2023, the financing hypotheses are based on the assumption that only the costs of NAPA (operational and basic investments) are considered, and all other main investments and project-related expenditures for the development of the VWRNP are projected for the coming years. Three scenarios are proposed for the year 2023, depending on the availability of funding sources other than the state budget, as shown in the table below. The final costs required for 2023 will have to follow after agreement of exactly what activities the Government decides to put in place to prepare for the launch of the National Park in 2024.

Between 2024 and 2027, the VWRNP administrative authority will be fully operational. The State's participation in the VWRNP budget will be strengthened by additional sources, the inclusion of which in the 2024 budget must be provided for and prepared as early as 2023.

	Low scenario		Medium scenario		Best case scenario	
	€	Details	€	Details	€	Details
State budget	77,406	Cover all 2023 expenses	38,379	Cover operational and investment costs of 2023	18,158	cover operational costs most likely in the first place
Donation	0	No donations available in 2023	39,027	Available only for project-based costs as stated in the Park Operation report	59,248	Including investment costs + project-based costs assimilated here to investment as well to ease the scenarios
Project funding	0	It seems unlikely to start a several-years project in 2023, as: a) A project has to be built according to conservation objectives that still have to be designed; b) A project proposal has to be written and submitted; c) The project proposal needs then to be reviewed and approved upon by the structure it has been submitted to; d) Then the project starts officially, sometimes several months after.				
<i>Chances</i>		<i>HIGH</i>		<i>MEDIUM</i>		<i>LOW</i>
TOTAL 2023	77,406 €					
	9,000,698 Lekë					

In 2026, operating costs and investments remain at the same level and should be financed in the same proportion by the State and the projects, while costs for the project-related infrastructure development increases to €3 million (as shown in the table below). It is assumed that project-related activities in 2026 will be covered by ODA and donations, with a matching contribution from the State.

In 2028, the proven and well-functioning funding system from the previous period will be reinforced by an additional funding instrument: the Vjosa-Aoös Nature Trust (VANT). In a period when the main budget is allocated to operating costs, the establishment of the VANT (or the use of an existing nature trust) could support the financing of salaries and operating costs from the state budget.

	Operational costs		Investment costs		Project-based costs		TOTAL
	Amount	Details	Amount	Details	Amount	Details	
State budget	216,054€		0€		188,165€	State public budget need to offer some matching funds to secure ODA and project-based funding. However, additional matching funds are found and the % of matching from State decreases (5%)	404,218€
	25,418,134 Lekë	State budget still covers operational costs minus some costs covered by fees collected in the Park	0 Lekë	The few remaining investments in third year are covered by projects	21,879,619 Lekë		47,297,753 Lekë
Small to medium project based funding (private or public)	0€		35,925€		522,680€	A lot of baseline studies need to be conducted in 2024. they can be covered by project-based funding completed with matching funds from the State	558,605€
INTERREG	0 Lekë		4,226,514 Lekë	Some minor investments are covered by projects	60,776,719 Lekë		65,003,232 Lekë
Large ODA investments	0€		0€		2,520,267€	ODA can cover the development of infrastructure, which represents in 2024 mainly the construction of the visitor centre	2,520,267€
	0 Lekë		0 Lekë		293,054,288 Lekë		293,054,288 Lekë
Natural resources use fees	17,192€	With the implementation of the sustainable fee strategy, fee budget share increases in the operational budget (10%)	0€		0€		17,192€
	2,022,556 Lekë		0 Lekë		0 Lekë		2,022,556 Lekë
TOTAL 2026	233,246€		35,925 €		3,231,111€		
	27,440,690 Lekë		4,226,514 Lekë		375,710,625 Lekë		
			3,500,282€				
			407,377,828 Lekë				

3.1.8 Stakeholder engagement report - summary

The following sections are prepared by the Stakeholder Engagement expert, Besjana Guri, *EcoAlbania*. A summary of the full report prepared by the expert is integrated here, while the full report can be found as an annex to this study.

3.1.8.1 Introduction and methodology

This assessment is an integral part of the knowledge-building phase, which is mainly associated with "stakeholder engagement" in the declaration process. In this regard, the assessment provides an up-to-date picture of the stakeholders that may be affected by the declaration of the Vjosa River as a National Park and shows the preliminary results of the stakeholder engagement process, which identified, mapped, and analyzed key stakeholders.

The objective of the process was to understand who the key stakeholders are, to get an overview of the current attitude of the local population towards the national park, and to understand the initial views of the stakeholders in terms of positive benefits and concerns towards the park.

The stakeholder engagement methodology includes five phases: i) stakeholder identification; ii) stakeholder grouping; iii) stakeholder analysis; iv) stakeholder engagement; and v) evaluation of stakeholder engagement.

Approximately 180 stakeholders representing government agencies, non-governmental organizations, and the private sector in the Vjosa valley were identified and engaged during the period between September and November 2022. Ten face-to-face and 25 online interviews were conducted with stakeholders. In addition, a series of three workshops were organized.

The stakeholder engagement analysis was divided into five levels of engagement with the project and project outcomes: (i) Unaware (U) when the stakeholder is not aware of the project or its impacts; (ii) Resistant (R) when the stakeholder is aware of the project but is not willing to change their attitude to support it; (iii) Neutral (N) when the stakeholder is aware of the project but neither supports nor opposes it; (iv) Supportive (S) when the stakeholder is aware of the project and supports it; and (v) Leading (L) when the stakeholder is aware of the success of the project and is actively committed to it.

3.1.8.2 Data from the process

To complete the matrix, each stakeholder is labeled with both their current level of engagement and their desired level of engagement, based on the indications from the quick analysis

The current level of stakeholder engagement is as follows: 46% of them support the project (S), 26% are neutral (N), 20% are leaders (L), 6% are reluctant (R), and 2% are ignorant (U).

The stakeholder map at the desired level would look like this: 57% of them support the project (S), 10% are neutral (N), 33% are leaders (L), 0% are resistant (R), and 0% are ignorant (U).

3.1.8.3 Main findings and results

The majority of the stakeholders responded that the park will have a positive impact on the region, and they also believe that the protection of the Vjosa River should be extended to the Greek part as well.

The majority also see the declaration of the VWRNP as an opportunity for solving environmental problems, protecting nature and providing an impetus for sustainable development.

More than three-thirds of the respondents and those involved in the process see face-to-face meetings as the most effective tool for sharing and engaging stakeholders in the VWRNP planning process; public campaigns and the media are also tools that should be used.

It is recommended that a deeper and more comprehensive stakeholder engagement process be conducted in the next phase of the Vjosa Wild River National Park establishment process. In this regard, it is recommended that the second round of stakeholder engagement process be conducted beginning in early 2023.

The following are the key outcomes of the stakeholder engagement process: The declaration of the Vjosa Wild River National Park is perceived as an opportunity to stop the environmentally damaging activities that are currently taking place or planned in the area.

The stakeholders see the Vjosa River as a "lever" for economic growth and prosperity for local communities and the entire valley. For them, Vjosa is a "life-giving" river supporting biodiversity and the daily life of the local communities.

The main economic activities that stakeholders believe should be implemented in the VWRNP are tourism and ecotourism, agriculture and livestock farming. Fishing activities and agriculture should be carefully regulated and taken into consideration when developing the management plan for the VWRNP.

The local communities, especially those living in rural and remote areas, farmers, hunters, fishermen, local businesses, women, and marginalized groups should be informed and consulted both during the planning phase and in the implementation phase of the National Park.

Consideration must be given to including other potential tributaries of the Vjosa River Basin in the future Park in order to ensure their protection in the case of free-flowing rivers, and to increase the level of control in the case of already degraded rivers.

The pressures from the residents that live near the river should be carefully considered.

Some flood risk management and erosion control measures need to be considered and taken into account when defining the Park's boundaries.

The problem of deforestation, illegal fishing and waste management are three other urgent environmental issues raised by stakeholders that affect the environmental status of the future park, and especially ecotourism in the Vjosa valley.

Government institutions should coordinate transboundary protection measures for the river with the Greek Government.

3.1.9 Environmental and social impact assessment (EsIA)

The Preliminary Report (PR) of the EIA for the project of declaration of the VWRNP is part of the procedure for the creation of a protected area. The purpose of the PR-EIA is to ensure the protection of the environment, through the prevention, reduction, improvement or compensation of impact from the project proposal, and to guarantee an open decision-making process.

3.1.9.1 Legal, regulatory and institutional aspects

The content of the report fulfills the requirements of Decision No 686/2015 by the Council of Ministers and the requirements of Decision No 354/2016, Article 75/1, by the Council of Ministers. The structure of the preliminary report of EIA is established with Decision No 912 by the Council of Ministers of 11 November 2015 "On approval of the national methodology of the environmental impact assessment process".

3.1.9.2 Technical aspects of the report

Identification of impacts

The impacts of the project aimed at creating a VWRNP or Category II Protected Area (IUCN) are foreseen to be important or relevant in terms of preserving the natural state of the park's territory and improving the segments negatively affected by previous activities.

The declaration of the Vjosa National Park will have positive impacts by increasing security, reducing pressures, and improving the state of ecosystems and nature in general. Protection of park areas in the central area and restrictions in other sub-areas will significantly reduce the current threats to and around the park area. Improvement is expected to occur in the physical (land, water, air) and biological (flora and fauna) environment:

- Reforestation programs will reduce erosion and landslides;
- Sewage and urban waste treatment programs will significantly improve river water quality;
- Ban on the exploitation of rivers will restore balance in river habitats;
- Enhancing the rules will affect the protection of forests, flora and fauna.

The VWRNP is expected to be accompanied by new socio-economic benefits and opportunities for the area around the park. The potential impacts of the park may be

socio-economic, related to landscape and heritage, with access to natural resources, or they may emerge by sectors and activities - industry, agriculture, fishery, aquaculture, tourism, etc.

Summary of potential impacts of the VWRNP

Field/sector	VWRNP impacts
Socio-economic	<ul style="list-style-type: none"> - Increased income in the National Park area or around it; - Increased number of jobs; - Increased property value; - Positive demographic changes or population growth; - Use of the VWRNP "brand" for product marketing; - Support for local services, management of urban waste, sewage, etc. - Preservation and increased security for objects of natural and cultural heritage; - Increased interest for the small business; - Healthy life reduces health-related costs.
Natural sources (IUCN PA Category II standards)	<ul style="list-style-type: none"> - Increased level of protection of nature, landscape, ecosystems, habitats, flora, fauna, natural and cultural heritage; - Increased profit from improvement and upgrading of the service of natural ecosystems, flora and fauna (e.g., <i>better yields and products from plant pollination, better water quality, better quality of products irrigated with river water</i>); - Better control of water pollution sources (emission of waste water, urban waste, waste from quarries, mines, etc.).
Tourism	<ul style="list-style-type: none"> - Increased number of visitors and/or tourists; - Increased employment in the tourism sector; - Increased direct income from tourists and visitors; - Increased profit in the small business value chain (farming, agroindustry, etc.); - Increased investments to support tourism; - Growth of businesses and services to meet the tourists' demands.
Farming and fishery	<ul style="list-style-type: none"> - Increased possibility of developing new agricultural schemes in harmony with NP (<i>natural, traditional, or organic agriculture</i>); - Possibilities of preserving agricultural practices at risk; - Possibility of subsidies from the budget schemes of the MARD or other donors; - Increased local demand for products of the area and benefits; - Use of the VWRNP logo for product marketing; - New opportunities for the development of agrotourism; - Expansion and management of pastures with low intensity; - New agro-environmental standards and opportunities for subsidy from IPARD or other donors.
Natural and cultural heritage	<ul style="list-style-type: none"> - Preservation of inherited natural values, systems and function of ecosystems; - Better preservation of cultural and archaeological heritage assets; - Increased opportunities for the maintenance of common municipal assets needed for tourism purposes.

The table below lists the potential risks associated with the creation of the VWRNP that may appear under certain circumstances.

Possible risks during the creation and operation of the VWRNP	
1.	Difficulty for users of Vjosa's natural resources due to new restrictions and rules related to the VWRNP;
2.	Possibility of increased pressure in cases of high flow of visitors on archaeological/cultural heritage objects, biodiversity (natural monuments), and especially on threatened and endemic species;
3.	Possibility of increased need for infrastructure, transport, hostels and housing;
4.	Trend to increase prices for products and services for residents;
5.	Possibility of increased circulation of vehicles;
6.	Reduction of water for agriculture due to restrictions, especially during the July-August period;
7.	Trend to decrease crop yields due to restrictions on the use of intensive practices (reduction of chemicals) in the lower section of the NP.

The relevance of the impacts is determined by the form of the emergence of environmental changes, the extent in time and space, the frequency, etc. The relevance of the impacts may be assessed based on the magnitude of the change, expressed by the value of indicators, which can be measured. Magnitude, the force of change, extent in time and space are other indicators that may be used to assess the relevance of effects. To assess the relevance of the expected impacts from the declaration of the VWRNP, we will consider the situation after the creation of the park and similar situations.

The relevance of the impacts will be assessed on a three-level scale:

*** (3) very important

** (2) important

* (1) slightly important

The relevance of the direct impacts according to the VWRNP sections:

Nature of impacts	Main potential impacts of the VWRNP	Geomorphologic sections of the NP			Drino	Bënça	Shushica
		S	M	U			
Social	Increased employment and income	***	***	**	**	***	**
	Quality resources (water, air, food) and healthy life	***	***	**	***	***	**
	Improvement of security and services (education, health, etc.)	***	**	**	**	**	**
Socio-economic	Small business growth and trend for demographic growth	***	***	**	**	**	**

	Increased local demand for products of the area and benefits	***	***	**	**	***	***
Economic	Possibility of subsidy from IPARD or other donors	**	**	***	**	**	**
	Increased value of the VWRNP products	***	***	**	**	***	**
	Increased property value	***	***	**	**	***	**
	Increased profit in the small business value chain (farming, agroindustry, etc.;	***	***	**	**	***	**
	Increased investments to support tourism	***	***	**	**	***	**
	Support for the development of new agricultural schemes in harmony with the NP	***	***	**	**	***	**
	New opportunities for the development of agrotourism	***	***	**	***	***	**
Environmental	Increased security for natural and cultural heritage	***	***	***	***	***	***
	Safe management of waste and waste water	***	***	***	***	***	***
	Improvement of conditions for wild flora and fauna	***	***	**	***	***	***
	Extension and management of low-intensity grazing systems	***	***	*	***	***	**
	Increased opportunities for the maintenance of common, municipal assets needed for tourism purposes	***	***	**	**	**	**

Impacts of the Vjosa Park on the cross-border area with Greece

No potential threat or pressure has been identified related to the declaration or status of the VWRNP that could be associated with negative impacts on the cross-border area with Greece.

Identification of pressures

A summary of environmental threats and risk assessment are presented in the table below:

Pressures/threats	Form of risk emergence	Risk level
The needs of the country for energy create pressure for the construction of hydropower plants and dams on the Vjosa River and its tributaries.	Changes to the form of use of land;	In the scenario where the dams are built, the level of risk is very high, causing irreversible environmental changes. The expected damage could have catastrophic consequences.
	Significant changes to the regime of surface and underground waters;	
	Irreversible changes to vegetation, flora and fauna;	
	Harm to or extinction of species under international protection;	The level of environmental risk is estimated to be very high/catastrophic.
	Damage to and loss of values of natural and cultural heritage;	
	Evident changes to the PA of Narta, erosion, and loss of tourist resources;	
Deforestation, lack of vegetative cover, relief, exploitation of rivers, agricultural activity exert pressure and pose a threat to soil erosion and degradation.	Increased seismic risk;	Erosion occurs at very high levels, environmental damage is very high. The current level of risk is very high.
	Removal of soil material, organic matter and nutrients (N, P, K) from the lands along the basin;	
	Landslides, damage to infrastructure or other properties;	
	Erosion of riverbanks and land degradation;	
The practice of managing urban waste and solid waste, their dumping into rivers and open environment pose a threat for pollution and degradation of natural resources.	Changes in the coastline;	The current practice of waste management for many years has affected the quality of Vjosa and its tributaries, and water resources. and it threatens the food chain and human health. High risk.
	Changes in habitats and ecosystems, reduction of agricultural potential.	
	Physical/chemical/biological pollution of the river system (streams, rivers);	
	Pollution of surface water and groundwater sources;	
	Contamination of agricultural lands and the food chain/threat to human health;	
Discharge of sewage and waste water from other activities (farming, agro-industry, aquaculture,	Pollution and degradation of habitats/damage to flora and fauna;	Discharge of waste water of urban origin or from other industrial, agricultural, mining activities, etc., for many years has
	Waste degradation in open environment and emission of greenhouse gases.	
	Pollution of the surface water and groundwater system;	
	Threat to users of river water;	
	Cost increase for treatment of drinking water;	
	Degradation of habitats, damage to flora and fauna;	

mining, handicraft workshops) in the Vjosa basin.	Contamination of agricultural land and food products for animals and humans;	affected the water quality of Vjosa and its tributaries, and water sources, threatening the food chain and human health. High risk.
	Pollution of coastal waters and sea products;	
	Accumulation of sediments containing heavy metals or dangerous and persistent substances;	
	Threat to public health in the long term.	

3.1.9.3 Conclusions and recommendations

The project for the "Declaration of the Vjosa Wild River National Park" or the VWRNP and its free-flowing tributaries is in line with the commitment of the Albanian Government to preserve the rare values of the ecosystem of Vjosa, which are important for the country, Europe, and the global environment.

- The preliminary report on EIA confirms the rare natural and heritage values in the area of the Vjosa River, its free-flowing tributaries (Drino, including Kardhiq, Bënça and Shushica) and the basin area;
- The report concludes that the preservation of the natural state is important for the country, for Europe, and for the global environment.

The socio-economic and environmental impacts related to the legal restrictions, according to the sub-areas and geographical sections of the VWR, have been assessed and the following conclusions have been drawn:

- The implementation of the project for the declaration of the VWRNP has no negative socio-economic and environmental impacts on the Park or surrounding area;
- There are no negative impacts on the cross-border area with Greece;
- The sustainable management of the NP resources will enable the improvement of the environmental state in the ecosystem and surrounding area;
- The creation of the VWRNP creates the model and the opportunity for expansion to the Greek area;
- The expansion of the Park to the cross-border area would guarantee the ecosystem of Vjosa in the long term by preventing possible threats and pressures.

The creation of the VWRNP shows how nature and inherited values may be preserved in front of threats and pressure with irreversible effects and catastrophic damage. The project for the VWRNP declaration ensures in the long term the natural future of the Vjosa ecosystem for generations to come.

The socio-economic impacts that follow the declaration of the VWRNP, the impacts on natural resources and heritage, as well as the relevance of the impacts, according to the geographical segments of the Park, have been assessed by showing that:

- The declaration of the VWRNP enables a new perspective for the socio-economic prosperity of the area focused on sustainable tourism, agriculture, services, etc.;

- The creation and promotion of the VWRNP logo are expected to be followed by a significant increase in tourist activity, employment and income, an increase in the value of properties and local products;
- The positive changes in the natural and socio-economic environment will have a positive impact on the demographic trend by increasing the interest to live and invest in the buffer zone around the Park;
- The positive socio-economic and environmental effects are expected to extend to the Greek area as well.

3.1.10 Priorities and schedule for implementation and monitoring

A phased approach is envisioned for the comprehensive protection, management, and restoration of the Vjosa River Basin. The design, designation, and establishment of the VWRNP will lay the foundation for the first phase of operationalization and subsequently for the consolidation and further expansion of the Park and its capacities. The MoTE, with support from national, regional and international partners, will proceed in four phases:

2022

- Feasibility studies and site assessments will form the basis for the VWRNP designation.
- Vision and road map will be defined and agreed upon, and partners will commit to longer-term support.

2023

- The formal declaration of boundaries, zones, buffers, and ecological corridors.
- The majority of tributaries are under direct protection, and all tributaries are under conservation management.
- The VWRNP is assigned to IUCN PA Category II - National Park.
- Establish the institutional arrangements for the operation and management of the VWRNP Phase I under the existing national protected area management framework; this includes the initial appointment of the VWRNP staff.
- Planning activities for the Park's essential infrastructure (planning documents for the Park office and visitor center), the VWRNP identity, corporate design and promotion, Park visitation and interpretation concept.
- Capacity development, including training for Park staff and tourism providers.
- Modification of the legal background for the implementation of an effective management model for the VWRNP.
- Development of management direction for the VWRNP and an annual management plan.
- Assessment of the financial needs for the operation of the VWRNP in 2024.
- Preparations for the VWRNP - Phase II with a detailed work plan, including delineation of all free-flowing tributaries and other areas of special conservation value on public and private lands, especially the river delta components, to ensure the ecological integrity of the Vjosa River ecosystem.
- Implementation of pilot projects, such as the reforestation of selected floodplains.

- Fundraising: begin applying for large-scale Interreg projects and other funding; reach out to philanthropic donors.

2024 - 2027

- The VWRNP is operational with core capacities and technical support.
- The initial management plan is developed and tactical actions are underway, including monitoring systems.
- Sustainable tourism development and park financing and business plans are in place.
- Wider conservation designations reinforce the protection of all tributaries.
- Transboundary cooperation with the Aoös section in Greece continues to develop and takes the form of direct cooperation
- Certification of the VWRNP according to IUCN Green List standards.

2028 - 2031

- The VWRNP achieves proven success in conserving its most important natural, ecosystem, cultural, and climate values.
- All tributaries remain free-flowing and ecologically intact.
- Transboundary cooperation with Greece allows the entire river system to benefit from protection and conservation.
- Sustainable tourism development and related business opportunities provide consistently growing economic benefits directly and indirectly to the VWRNP stakeholders and local communities.
- The VWRNP complies with the IUCN Green List standards.

3.2 Park boundaries, goals/ objectives and standards

This section on the boundaries is prepared by the GIS experts, Ulrich Schwarz and Ronny Dobbelssteijn. A summary of the report prepared by the experts is integrated here, while the full report can be found as an annex to this study. References to this section can be found in the related annex.

The focus of Phase I of the establishment of the VWRNP, was on the delineation of the ecologically most valuable riparian habitats and river sections. It mainly covers public lands. Total length of the Vjosa, Shushica, Bënça, and Drino Rivers, including the Kardhiq tributary, is about 400 km. In Phase II, the focus will be on including additional tributaries and all the other adjacent or connected areas important for biodiversity and hydro-morphology, which are essential for maintaining the ecological integrity of the Vjosa River Basin, regardless of the land ownership.

3.2.1 Approach to delineating the VWRNP Phase I

For the Phase I delineation of the outer boundary, the core zone and the other zones inside the proposed VWRNP, two general criteria were used:

3.2.1.1 The hydro-morphological criterion

The evaluation of the first criterion (or "the hydro-morphological criterion") is based on the hydrological and morphological processes associated with the active river channels, its banks and floodplains, considering physical parameters, such as water flows and sediment transport patterns, and their powerful effect on the surrounding land and vegetation at the level of Vjosa and main tributaries. The purpose behind the establishment of the Park is to ensure the maintenance of the hydro-morphological and ecological character of the rivers. In the mapping of the core components of the Phase I delineation the following steps were used:

1. Active channel [AC] – the shifting main river channel, river branches, and parallel channels, including gravel bars and sandbars that are frequently flooded, see Figure 26; this is fully inside the park boundary;
2. Active floodplain [AF] – divided in the regularly flooded riparian zone and valuable riparian habitats [Afr], which is inside the boundary, and the temporary flooded area of up to once every 30 years [AFoth], which is outside of the boundary;
3. Morphological floodplain [MF] – the maximum extent of the potentially flooded area (up to once every 300 years), which is outside the park boundary;
4. Erodible slopes [ES] – the areas, where the river is eroding high terraces, slopes or valleys at present, are inside the park boundary.

After preliminary analysis, the following additional components were included in the Phase I Park boundary:

- Bank buffer strip [BBS] – a small strip extended beyond the active channel up to road embankments or hills for example;
- Canyon banks (slopes) [CY] – the lower part of canyon slopes influenced somehow by the river channel (e.g., up to 20 m in height);

- Erosion buffer [EB] – areas where the river is eroding agricultural land, typically in the active floodplain expected to be eroded by the river within the next 30 years.

Other components have been identified but are not part of the park boundaries in Phase I. A detailed explanation of the different identified components can be found in the full report.

3.2.1.2 The land ownership criterion

The second criterion (or “the land ownership criterion”) was used to identify all public lands that overlap with the components of the “broader river” (consisting of the watercourse and adjacent floodplain), and in general to exclude private lands. Private land was only included where the active floodplain riparian vegetation was replaced with agricultural fields, and where those lands were considered essential for maintaining the ecological integrity of the river ecosystem, thus regularly flooded (once every 1 to 5 years), or in the process of being eroded. In cases where parcel data were not available, developed (urbanized) areas, agricultural lands, and fenced pastures were identified and excluded based on expert opinion. In sections where the river flows within steep valley confines, where no or very limited natural resource use was identified (e.g., areas used only for non-intensive grazing, firewood collection, or non-timber forest product collection), the boundary was defined based on geographical features, such as ridges or canyon edges.

Physically visible land parcel countours were used in the final delineation of the Park boundaries so to ensure the boundaries would be recognizable in the field, and private land would not be “cut in half” by the Park borders. These extra areas are indicated as “bz” or “buffer zones” from among the different components. For Phase I the resulting surface area within the park boundaries are as indicated in the following table.

Component	Area (ha) in park boundary	Full name
AC	6,033.0	Active channel
AF r	4,595.6	Active floodplain riparian habitats
CY	498.7	Canyon banks
EB1	437.5	Erosion buffer 1
ES	338.6	Erodible slopes
BBS	282.2	Bank buffer strips
AF oth_bz	201.2	Active floodplain ‘other’ – buffer zone
EB_bz	135.9	Erosion buffer – buffer zone
BBSn	80.7	Bank buffer strips connecting to nature areas
EB1_bz	75.8	Erosion buffer 1 – buffer zone
MF_bz	47.1	Morphological floodplain – buffer zone
TR_bz	8.3	Terraces - buffer zone
Total	12,734.7	

It is useful to underline that the delineation of the VWRNP Phase I was done based on the best expert judgment of the area necessary for a sustainably free-flowing river (Figure 23). The final definition of the (extended) boundaries of the Park will be provided in Phase II, based on more in-depth data analysis and local community

consultation, with such definition including other criteria (like social, economic, cultural, historical, etc.), where applicable and physically identifiable in the field.

3.2.2 Datasets used for mapping and delineation

The most important datasets used for the mapping and delineation include:

1. Existing protected areas boundaries;
2. Administrative boundaries downscaled to individual cadastral parcels;
3. 2x2 meter digital elevation model to check floodplain extent;
4. Flood risk map data only for lower Vjosa and some hydrological data for available gauges in the catchment;
5. River regulation structures and flood dikes;
6. Water abstraction sites for irrigation, hydropower and residual water stretches;
7. Historical and recent high-resolution imagery.

3.2.3 A brief insight into the planned procedure for Phase II

In Phase II of the project, further extension of the National Park area, and/or other types of protected areas will be applied through:

1. Identifying core areas of sediment generation and delivery (mostly headwaters and tributaries);
2. Identifying sections with the most valuable/ ecologically pristine adjacent land (e.g., forest slopes);
3. Identifying linkages to other protected areas;
4. Identification of important areas based on non-ecological criteria.
5. Final administrative overlay and legal delineation.

During Phase II delineation, all tributaries in the Vjosa basin will be considered for their ecological integrity, hydrological regime and sediment input.

3.2.4 Components to be considered for inclusion into Phase II delineation

The following components are not included in Phase I park boundary, but will be considered in Phase II of the project along with other potential areas of special conservation or hydro-morphological value.

1. Areas of sediment origin [Sed]: The most prominent sediment origin areas, strongly dependent on hydrology, geology, and morphology of the particular headwater areas, including the upper course of smaller tributaries.
2. The natural areas adjacent to the rivers [NAadj]: Natural (forests) area directly bordering the river without being cut off by roads or agricultural strips. This category includes only those areas that are neither part of any existing protected area nor included in the river components.

3. Connection to existing protected areas and tributaries [Con], will need to be discussed thoroughly during Phase II, as these connections are not always based on ecological connectivity, but may depend on other factors determining their extent.
4. Terraces [TR]: Some terraces of different ages and heights, showing the entire valleys, are being considered.

Other components of great importance for the hydro-morphology to be further examined, but are presently mainly covered by the Pishë-Poro – Narta Nature Reserve:

5. Deltaic habitats [DE]: The Vjosa Delta consists of a riparian area and a marine delta, presently included in the Pishë-Poro - Narta Nature Reserve.
6. Coastal marsh (swamp) [CS]: Between the Vjosa River and the lagoon there is a former coastal brackish marsh. The groundwater of shallow river freshwater mixes with intruding salt water coming from the coast, creating a large swampy area along the Albanian coast. This area is suitable for wetland restoration.
7. Lagoon [LG]: The lagoon is an integral part of the river delta formed by a dune barrier deposited on the coast by wave activity. It should be included in the broader management of the National Park. The lagoon is divided into two parts, the protected area and the salt flats (salina).
8. Salina [SA]: This area includes the commercialized part of salt production as part of the former lagoon.

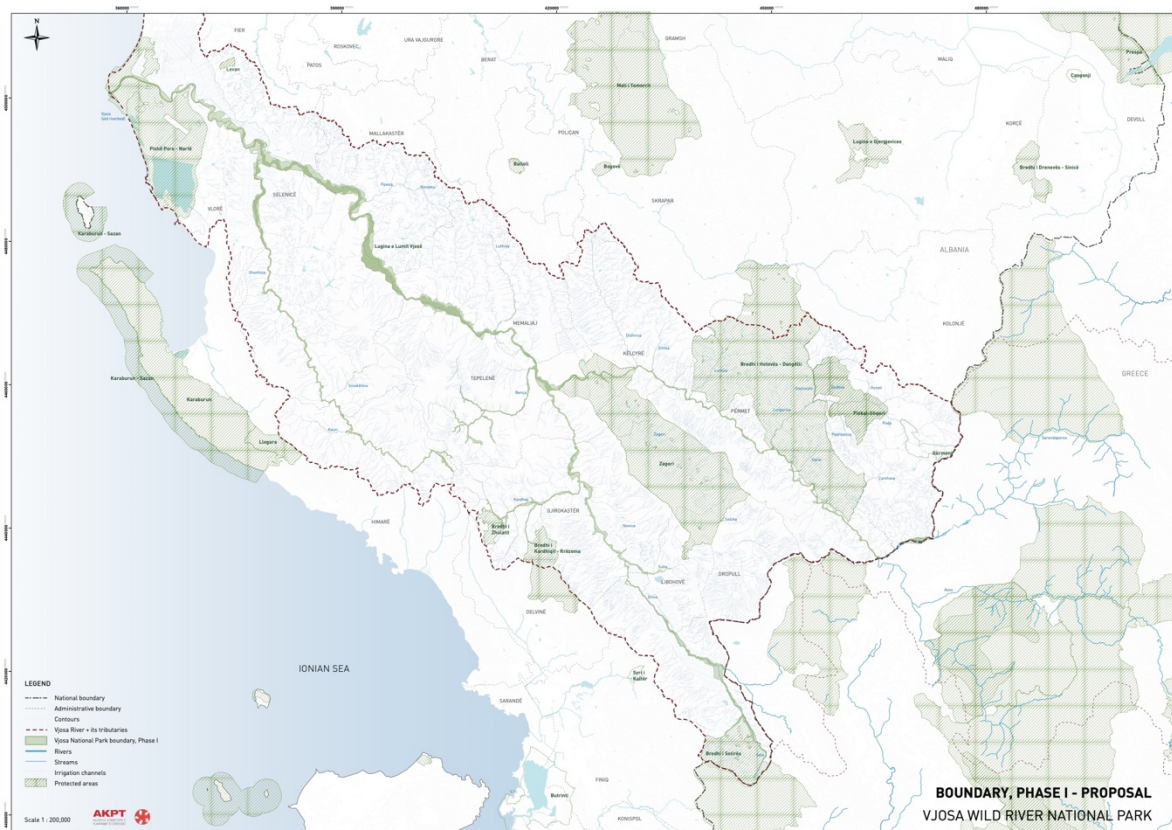


Figure 23: Vjosa Wild River National Park, Phase I delineation (map by NTPA)

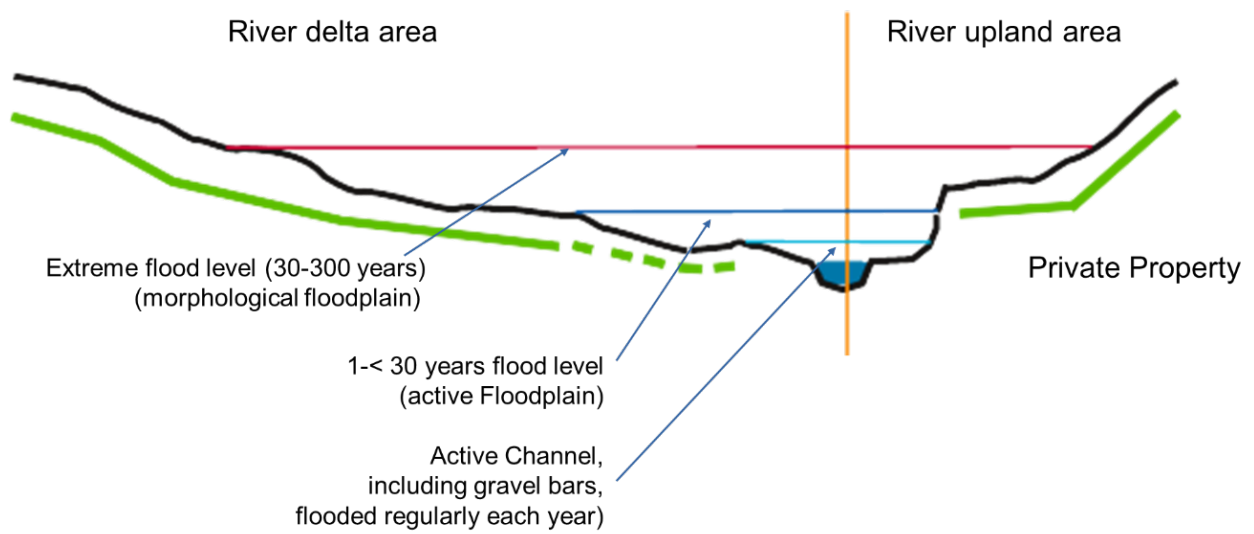


Figure 24: Characteristic river cross-section.



Figure 25: Example of flood modeling for Shushica (in GeoHecRas 2d) to demonstrate the hydro-morphological dynamic within the active channel

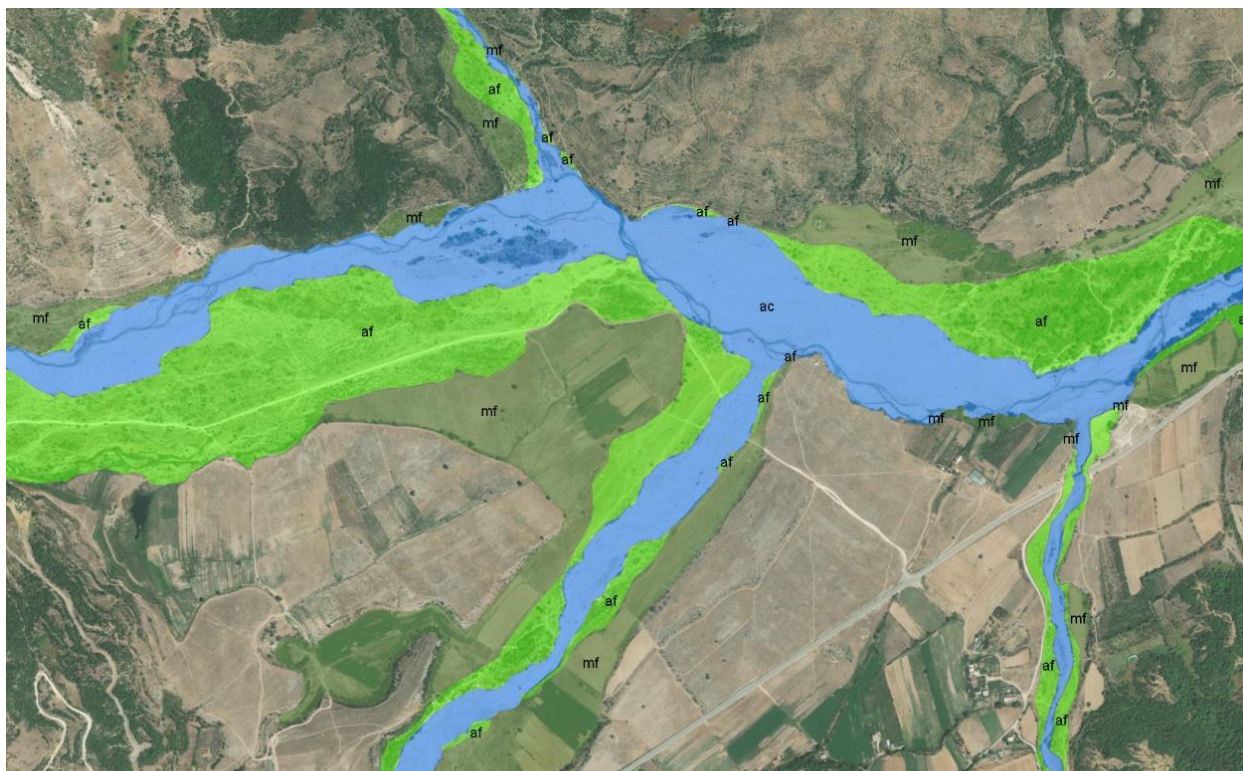


Figure 26: Test example for Kardhiq showing the delineation of active channels (blue), active and morphological floodplain (green and dark green, respectively)

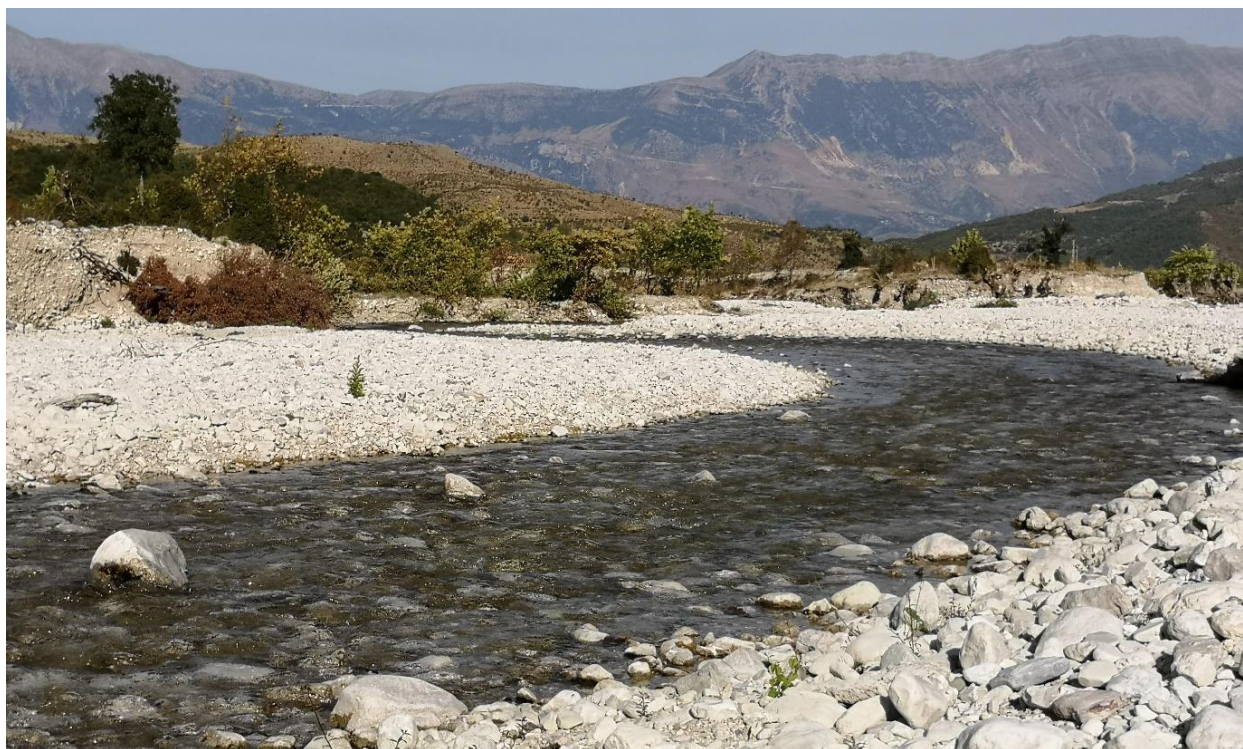


Figure 27: The active channel comprises the river water bodies and the gravel bed (Drino tributary, all pictures by Ulrich Schwarz)



Figure 28: Pioneer and softwood development on gravel bars on middle Vjosa, in the background higher floodplain, stands with eroding bank



Figure 29: Sediment origin in headwaters and steep erosion banks



Figure 30: Upper Vjosa near Përmet: widening on the left side and steep bank with canyon-like vegetation on the right side



Figure 31: Inside the Bënça headwater canyons

3.3 Zoning and the proposed degrees of conservation and permitted uses

Protected area legislation, including Law No 81/2017 in Albania, recognizes the concept of zoning as a management tool. Zoning is particularly useful for dealing with large multi-purpose and multi-dimensional protected areas and for providing linkages among core areas. Albanian legislation allows the use of flexible zoning for inner zones in the national park, managed nature reserve, and protected landscape.

The legislation indicates that the management plan for a given area can divide the area into subzones or units to define different management needs (strictly protected areas, tourism areas, restoration areas, etc.).

Alternatively, subzones within a protected area can have their protected area categories, permanently defined not only in the management plan, but also in the law.

According to Article 13 of the protected areas law (81/2017), zones shall be established within the national park, managed nature reserve, and protected landscape as follows:

- Core subzone
- Traditional and sustainable use subzone
- Recreational subzone
- Buffer subzone
- Heritage and cultural landscape subzone

The first level of protection (strict) applicable in the core subzone aims for the comprehensive conservation of biodiversity and guarantees an undisturbed natural area (Sovinc, 2021).

Phase I delineation defines the core subzones of the VWRNP. It also defines some other areas that serve as buffers for the core subzone. For this phase of the declaration of the VWRNP (Phase I), these are grouped as the "other subzones." During the VWRNP Phase II declaration, further data will be gathered and a thorough analysis will be conducted, expanding and classifying these areas into subzones of traditional and sustainable use, recreation, heritage and culture, and buffer subzones.

3.3.1 Subzones, surfaces and boundaries

In total, some 400 km of Vjosa, Shushica, Bënça, and Drino, including Kardhiq, are the subject of the analysis. Out of the 2,737 mapped polygons and patches with a total area of 53,448 ha, the proposed core zone was delineated based on 11,822 ha and a buffer area of 905 ha. Therefore, the park boundary comprises 12,727 ha (1,944 features in total, measured in ETRS89 UTM 34N as for all charts in this report, the additionally provided ETRS89 ALB_TM_2010 file differs slightly with 12,735 ha).

According to Figure 32 below, the most important components of the core subzone is the active channel (AC), having 6,030 ha, and the low-lying active floodplain (AFr), hosting riparian habitats containing 4,593 ha. The delta area, including some of the lower floodplain areas, shallow sea water, beach, small lagoons, coastal swamps, dunes, and pine forest, is not part of Phase I of the VWRNP due to overlap with the existing protected area “Pishë-Poro – Narta.” During Phase II of VWRNP, further studies will be conducted to connect and integrate both protected areas

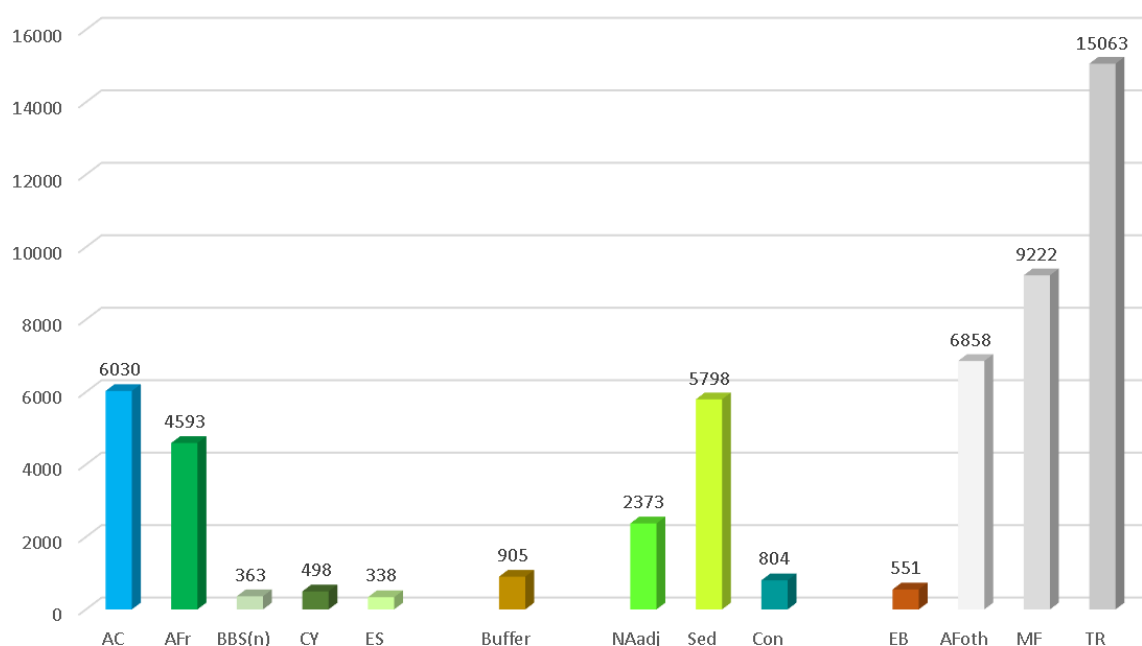


Figure 32: Distribution of mapped area classes in ha (for classes, see Chapter 1) in the order of their importance for the VWRNP: All classes from AC to DE are going to be included in the proposed core subzone

To include all river banks the following classes have to be included in the core zone. The middle and upper courses of Shushica and Vjosa, respectively, are characterized by canyon-like incision stretches in the conglomerate of former terraces. Those steep canyon-like bank strips (CY), of up to 20 m in height, sum up to some 498 ha. Erosion slopes (ES) of foothills and mountains in the partially confined valleys with some 338 ha rounding up the directly river-influenced adjacent land, plus some 363 ha for bank buffer strips (BBS), with indifferent habitats along road slopes, not falling into any other category of the active floodplain (“n” includes natural banks as part of the adjacent natural areas, already mapped, but still not included in the park boundaries).

The buffer area comprises mainly erosion buffer (EB1) prone to be eroded within the next 5-10 years, mainly agricultural land. But also, active gravel exploitation sites in the AFoth fall into the buffer areas. This totals 12,727 ha and should be counted as the initial total boundary of the VWRNP (Phase I) including the four main rivers and Kardhiq.

The three additional area types are natural areas adjacent to the rivers (NAadj), (mainly forest), with 2,373 ha, connectivity areas to tributaries, and corridors to existing protected areas (Con) with 804 ha (both mapped only outside of the protected

areas!), and important sediment origin area (Sed), with 5,798 ha, serving first as background and potential extensions, most probably in a different area category (buffer or special area).

Towards the future expectations (in Phase I), but already important for the further development of buffer zone are "erosion buffer areas" (those for the short term are included already in the boundary, but an additional 551 ha (EB) should be envisaged in a kind of buffer zone). All of those areas are today under agricultural usage, mostly within the active floodplain (other usages), and partially in the morphological floodplain. However, the time horizon when this area will be eroded by the river is up to 30 years.

Table: VWRNP area overview, including the core subzone and "the other subzones"

Type	ha
Active channels	6,030
Active floodplains and riparian habitats	4,593
Adjacent bank strips, such as canyon and erosion slopes, indifferent buffer strips (e.g., road slopes, but also hill slopes, nat.)	1,199
TOTAL (core subzone)	11,822
+Buffers (erosion buffers, mostly agricultural areas immediately adjacent to the river and prone to erosion within the next 5-10 years). This will make for the "other subzones"	905
VWRNP Phase I 2022 – the proposal	12,727

VWRNP Phase II 2023 – the VISION	
+adjacent areas (natural areas along rivers), connection areas to tributaries/ other protected areas, sediment origin areas ("soft" delineation criteria)	app. 10,000
Consideration of overlapping delta areas/categories	6,000
Estimation for additional tributaries (Phase II in 2023, all the afore-mentioned categories)	app. 2,000
Total expected area after Phase II in 2023	~30,700



Figure 33: Vjosa Wild River National Park: Core subzone and "the other" subzones delineation (map by NTPA)

3.3.2 Uses and regulations

Economic, social, and touristic activities, scientific studies, and all other activities provided for in the Management Plan, not expressly prohibited by Law No 81/2017, can be carried out in the VWRNP.

Activities allowed in the National Park following the issuing of a permit by the competent authority include:

- Any activity that is carried out in compliance with the management plan or with decision by the National Territorial Council;
- Monitoring of environmental conditions, of the ecosystem, habitats, and species of flora and fauna;
- Scientific research studies, including those in the field of cultural heritage;
- Temporary, seasonal touristic constructions (light structures) that do not harm the environment.

Sustainable human use of resources in the national parks in Albania is regulated, and intensive exploitation of natural resources, use of intensive technologies, and construction of urban and infrastructural areas are excluded. Activities that provide spiritual, scientific, educational, and recreational opportunities are allowed and encouraged.

Upon the written and justified proposal of the protected area authority, the National Agency of Protected Areas (NAPA) may approve:

- grazing and passing through of livestock and construction of light or temporary structures to house them;
- putting up stands, signboards, advertisements, signs, and posters;
- sailing boats, canoes, and other means of sailing (not motorized);
- non-military flights in helicopters, balloons, delta planes, etc.;
- driving and parking vehicles out of the designated roads and areas;
- mountain climbing, skiing, camping, and lighting of fires outside the designated places;
- collecting plants, fruits, seeds, and fungi;
- performing seasonal tourism activities, that do not require the permanent occupation of the land.

Limits on uses

Limits on uses, to be applied within the entire area of the National Park, are as follows:

- Hunting;
- Introduction of non-native species;
- Intensive propagation or introduction of hunting animals, except for propagation for conservation;
- Afforestation in monocultures;
- Neutralization of waste;
- Making fires outside certain places and areas;
- Construction of highways, sailing canals, and urban areas;
- Driving outside designated roads and areas.

A preliminary list of limits on uses – core subzone

- Cutting of trees and shrubs;
- Construction work of any kind;
- Usage of land through any technological means, or method, that causes fundamental changes in biodiversity, ecosystem structure, and functions, or irreversibly damages the land surface;
- Construction of roads, power lines, and long-distance oil and gas systems;
- Extraction of minerals;
- Grazing, the passage of domestic animals, and the construction of shelters for these animals;
- Usage of chemicals and fertilizers;
- Movement of vehicles of any kind, except vehicles of the Reserve Protection Authority and the Fire and Rescue Service;
- Construction of permanent recreational, entertainment, and sports facilities;
- Sailing boats, canoes, and other means of locomotion, except in designated areas identified in the management plan;
- Massive sports and tourism activities outside the prescribed areas;
- Organizing motor vehicle/boat races;

- Usage and sprinkling of chemicals on roads.

A preliminary list of limits on uses – the other subzones

- Alteration of the natural condition of water bodies and wetlands;
- Dumping of chemicals;
- Collecting of plants, minerals, paleontological finds, and stones;
- Construction and operation of facilities for military and safety purposes;
- Setting up stands, signs, advertisements, banners, and posters, without affecting those that provide information on the objectives of the protection of the area;
- Mountaineering, camping, and lighting fires outside the designated areas.

3.4 Alignment with IUCN Category II – National Park

3.4.1 Introduction

The first major step to achieving the vision for Vjosa-Aoös is the commitment, establishment, and operation of the Vjosa Wild River National Park (VWRNP) in Albania. The VWRNP will be designed, governed, and managed to meet the highest international standards for protected and conserved areas, and align with the criteria for an IUCN Protected Area Category II – National Park designation.

A protected area assigned IUCN Category II - National Park will protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational, and visitor opportunities.

The IUCN requires that 75% of the land in a park be managed to the highest standard of park protection. For the core areas of the park in the Phase I declaration, this is achieved.

3.4.2 Key elements of IUCN Category II

The key elements of Category II that relate to the VWRNP are as follows:

FROM IUCN GUIDELINES	RECOMMENDED FOR THE VWRNP
Primary objective: To protect natural biodiversity along with its underlying ecological structure and supporting environmental processes, and to promote education and recreation.	Overall vision for Vjosa-Aoös: <i>The Vjosa-Aoös River, from source to sea, including all tributaries, is afforded full national and transboundary protection, to the highest international standards, and is effectively conserved as a living, wild, free-flowing river, to the benefit of people and nature in Albania, Greece, and the world.</i> Primary objective of the VWRNP: Protection of natural biodiversity, together with the basic ecological structure and supporting environmental processes in line with IUCN Category II standards, as well as the promotion of recreational and educational activities compatible with the concept of sustainable tourism, and the promotion of the development of local communities.
Other objectives and criteria	Related elements for the VWRNP
To manage the area in order to perpetuate, in as natural a state	The key element is the integrity of the main river system and all its tributaries. This means

as possible, representative examples of physiographic regions, biotic communities, genetic resources, and unimpaired natural processes.	they must be either directly included within the boundaries and protected zones of the VWRNP, or through indirect conservation management and compatible land-use in buffer zone or connectivity corridor designations (Phase II will expand the focus beyond the initial VWRNP designation).
To maintain viable and ecologically functional populations and assemblages of native species at densities sufficient to conserve ecosystem integrity and resilience in the long term.	To identify all key species and biodiversity values, and ensure that conservation management and monitoring efforts demonstrate improved and stable status of these values within an initial 5-year management cycle.
To contribute in particular to conservation of wide-ranging species, regional ecological processes, and migration routes.	To identify the key ecological role of the Vjosa-Aoös system in supporting wide-ranging and migratory species, including avifauna, fish, and other aquatic and riverine vertebrate.
To manage visitor use for inspirational, educational, cultural, and recreational purposes at a level, which will not cause significant biological or ecological degradation to the natural resources.	To ensure that sustainable, low-impact visitor and ecotourism development is part of the development of the VWRNP, and to encourage educational, cultural, and recreational use of the area, in ways which are low-key and will not cause any significant impact on the natural values of the Vjosa-Aoös river system.
To take the needs of local communities into account, including subsistence resource use, in so far as these will not adversely affect the primary management objective.	To ensure participation of the local stakeholders in the governance process and decision-making related to management efforts. To prioritize local access and help ensure that traditional and cultural practices can persist in ways that are complementary to the overall ecological integrity.
To contribute to local economies through tourism. Category II areas are typically large and conserve a functioning "ecosystem," although to be able to achieve this, the protected area may need to be complemented by sympathetic management in surrounding areas.	To prioritize economic opportunities through tourism and related value-chains in ways that share opportunities and provide incentives for conservation-friendly developments and business. To ensure that sustainable tourism principles are applied to the surrounding wider river system, not just to the VWRNP alone.

3.4.3 Definition of principles

Principle 1: Good governance

The governance arrangements for the VWRNP will guarantee the legitimate rights of local stakeholders and communities to access and benefit from the Vjosa River and landscape. The decision-making processes related to planning and management will ensure that legitimate voices are consulted and listened to, with free, prior and informed consent secured for all major programs and initiatives in the area. Governance mechanisms for the VWRNP will ensure that all future management operations will adaptively respond to local perspectives and concerns, and will provide up-to-date and transparent information on the status of conservation values, management objectives and projects, and accountable reports on progress and results from conservation activity.

Principle 2: Comprehensive design and strategic planning

The design and gazettelement of the VWRNP are comprehensive and based on a GIS analysis of important ecological values and their connectivity and representativeness, and the potential for effective area-based conservation management. The major values of the whole Vjosa-Aoös River system, from source to sea, will be identified and better understood. These values, including biodiversity and species, ecosystem and environmental services, as well as cultural values and climate resilience, will be core factors in designating the VWRNP boundaries, zoning within these boundaries, and delineating associated buffer and connectivity corridors and related conservation land-use designations. Design and planning will be based on a sound understanding of the status of this natural ecosystem, the cultural and climate values of the Vjosa-Aoös riverscape, and the threats to their integrity, as well as consideration of the social and economic context of the region.

Principle 3: Effective management and operations, sustained investment

A long-term management goal and strategic direction will be set for the VWRNP from the outset, beginning with the vision and key recommendations from the feasibility studies and baseline GIS, and related conservation assessments. Once the VWRNP is established, an operational 10-year management plan will be developed, with tactical annual work plans and budgets devised based on adaptive management principles, and informed by ongoing monitoring of major site values and their trends and status. The focus of management efforts will be on ecological integrity, understanding and reducing threats, and active biodiversity and habitat protection, as well as restoration and ecosystem rehabilitation, where required.

The technical and operational capacity of the VWRNP management unit will be strengthened and aligned to strategic programs and initiatives. Operations will not be hampered by a lack of resources, with adequate and sustained financing available, complemented by project-based investments. Laws and regulations will be fairly enforced, with accessible grievance and dispute mechanisms supported by the VWRNP governance processes. Visitor access permitted uses and recreational activity will be carefully managed, with sustainable tourism development being a key priority for the VWRNP management body and government, in collaboration with local entrepreneurs and the private sector. Education and outreach programs, including

visitor centers, promoting national and international research, and special ecotourism adventures will form part of the overall package of well-managed, low-impact visitation and recreation activities.

Principle 4: Measure progress: deliver successful conservation outcomes

The VWRNP management will put in place an efficient and cost-effective monitoring framework. This will inform the status and trends of all major site values, and adaptively set thresholds for success that will help guide investment and help focus conservation management efforts. In this way, successful conservation can be measured, good performance can be recognized, and public and political support for the VWRNP conservation outcomes can be maintained.

3.4.4 Implementation and monitoring

VWRNP values	Thresholds for success		
	Phase I (to end year 1) MEETS CRITERIA FOR IUCN PA CATEGORY II – NATIONAL PARK	Phase II (to end year 5) CERTIFIED TO MEET IUCN GREEN LIST STANDARD	Phase III (to end year 10) RENEWS IUCN GREEN LIST STANDARD CERTIFICATION
Natural values – biodiversity, including all rare and threatened fauna and flora, including: <ul style="list-style-type: none"> - Avifauna - Mammals - Fish - Reptiles and amphibians - Insects - Trees and plants, fungi 	Major VWRNP biodiversity and wildlife values are identified. Baseline status and recent trends established. Threats identified and management responses proposed. Monitoring procedures established to track status and trends for all major values.	Major VWRNP biodiversity and wildlife values are regularly monitored for status and trends. Thresholds for success are determined and set for each major value, including targets for threat reduction and population recovery. Thresholds are monitored annually with progress tracked to 5-year targets.	Conservation actions achieve thresholds for stable or improved status for at least 80% of the major VWRNP biodiversity and wildlife values. Adapted thresholds for success are set for each major value from year 5. Monitoring is efficient and focused on regular status updates.
Ecosystem values <ul style="list-style-type: none"> - Major river and freshwater habitats and 	Major VWRNP ecosystem values are identified. Baseline status	Major VWRNP ecosystem values are semi-regularly monitored for	Conservation actions achieve thresholds for stable or improved

<p>associated ecosystem types</p> <ul style="list-style-type: none"> - Integrity of <u>all</u> tributaries - Key watershed ecosystem functions - Geological features and heritage - Environmental services, including pollination - Reduced zoonotic disease events/transfer 	<p>established, including economic valuation. Threats identified and management responses proposed. Monitoring procedures established to track status and trends for all major ecosystem values and services.</p>	<p>status and trends. Thresholds for success are determined and set for each major value, including targets for threat reduction and ecosystem restoration, regeneration and recovery. Thresholds are monitored annually with progress tracked to 5-year targets.</p>	<p>status for at least 50% of the major ecosystem values and habitat types. Adapted thresholds for success are set for each major ecosystem value from year 5. Monitoring is efficient and focused on regular status updates.</p>
<p>Cultural values</p> <ul style="list-style-type: none"> - Archaeological heritage areas - Sites and places of cultural, spiritual, historic and religious importance - Traditional livelihood practices and intangible cultural heritage - Scenic beauty - Places of recreation and wellbeing 	<p>Major VWRNP cultural and heritage values are identified. Baseline status and recent trends established. Threats identified and management responses proposed. Basic monitoring procedures established to track status for cultural values.</p>	<p>Major VWRNP cultural values are broadly monitored for status. Thresholds for success are determined and set for each major cultural value, including targets for threat reduction, maintenance and use/access impacts. Thresholds are monitored to 5-year targets.</p>	<p>Conservation actions achieve thresholds for stable or improved status for at 100% of the major cultural values. Monitoring is efficient and focused on regular status updates.</p>
<p>Climate contributions</p> <ul style="list-style-type: none"> - Increased resilience for people and nature against climate vulnerability 	<p>Baseline climate vulnerability and adaptation assessments establish status and likely trends. Carbon accounting and potential</p>	<p>The VWRNP climate contributions are regularly monitored for status and trends. Thresholds for success are determined and</p>	<p>Climate adaptation and mitigation efforts achieve thresholds for success and demonstrate clear and measurable gains in adaptation,</p>

<ul style="list-style-type: none">- Climate mitigation, forest regeneration and carbon protection	<i>mitigation opportunities identified and incorporated into management and monitoring efforts.</i>	<i>set for each major adaptation and mitigation value. Thresholds are monitored annually with progress tracked to 5-year targets.</i>	<i>reduced vulnerability, and carbon mitigation gains. Monitoring is efficient and focused on regular status updates.</i>
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3.5 Governance and management model – a summary

This section is prepared by the Park Operations expert, Anna Kovarovics, E.C.O. Institute of Ecology, with contributions by Ina Janushi (national expert), and Elvana Tivari and Elvis Tosuni (legal experts). A summary of the full report prepared by the experts is integrated here, while the full report can be found as an annex to this study. References to this section can be found in the related annex.

3.5.1 Introduction

For the operations of the future VWRNP, two options for the organization and structure of the future management were developed. Both options ensure professional and adequate management of the National Park.

For both options, the number and expertise of staff, the organizational structure within the existing current management of protected areas (PAs) in Albania, the required equipment and infrastructure, and the budget for the first years after the establishment of the VWRNP were developed and described (see Annex).

3.5.2 Methodology

As a basis for the development of the future management, available literature and data on the Vjosa River, the current management of PAs in Albania, the existing structures and the demands for the future management of the National Park were collected and reviewed.

Additionally, a study tour along the river took place in September 2022, enabling national and international experts to discuss the future National Park on site.

Based on the literature review and the information gathered during the study tour, several meetings were held with stakeholders and decision-making bodies to answer open questions and discuss first ideas for future management.

3.5.3 The current management structure of PAs in Albania

The current structure of the PA management in Albania is organized at the national – National Agency for Protected Areas (NAPA), and regional – Regional Agency for Protected Areas (RAPA), levels. Currently, there are no individual administrations of individual protected areas.

3.5.3.1 Challenges of the current PA management system

Based on the desk review, meetings and observations during the study tour, several challenges of the current PA management system in Albania could be identified:

RAPAs manage many (types of) PAs

RAPAs have to manage all PAs in their region. Usually, there are several types of PAs in a region, e.g., natural monuments, protected landscapes, nature parks, and national parks present. Each type of PA requires different approaches to management and monitoring.

Furthermore, the number of staff involved in protected area management does not correlate with the number of PAs in a region. If there are many PAs in a region, the staff has to manage them accordingly with the resources available.

Budget flow is slow

Once a year, the budget for all RAPAs is discussed and set. Therefore, it has to be decided in several steps (RAPA – NAPA – MoTE – MoFE – Council of Ministers – Parliament). It usually takes until March each year for the budget to be effective.

Additionally, RAPAs do not have a budget that they can decide on themselves. The money is converted according to actual expenses. This means that even for small investments, such as office equipment, RAPAs have to inform NAPA and wait for their decision until the expenses are approved and the needed equipment can be bought. This process can take up to weeks or months.

In several meetings and discussions, the need for financially independent management (with its budget) was emphasized by the stakeholders.

Cooperation of RAPAs

Usually, RAPAs manage all PAs within their region. PAs located in two or more regions are therefore managed by more than one RAPA. Currently, there are no structures, where RAPAs, that jointly manage a PA, meet, share their expertise and coordinate their activities within the PA. It is up to RAPAs involved in transboundary PAs to organize the communication themselves.

Currently there are some examples of transboundary PAs, where RAPAs cooperate, especially when it comes to reporting to NAPA, but usually each RAPA reports on its part of the PA and the activities there.

Development of PAs as brands

As RAPAs usually have to manage a large number of PAs, the workload for the available staff is enormous. Currently there is no PA in Albania that has its logo, corporate identity, or specific public relations according to its natural characteristics. This means that locals and tourists are usually unaware of the tourism opportunities around the PAs. The development of a brand is a lengthy process that currently cannot be coordinated by RAPAs.

Visitor guidance according to the nature protection needs

In the field of tourism, a visitor guidance system is crucial, both for the visitor experience and for safety. To develop a suitable visitor guidance system, it is

necessary to have a very good knowledge of the PA, its conservation needs, and especially the sensitive natural areas. In the case of grazing and other uses within the PA, stakeholders must be involved in the development of the visitor guidance system to ensure that their needs and knowledge are taken into account.

3.5.4 Future management options for the Vjosa Wild River National Park

To address the challenges described above and to start developing the future management of the VWRNP, two options for how the management could be organized were developed. Based on these two schemes, the number of staff, the necessary equipment and infrastructure, and the needed budget were developed.

According to the preferred option from the expert's point of view and the discussion with authorities, stakeholders and involved experts, individual management for the VWRNP is to be preferred and is explained in more detail below. Both options are described in detail in the final park operations report.

3.5.4.1 Individual management

The individual management with budgetary sovereignty for the Vjosa Wild River National Park ensures proper management and possibilities to develop the PA as a brand, and foster ecotourism and regional development.

Structure

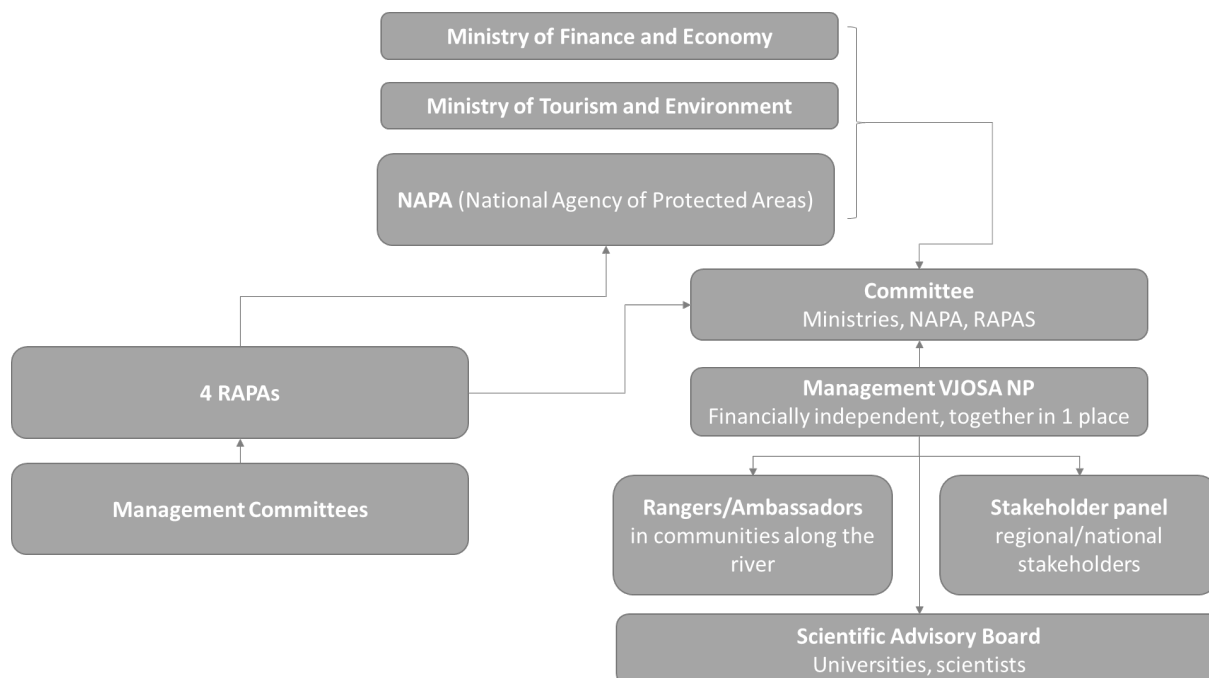


Figure 34: Structure of proposed option 1: individual management

As shown in the figure above, the management of the Vjosa Wild River National Park in this case is a separate organization, in addition to the already existing RAPAs. It operates at a supra-regional level to manage the entire National Park across several regions. It is on the same hierarchical level as RAPAs.

The management is located in one place (location to be determined at a later stage), where all the staff works together in one building. Additionally, there are rangers (also called ambassadors), who are patrolling and have supervisory and informational functions. Besides the management, there is a stakeholder panel, where all important stakeholders at the regional and supra-regional level are represented (e.g., municipalities, communities, NGOs, tourism representatives, and universities). Additionally, a scientific advisory board provides scientific input and supports the management with expertise. The stakeholder panel and the scientific advisory board meet regularly with representatives of the management and discuss current challenges and future activities of the National Park.

A committee is set up as a link among the management of the National Park, the national decision-makers, and RAPAs. In their regular meetings, the budget is discussed, the objectives for the coming year are set, and the management activities of the previous year are presented and evaluated. The committee includes representation from the National Park, two ministries important to PA management, and the participating RAPAs. The board/committee meets regularly and serves as a decision-making body.

The budget of the National Park will be fed by several funding sources. The main requirement for the future management is that it has sovereignty over its budget (financial staff will be represented in the management). The main budget will be provided by the State, while other sources can be international projects, the income of the National Park (excursions, tourism fees, etc.), and donors. Sustainable financing of the future management is presented in more detail in the Chapter "Sustainable financing model."

To implement this option, it is necessary to create a legal basis for the board/committee and individual management, as these are currently not in place.

Management organigram

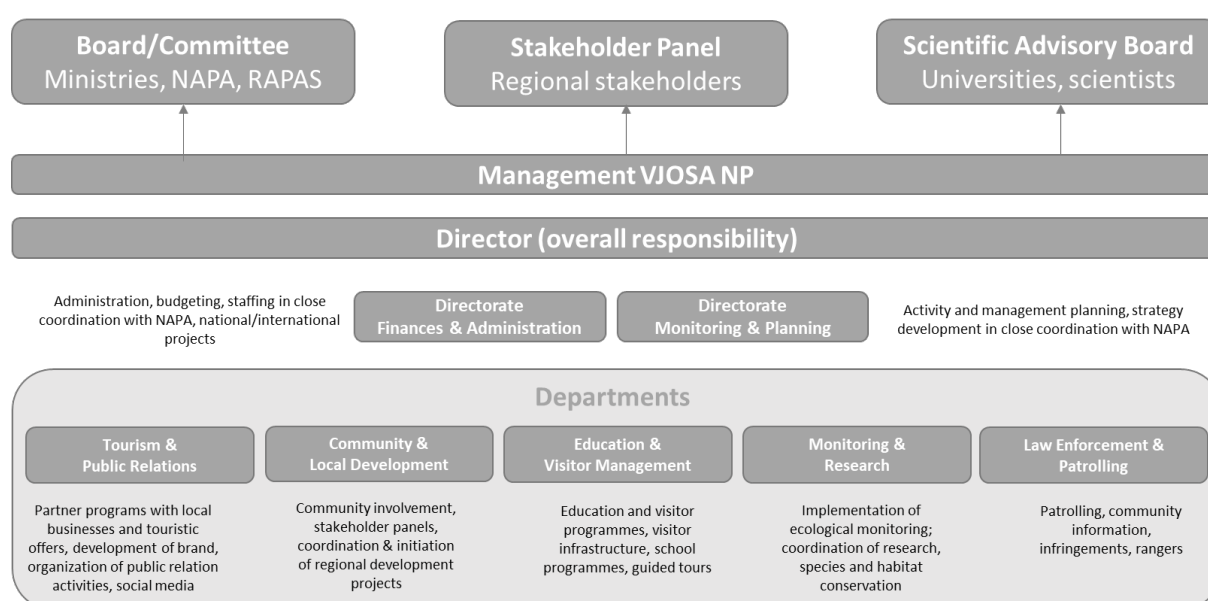


Figure 35: Management organigram

The management of the future VWRNP is organized on several levels and units capable of fulfilling the needs and tasks of a Category II National Park, according to the definition of the IUCN.

As shown in the figure above, the management is organized with a director, two directorates and five departments.

The director has overall responsibility for the National Park and its staff, and performs representational and lobbying tasks. He or she is also responsible for hiring staff and making final decisions on projects, budgets, and activities. The director also attends board/committee meetings and may be assisted by staff depending on the issues to be addressed at each meeting. Two directorates, Finances and Administration and Monitoring and Planning, operate to support the director.

Both directorates work in close cooperation with the director and NAPA, on the one hand, and the technical departments, on the other. This ensures that the technical aspects and expertise of the departments are taken into account when planning the new strategies and management approaches with NAPA, and vice versa.

Five departments in the National Park management are responsible for the technical implementation of the developed strategies and plans. Each department consists of experts and the department head responsible for the overall planning and implementation of tasks and activities.

The departments support the director, the directorates and the other departments with their expertise in preparing the management plan or other regulating documents that require specific knowledge. If useful, they may also be invited to participate in the regular meetings of the board/committee.

Another important responsibility of the departments is the initiation, development, application, and implementation of national and international (funded) projects within their field of expertise. The financial planning of the projects is done in close cooperation with the Finances and Administration Directorate. Projects must be consistent with the management plan and the existing national plans and objectives for national parks, protected areas, and nature conservation.

To ensure a comprehensive approach, the following departments will be part of the management of the VWRNP:

- Tourism and Public Relations
- Community and Local Development
- Education and Visitor Guidance
- Monitoring and Research
- Law Enforcement and Patrolling

For the VWRNP to function, all positions and structures shown in the organigram must eventually be implemented. To facilitate the establishment of the management, the number of staff can be decreased at the beginning and increased within the first three years.

Staff

For the implementation of management model as described in the previous chapter, sufficient personnel and expertise must be available and secured in the long term. The staff and the existence of the National Park must offer long-term prospects, employment and development opportunities (e.g., further education opportunities).

To facilitate the establishment of the management, three implementation steps have been developed to slowly increase staffing levels and ensure professional and orderly implementation of the defined management structures and tasks.

- Director (1st year)
- Heads of directorates and departments (1st year)
- Rangers (1st year)
- Accountants and experts (2nd and 3rd year)

Staff salaries should be covered by core funding that is secure for the duration of the National Park, and ideally funded by the government, as this ensures the greatest sustainability.

Additional staff can be covered by funded projects, depending on the expertise and skills required for each project.

Another possible source of staff can be the national and international volunteers. It should be noted that volunteers would usually not have completed their studies and/or not have a similar experience to that of the junior/senior experts. Therefore, they should be assigned tasks according to their skills and experience.

Infrastructure and equipment

To ensure the ongoing operations of the National Park management, technical equipment and visitor infrastructure are crucial and must be in place from the beginning (technical equipment), respectively, within the first years (most important infrastructure).

Technical equipment

Technical equipment (e.g., PCs, telephones, printers, vehicles, smartphones) ensures the operation of the management. All technical equipment must be in place within the first three months of operational work of the National Park. Otherwise, professional workflow is not possible.

Infrastructure

The (visitor) infrastructure is to be set up within the first years of the National Park's establishment. It is crucial to plan the infrastructure based on the existing data, meetings with stakeholders/decision-makers, and available funding opportunities. Additionally, several studies should be conducted (either by National Park staff or external experts) to ensure professional and technical planning of the Park's infrastructure.

In the first year(s), the offices of the National Park management will be rented, since the visitor center (including also offices for the staff) will not yet be available. The rented offices must be adequate for the number of staff and technical equipment needed to manage the Park.

Planned (visitor) infrastructure for the VWRNP within the first years:

- Information boards
- Visitor guidance system for the entire National Park
- Visitor center (exhibition, seminar rooms, offices)
- Visitor information points in communities/municipalities
- Rented office (for the first year(s) until the visitor center is built)

Budget

The VWRNP budget for the first three years has different cost categories that take effect in different years:

Operational costs are incurred annually and should be covered by the national budget

Investment costs are incurred selectively and should be covered by the national budget

Support financing includes pre- and co-financing costs for funding projects

Studies/plans/infrastructure can be financed by funding projects

		1st year	2nd year	3rd year
Operational Costs	Staff	10 644 480,00 Lekë	15 120 000,00 Lekë	20 813 520,00 Lekë
	Running costs	4 686 573,32 Lekë	5 526 732,00 Lekë	4 604 614,30 Lekë
	Maintenance of technical equipment	0,00 Lekë	891 010,80 Lekë	965 261,70 Lekë
	Maintenance of infrastructure	570 490,80 Lekë	834 519,60 Lekë	1 057 293,90 Lekë
	TOTAL OPERATIONAL COSTS	15 901 544,12 Lekë	22 372 262,40 Lekë	27 440 689,90 Lekë
Investment costs	Technical Equipment	28 222 439,19 Lekë	2 853 711,28 Lekë	1 826 513,52 Lekë
	External support	1 435 500,00 Lekë	2 200 000,00 Lekë	2 400 000,00 Lekë
	Infrastructure	3 889 710,00 Lekë	7 072 200,00 Lekë	0,00 Lekë
	TOTAL INVESTMENT COSTS	33 547 649,19 Lekë	12 125 911,28 Lekë	4 226 513,52 Lekë
TOTAL BUDGET VWRNP		49 449 193,31 Lekë	34 498 173,68 Lekë	31 667 203,42 Lekë
Support Financing		12 965 700,00 Lekë	14 144 400,00 Lekë	15 323 100,00 Lekë
Studies/Plans/Infrastructure (project based)		14 262 270,00 Lekë	236 918 700,00 Lekë	375 710 625,00 Lekë

Figure 36: VWRNP budget for the first three years

3.5.5 Legal implementation

The two options for implementing the proposed individual management for the VWRNP are:

1. VWRNP Protected Area Administration, established as an Agency or a Directorate under NAPA;
2. VWRNP Management Public Enterprise, established and founded as a State Limited Liability Company (SLLC).

3.5.5.1 VWRNP Agency/Directorate

Management form and supervisory responsibilities:

The DCM that will approve the designation of the VWRNP, based on Art.3(1), Art.8(2), Art. 38 (4) and Art. 38 (6) of the PA law, could determine the following:

- Management of the VWRNP shall be carried out by the VWRNP Management Authority, which will be established for this specific purpose in the form of a separate Unit subsidiary to NAPA;
- The organizational structure of the VWRNP Management Authority Unit shall be approved by the Instruction of the Prime Minister;
- The regulation for the internal functioning of the VWRNP shall be approved by the Instruction of the Minister;
- Supervisory responsibilities shall be upon the Management Committee to be established and functioning under Art. 41 of the PA law and DCM No 593/2018;
- In case of conflicts between the above provisions and any provisions of the existing by-laws, this DCM prevails.

3.5.5.2 VWRNP State Company

Management form and supervisory responsibilities:

The DCM that will approve the designation of the VWRNP, based on Art.3(1), Art.8(2), Art. 38 (4), Art. 38 (6) of the PA law and Art. 213 of the enterprise law, could determine the following:

- Management of the VWRNP shall be carried out by the VWRNP State Company (SLLC), which will be established for this specific purpose by NAPA, RAPA 1, RAPA 2 and RAPA 3¹;
- Its organization and functioning shall be defined by the enterprise law² and its Articles of Association (AoA) are approved as an annex to this DCM;

¹ Initial issued share capital could be the mid- or long-term (3- or 5-year) budget funds planned for the VWRNP by the involved RAPAs and NAPA.

² The enterprise law provides that the LLC is governed at a minimum by two bodies: (i) the Shareholders Assembly responsible for policy setting, monitoring and executive decision-making for certain issues of material importance; and (ii) the Administrator appointed by the Shareholders Assembly for a mandate up to 5 years with the right of renewal. The Articles of Association might provide for additional bodies (e.g., more than one Administrator, or an Advisory Board/Committee, etc.).

- Supervisory responsibilities shall be upon the Management Committee to be established and functioning under Art. 41 of the Law "On protected areas" and DCM No 593/2018;
- In case of conflicts between the above provisions and any provisions of the existing by-laws, this DCM prevails.

3.5.5.3 Transition period

As the legal adaptations of laws and decisions, and with that the establishment of the individual management of the future VWRNP, will take some time, the park operations team and the legal experts have discussed how to organize the management in this so-called transition period until the management of the VWRNP is established in legal terms.

It is to be noted that the presented proposals for the organization of the management during the transition period are not designed to be a permanent solution. This should also be stated in the declaration of the National Park to ensure proper management of the VWRNP as soon as possible.

Specifically, the organization of the management during the transition period will be developed according to the following points:

3. After the declaration of the Vjosa River as a National Park, its temporary administration will be managed by a Special Unit composed of experienced employees of RAPAs, who will be working full-time for the projects and will address issues that may arise from the management of Vjosa as a National Park. This way of management is laid down by the current provisions and regulations of the Law "On protected areas," as the management will be the responsibility of four RAPAs covering the VWRNP area.
 4. The Special Unit, as was stated above, can be established by an internal order of the Director General of NAPA, which will include details of the duties, powers, functions, and decision-making of the Special Unit, as well as any detail related to the needs of Management/Administration of the Protected Area, as if it were being administered by a new structure created for this purpose.
3. Management will be the responsibility of the Special Unit for as long as the appropriate institutional and legal infrastructure is not created to follow the form of individual management proposed as the best option.
4. In any case, it is estimated that, under the Law "On protected areas" and the by-laws enacted pursuant to it, the Special Unit created by order of the Director General can be technically supported by Albanian or foreign experts of various fields to cover technical aspects, which are not understood or cannot be resolved by the Special Unit. The costs for the Special Unit will as a rule be met out of the budget of RAPAs involved in the area declared a National Park, as well as donations that can be made in favor of these RAPAs, intended for investment or used for projects or plans for the Vjosa National Park.
5. Temporary management and administration, as was stated above, constitutes the traditional form of management of protected areas and therefore no legal or by-law

changes are required to implement this form of management. Meanwhile, if this will be the preferred option for management during the transitional period February 2023-January 2024, it will be necessary to prepare the Order of the Director General of NAPA in January 2023, to create the Special Unit and draft the tasks and mission.

3.5.6 Implementation steps

For the management of the future VWRNP, the following steps need to be taken before/immediately after the establishment of the National Park:

1. Decision on management and sustainable financing;
2. Secure long-term financing of the park;
3. Establishment of necessary structures and organization, depending on which management option is to be implemented;
4. Employment of staff and procurement of technical equipment and infrastructure;
5. Capacity training for the staff according to their needs and expertise;
6. Patrols in the VWRNP and information of locals and visitors about the NP and its goals;
7. Development of a logo and corporate design for the VWRNP;
8. Introduction of a visitor guidance system and information boards;
9. Application for funds to conduct the necessary studies and set up the visitor infrastructure;
10. Elaboration of a management plan (participative approach), including a business plan;
11. Elaboration of a monitoring plan;
12. Establishment of a partner program to involve local enterprises and organizations in the VWRNP management;
13. Evaluation and revision of the management plan and activities after five years.

3.6 Sustainable tourism – a summary

This section represents a strategic overview of sustainable tourism development within the process of establishing the VWRNP, combining the work of several experts. It contains a vision, an overview of top sites and activities, future potential, and key next steps.

3.6.1 Vision and goals

The primary goal is to establish a National Park in accordance with the IUCN standards for a Category II National Park, where the main management objective is the protection of natural biodiversity with a series of outstanding natural features, support of natural processes and promotion of recreation and education (Sovinc, 2021). With this in mind, the vision for the development of sustainable tourism is as follows:

The vision for sustainable tourism development:

Tourism in the Vjosa Wild River National Park is developed in an environmentally, culturally and socio-economically sustainable way that both meets the IUCN standards of protection and improves the lives of the communities in the Vjosa River Basin.

Goals:

- 1) Build a diverse portfolio of activities and sites distributed throughout the Vjosa River Basin that will provide sustainable economic opportunities for local communities and tourism businesses;
- 2) Increase conservation and education efforts to maintain a mutually beneficial relationship between locals and nature;
- 3) Increase the number of visitors and the length of their stay, and encourage year-round visitation by offering high-quality experiences;
- 4) Increase the number of local tourism businesses in the Vjosa basin area;
- 5) Invest in Infrastructure (waste management, transport management, visitor management, reforestation) that work hand in hand not only to a controlled increase in tourism to:
 - Enable local communities to become self-sufficient through sustainable growth opportunities in the tourism business;
 - Support the public health of local communities;
 - Improve the pride and well-being of local people;
- 6) Address the exodus of Albanian youth from villages to cities, as well as the exodus of young people from Albania as a whole, by providing economic and sustainable business development opportunities;
- 7) Become a lighthouse model that can be used by the international community, thereby firmly establishing Albanian leadership in the field.

The key is to set up the right structure that will control the type of visitor engagement with the river, and provide information to visitors that improve their understanding of the conservation effort.

A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis helped to identify key themes that were considered through the development of sustainable tourism in the Vjosa basin, including potential growth areas and opportunities for improvement.

Strengths	Weaknesses
<ul style="list-style-type: none"> • The Vjosa basin offers a diverse range of ecosystems; it is one of the last large free-flowing river systems in Europe with several amazing natural features that make it attractive to a variety of visitors. • It includes two UNESCO World Heritage Sites of outstanding cultural value, two National Parks, several other protected areas and a rich diversity of cultural, historical and archaeological sites and intangible cultural assets. • It is an iconic landscape that offers a variety of activities that are attractive to a wide audience. • Existing telecommunication in the Vjosa basin enables information exchange and navigation. 	<ul style="list-style-type: none"> • The current tourist season is limited to the warm half of the year only, which creates challenges for tourism businesses to achieve adequate returns on investment. • Housing infrastructure in the existing settlements or campgrounds is inadequate and poorly managed. • Roads outside the main corridor along the river are in an inadequate condition, parking infrastructure is not developed, there is little public transportation, and the trail network is not well developed and maintained. • Waste management and wastewater treatment are inadequate and threaten the natural qualities of the region.
Opportunities	Threats
<ul style="list-style-type: none"> • Promote visitation to several recently little-known areas in the region and enhance the visitor experience. • There is high-value international demand for traditional local community cultural experiences. • Marketing and providing experiences to increase the length of stay and spending to include all four seasons. • The Aoös/Vjosa River Basin offers opportunities for the development of cross-border tourism. 	<ul style="list-style-type: none"> • Pollution, including direct waste and pollution of land and water, threatens biodiversity, as well as health, and reduces the attractiveness of the landscape. • Extensive uses of natural resources, including mineral and water extraction and locally excessive mass tourism. • Mass tourism in the Vlora Delta and Lagoon region may adversely impact the natural values of the delta.

3.6.2 Current sites and activities

In 2019, there were 6 million tourists in Albania, of which 160,000 visited Gjirokastra and over 25,000 visited Përmet, two of the key cities along the Vjosa River. The numbers are also increasing for Tepelena and Vlora, while the total number of tourists, who passed through Vlora in 2019, was estimated at around 1 million. In Gjirokastra, about 30% of the income comes from tourism, and the weight of this sector is equally important for Përmet and Vlora.

Based on a study visit and a desk review there were:

- 12 key nodes were identified as starting points for the existing activities, which included Përmet, Gjirokastra, Tepelena, Vlora, Këlcyra, Memaliaj, Berat, Fier, Dropull, Libohova, Mallakstra, and Selenica.
- 12 different types of existing tourism: adventure, ecotourism, nature, cultural, religious, archeological, urban, culinary, historical, balneary (thermal baths), agrotourism and some mass tourism, of which not all are appropriate for development inside the National Park.
- In total, there were 41 activities listed within 34 sites. The lower section of the Vjosa basin is the most developed in terms of offerings.

For a full report and description of the sites and activities, please see the full report from pages 12 – 43; however, here are the key highlights of current tourism activity in the Vjosa basin:

Inside and adjacent to the new National Park

- Priority activities: 1. Rafting, 2. Camping, 3. Culinary (Përmet, Tepelena, Vlora), 4. Hiking, 5. Swimming.
- Priority sites: Gjirokastra, Nemërçka Mountain Range, Këlcyra Gorge, Narta Lagoon and Sand Dunes, Nivica Canyons and Waterfalls, Petranik Cave, Ruins of Ali Bey Këlcyra Palace.

Upper Vjosa basin section

- Priority activities: 1. Trekking, 2. Biking, 3. Camping, 4. Rock-Climbing, 5. Culinary.
- Priority sites: Bënja Thermal Baths, Langarica Canyon, village of Leusa, Sopot Waterfall including village of Stërmbec, central area on the National Park of 'Bredhi i Hotovës', including village of Frashër and the museum house of the poet and patriot FRASHËRI brothers .

Middle Vjosa basin section

- Priority activities: 1. Hiking, 2. Attending festivals, 3. Agrotourism, 4. Canoeing, 5. Climbing (Nivica Canyon).
- Priority sites: Amantia archaeological site, Nivica Canyons and waterfalls, Shushica River, Peshtura Waterfall, Lekli Castle.

Lower Vjosa basin section

- Priority activities: 1. Birdwatching (Narta Lagoon, etc.), 2. Cultural sites visit, 3. Camping, 4. Culinary experience, 5. Hiking.
- Priority sites: Narta Lagoon – Salina, archaeological parks: Apollonia and Bylis, Pishë-Poro forest, Vlora city, Adriatic Sea beaches, River Delta, Narta Sand Dunes.

From the inventory of the existing activities, currently there are extremely limited occurrences of what would be defined as an ecotourism activity. This is where money from tourism contributes to protecting conservation, benefits local communities, and where nature interpretation is taking place.

The current offerings are undervalued and not optimally placed along the length of the basin. They have the potential for sustainable business development, but there is no central site for visitor management or education. In addition, there is a need for waste management and cleaning, reduction of minerals extraction and aquaculture, reforestation and improved general infrastructure.

3.6.3 Future sites and activities

3.6.3.1 Approach to future tourism development

Because the preservation of the river and its biodiversity are the priority, developing activities on and around the National Park boundaries should differ based on location and type of human interaction. For example, cultivating additional opportunities for kayaking industry growth on the middle portion of the river may be advisable; while the opposite approach to implementing controls for the rafting industry in the upper section is the priority.

Vjosa's many natural wonders should be protected through tourism that celebrates its beauty with sustainable human interaction. This section identifies approaches to the sites and activities to which they should be applied.

Approach One: Lessening the environmental impact of current activities through increased regulations and licensing.

Approach Two: Investing in pollution and waste management and development of educational, low-impact activities in and near the Park. This would include capacity building of small, locally-owned businesses and training to create a well-qualified and certified group of future industry professionals in both sustainable tourism and hospitality industries.

Approach Three: Managing a steady increase in tourist visits while proactively controlling human impacts as the number of tourists increases.

As part of the feasibility study, an online survey was conducted, which was answered by eight National Park representatives in Austria, Estonia, Finland, Germany, and Poland. It provided valuable insights into the activities, impacts, restrictions, funding, and opening times. Here are the key learnings based on that research:

- Visitor numbers and areas: restrictions will be needed to protect the key resource of why people would come; better protection = better visitor experience = longer stays = better income per person.
- Diversification of offers is needed: to take out the expected visitor pressure from the core protection zones. Managed visitor flows → with more choices → less competition over price → quality over quantity.

- Infrastructure, e.g., trails and their maintenance: This should reside in local ownership and/or be contract-based.
- Creation of a Vjosa thematic long trail for hiking and cycling: This can take away pressure from the river (while being a pull factor, like the Peaks of the Balkans, Via Dinarica, and High Scardus Trail).

3.6.3.2 Recommendations for a specific site and activity development

A key step is to better define and connect the diverse offerings within the area further into sustainable tourism concepts, and put a higher value on them that can significantly increase the pricing. The aim is to keep visitors longer within the area and spend more money.

It will be important to put more effort into developing the upper and middle Vjosa basin, but limit and change offerings in the lower Vjosa basin to avoid mass tourism developments.

The sustainable tourism destination should have urban hubs from which all the major regional activities begin. A hub is an urban location that is high-density and offers all the amenities like restaurants, cafés, grocery stores, museums, tour operators, health services, etc. These hubs also act as gateways to the natural world. For the Vjosa Wild River National Park, we are proposing four hubs:

- Përmet and Gjirokastra for the upper section of the Vjosa River basin;
- Tepelena for the middle section;
- Vlora for the lower section.

The potential "STARS" or highlights (sites - activities - infrastructure) that have been identified within the Vjosa basin are as follows:

- 1) Wildlife conservation tourism (Birdwatching - Sea Turtles - Mammals; citizen science and volunteering activities with highly specialized tour operators).
- 2) Twenty Villages: Agro-ecotourism and rural sustainable tourism experiences, including culinary (examples, see Montenegro's Rural Tourism Association). Twenty of the "100 Villages" program (launched by the Albanian Government in 2018) are located in the Vjosa basin, and are recommended to be marketed as rural tourism experiences that combine cultural heritage with agrotourism. Each village has its beauty and offerings, and we would like to write about four of them, which surround Përmet, namely Leusa, Kosina, Malëshova, and Peshtan.
- 3) Canoeing/Kayaking/Paddleboarding: According to IUCN requirements, this is to mainly take place in the middle section of Vjosa and near the delta.
- 4) Horse riding: Offers must be animal welfare-oriented, the experience level of riders checked in advance, safety-security-health of both people and horses taken care of.

- 5) Cycling: Different target groups between trekking and cycling (longer distances and stays); connecting to EuroVelo 8 / Adriatic Seaside, mountain biking and E- biking - suitable for tours and to experience local trails, starting from and returning to the same place. Ideally, the feasibility of the road network of the Vjosa basin, connecting also across the border with Greece and North Macedonia (Ohrid and Prespa), would be researched and mapped with cyclo tourism expertise, connecting villages and avoiding car traffic.
- 6) Rock climbing: More eco-friendly; sites should be carefully selected in order not to disturb the natural biodiversity and processes and requirements to map and propose.
- 7) Camping - including mobile homes and "van life": Camping anywhere, anytime, for free must be stopped; support and education to existing family small and medium enterprises (SME) provided; introduce Scenic Routes of Albania in the context of a payable camping offer; promote all other months, not July and August.
- 8) Ecolodges / Eco-Glamping: Eco- and socially-friendly visitor accommodations. There is a great opportunity to eco-upgrade the accommodation offerings in the Vjosa basin and introduce the concept of ecolodges and eco-glamping.
- 9) Guesthouses: Rural guesthouses are often owned and operated by local members of the community and serve as a jumping-off point for hiking and agrotourism. Women were cited as among the principal operators of these businesses, too. The Government needs to help all of these guesthouses to be legally registered, which makes them more attractive to be included in the tour operators' itinerary as accommodation.
- 10) Visitor Center: A signature, easily accessible Center, which is strategically located. The Visitor Center should be open and accessible all year long. The Center would ideally have a standing exhibition and changing exhibitions that talk to all 5 senses, provided that there is sufficient ongoing funding to manage it. Thematic events also can be offered involving local citizens to help make it "their" Park. The Visitor Center should be a place where visitors can stay longer in bad weather.
- 11) Information Centers: These centers are spread out throughout the Vjosa basin. Two currently exist in Përmet and Gërokastra. Information includes the web, leaflets, information points in the field, rangers in the field, information about the NP (plants, geology, protective measures), guided tours, regional development, etc.
- 12) Stargazing (guided): Very low intervention and quiet type of activity for more mindfulness - see <https://www.visitdarksides.com>. Most parts of the Vjosa area are free of light pollution.
- 13) Festivals: Saze is a traditional music style that can only be found in Southern Albania, in Përmet and Kolonja. Here, live performances/ shows can be prepared for tourist groups at restaurants or hotels. This involves fairly minimal product development, which can add more visibility to the overall cultural

offer. The BBC has made an important short film on Saze music, and among Albanians the Gjirokastra region is known for this traditional music. It is unclear how well international tourists are aware that Përmet is the birthplace of this style, but with appropriate branding the city could build on this.

3.6.4 Initial views on income potential

It was not possible in the time available to analyze the income potential of the Park as it was necessary, first, to understand what was there now and how it would need to be changed to generate more income. That being, the project team has tried to provide a few thoughts that can serve as the basis for future work.

3.6.4.1 Number of tourists

There was significant concern on behalf of the expert group about increasing the visitor numbers to 'high' and to 'rapid' - and the resulting damage that would do to the Park. There are multiple examples across Europe and the Balkans, where high visitor numbers have hurt nature and resulted in poor visitor experiences and fewer repeat visits. Thus, it will be important to determine the "carrying capacity" of the Park, in other words, how many visitors can be managed in key locations along the river basin without harming nature.

There are several benchmarks from other Balkan countries that provide a sense of scale:

- (Currently, the number of visitors to Vjosa ranges from 160,000 in Gjirokastra to over 1 million in the Vlora Bay (Narta – Orikum, including Sazan and Karaburun Peninsula)
- Triglav National Park in Slovenia has 2.5 million visitors a year
- Plitvice Lakes National Park in Croatia has 1.8 million visitors

Research from the USA National Park Service suggests that there the "National Park" brand, with its higher levels of protection, will drive a +20% increase in visitor numbers in 10-20 years.

3.6.4.2 Income to local communities based on goods and services

There was very little data available on the value of goods and services provided in the Vjosa basin area currently. However, it is not unreasonable to expect that local businesses will be able to offer more premium food, products and services as the visitor experience improves.

As mentioned above, there is a significant opportunity to better shape and connect the diverse offerings across the basin so visitors stay longer and spend more money. Research suggests that, if this is done, there is an opportunity to increase pricing up to 10 times if compared to mass tourism pricing (i.e., in Europe, for example, mass tourism pricing \$100 per person, adventure traveler \$2,500 per person, p. 80 of the main ecotourism report).

3.6.4.3 Income from tourist fees

The following estimates were made by the project team, based on Gjirokastra, the most popular destination (excluding Vlora), and charging a fee at the hotels and managed campsites. As collection costs are high it is recommended to change the law to allow the VWRNP to charge more, and to potentially differentiate fees between foreigners and locals. These fees would ideally be put toward ecotourism costs.

Note that these fees are substantially lower than for the other National Parks as there is no single entrance point (planned) to collect.

	Current visitors / current official charges	Increasing charges	Increasing visitors by +10%	Increasing charges for foreigners (30% x 3 euro)
Gjirokastra visitors	160,000	160,000	176,000	176,000
Visitors per room	2	2	2	2
3 nights per visit (assumption)	3	3	3	3
Fee per room per night (euro)	0,40	1,00	1,00	1,60
Total	96,000	240,000	264,000	422,400
Share local authorities (50% assumption)	48 000	120 000	132 000	211 200
Total for Park Conservation	48 000	120 000	132 000	211 200

3.6.5 Key next steps for the development of sustainable tourism

On the next page is shown a table outlining the key next steps for ecotourism development in the National Park.

RECOMMENDED ACTIVITIES FOR 2023 (the transition year of the VWRNP implementation)	RECOMMENDED ACTIVITIES 2024 – 2028 (a phase of making the VWRNP fully operational)
Infrastructure developments <ol style="list-style-type: none"> 1) Waste and garbage removal, and the establishment of a continued management system. 2) Develop a Traffic and Transportation Management Plan: The only way to reach Vjosa is by car. An increase in available 	Infrastructure development: <ol style="list-style-type: none"> 1) Building Visitor Center and information points, roads and access, waste infrastructure if still needed. 2) Concept and plan for digitalization of the Park and its

<p>parking areas may also be needed. Assess locations for parking; including: 1) potential places to add parking, and 2) areas at risk of visitors parking freely, where the risk of damage to Vjosa is probable. Determine capabilities to expand public transportation with buses.</p> <ol style="list-style-type: none"> 3) Conceptualize, find funding, and prepare for building the Visitor Center and information points. A Site Selection study is needed to locate the Visitor Center, Information centers, accommodation, park staff infrastructure, etc. 4) Standards for camping facilities: identified campsites should receive both infrastructure investment and regulatory expectations for operations. Invest in basic sanitation on all campgrounds on or near the Park. 5) Define and map cycling and hiking trails. 6) Reforestation. 	<p>operations: digitalization of the area, offerings, sites, visitors. This is considered as a key improvement that can help with the management of the area, branding and marketing, and education.</p>
<p>Park operations and regulations</p> <ol style="list-style-type: none"> 1) Work with science and conservation experts in Albania to determine ideal traffic levels for the various areas in the Park, dependent on vulnerabilities or threats to nature. 2) Work with Albanian national and municipal governments to define regulations for park activity managed by government staff (i.e., rangers and guides), and access for both private tourism companies operating tours within the Park. 3) Identify staff needed and begin training of Park rangers. 4) Build capacity for other Park services staff via training and certification. 5) Determine the requirements for private tour guides operating within the Park, and ensure existing guides are meeting those standards. 6) Tour plans: regular guided tours by foot and by boat downstream of Tepelena, start in spring 2023, by external experts, e.g., NGO representatives. These guided tours should also include tributaries. To support these Albanian guides, experienced NP rangers, e.g., from Austria 	<p>Park operations and regulations</p> <p>Implement operations plan.</p>

could come to Albania; possibly as part of a "twinning project."	
Development of offerings <ol style="list-style-type: none"> 1) A holistic sustainable physical Master Plan that integrates biodiversity conservation with sustainable tourism, and includes Park staff infrastructure, etc. Having in mind full year-around offerings developments. 2) Investment in new ecotourism exploration: develop programs for investors in new tourism businesses near the Park that require reinvesting in the Park, as well as adhering to environmentally sustainable practices. Program should give priority to projects that are local, and plan for sustainability and conservation. 	Development of offerings <ol style="list-style-type: none"> 1) Certifications of green destinations as part of development and recognition. 2) National recognition and award system for the best experience tourism developers, providers.
Quantify the financial benefits of the Park and the new tourism offerings <ol style="list-style-type: none"> 1) Research (with surveys, etc.) what the park fees should be and how they can be collected. 2) Quantification of the financial benefits, for the local community and the Park. 	
Visitor management <ol style="list-style-type: none"> 1) Plan data collection – what, where and why to start preparing and defining the process. 2) Signposting of the area (including the conceptual study, corporate design, and preparation of the contents). 	Visitor management <ol style="list-style-type: none"> 1) Organizing international exchange and learnings on destination management, experience. 2) Digitalization.
Stakeholder engagement <ol style="list-style-type: none"> 1) Workshops that communicate and co-create new guidelines and new messaging for the area. 2) Focus on agricultural owners and how they can develop within the transformation. 3) Events where ideas on future developments for offers can be co-developed. 	Stakeholder engagement <ol style="list-style-type: none"> 1) Communication of brand and story. 2) Regular and on-going community engagement and feedback mechanisms developed.
Concept, story and brand	Concept, story and brand

<p>1) Create once the portfolio priority activities and sites are decided upon, based on the IUCN PA Category II standards and evaluation of the inventory of the natural and cultural values and sites. Build in short and long term, and include it in stakeholder engagement workshops.</p>	<p>1) Communications, materials, workshops for getting everyone on board (management, government, operations, locals offering and locals living in the area).</p> <p>Think of smart ways to promote – within the concept of sustainable tourism</p>
<p>Educational outreach:</p> <p>1) Training for rangers 2) Stakeholder workshops</p>	<p>Educational outreach</p> <p>1) On-going training for rangers 2) Trainings for people to advance their offerings 3) Digitalization workshops</p>
<p>International funding:</p> <p>1) Identify international funding opportunities and make applications for priorities, including:</p> <ul style="list-style-type: none"> ○ Infrastructure and waste removal, ○ Capacity-building of new workforce, ○ Reforestation. 	<p>International funding:</p> <p>1) Digitalization 2) Education 3) Other projects</p>
<p>Marketing, sales, communications</p> <p>1) Proactive local communications campaign for positive ownership.</p> <p>As some of the new rules and regulations can be expected to create confusion or resistance, proactive campaigns should be developed to inform and address potential issues (example, stop camping anywhere anytime, for free).</p> <p>2) Prepare a plan on marketing for 2024 – 2028, which, for example, advertises locations with the best-established infrastructure, and minimize advertisement of the locations with the most vulnerable biodiversity and/or the most significant infrastructure issues in pollution, sanitation, road access, and trash removal.</p>	<p>Implement communications and marketing plan.</p>

3.7 Sustainable financing model – a summary

This section is prepared by the Sustainable Financing expert, Guillaume Le Port, *BlueSeeds*, with contributions by Ina Janushi (national expert), and Elvana Tivari and Elvis Tosuni (legal experts). A summary of the full report prepared by the experts is integrated here, while the full report can be found as an annex to this study. References to this section can be found in the related annex.

3.7.1 Main sources of sustainable funding for the National Park

Sustainable funding of the VWRNP conservation activities is a key element to make sure management objectives will be achieved over the years. The opportunity to evaluate the best funding options available for the VWRNP in the future is to anticipate and prepare the most relevant funding system for the National Park, and reduce the risk of a funding gap. The current funding scheme for protected areas in Albania is already well-structured and soundly operating, but could be optimized for more efficient funding management for the future VWRNP. Most likely, funding of the VWRNP will follow a blended approach, with the main sources of funding consisting of:

- Public budget from the Albanian State, that should always be covering at least the basics of operational costs, especially salaries. Most funding sources for protected areas so far, based on a project-wise approach, provide mainly investments or funding for very specific activities. Long-term coverage of operating costs (salaries, running costs) is the basis for sound management of the VWRNP. Those costs should always be covered by the (public) state budget. Not only does it give the capacity to management staff to focus on conservation objectives achievement, but it is also a very positive sign to public and private donors; strong commitment from the Government to the National Park will only reassure them and convince them even more to fund the VWRNP.
- Official Development Aid (ODA) for at least one large project from a major development organization, such as KfW, AFD, or the EU, should be sought to support priority investments in large infrastructure. Especially the development of a transboundary cooperation project with the Vikos-Aoös National Park in Greece could be a good starting fund for capacity building and the first implementation of concrete activities in 2024.
- Smaller grants projects to support additional investments (from private foundations and/or other international public sources). Especially the implementation of a transboundary INTERREG project with Greece, starting in 2024, for a global envelope of 1M€, should be quickly assessed.
- Potential collection of fees inside the VWRNP boundaries, if and only if (i) evolution of laws allows it, (ii) the economic cost/environmental cost/VWRNP benefit ratio is in favor, and (iii) fees are only considered as a minor share of the overall budget. Revenues generated from those fees could be used for emergencies or very specific activities. If this source of funding were to be used, it would most likely not be immediately operational.

- Payment for ecosystem services: this innovative way of funding conservation activities could be assessed in the coming years, as some preliminary studies have already been conducted in Albania for the Bovilla watershed, for example.
- Vjosa-Aoös Nature Trust: in the coming years (not before 2028), a Nature Trust could be implemented to increase the financial resilience of the National Parks protecting Vjosa on both sides of the border. This type of funding vehicle is a sustainable way of providing long-lasting funding for operating costs or punctual investments, thanks to the development of an endowment fund. However, this kind of structure is very specific in its governance and implementation process, and can take several years to be operational. Looking to engage already existing Nature Trusts for the funding of the VWRNP should also be considered before the development of a new structure. A Nature Trust can be replenished by a different type of donors, but can also be used to channel carbon funding towards conservation activities in the VWRNP, for example.

3.7.2 Scenarios of the VWRNP funding scheme

In general, the origin of funding for the management activities of the VWRNP and the chosen funding system will evolve according to the different phases of a national park.

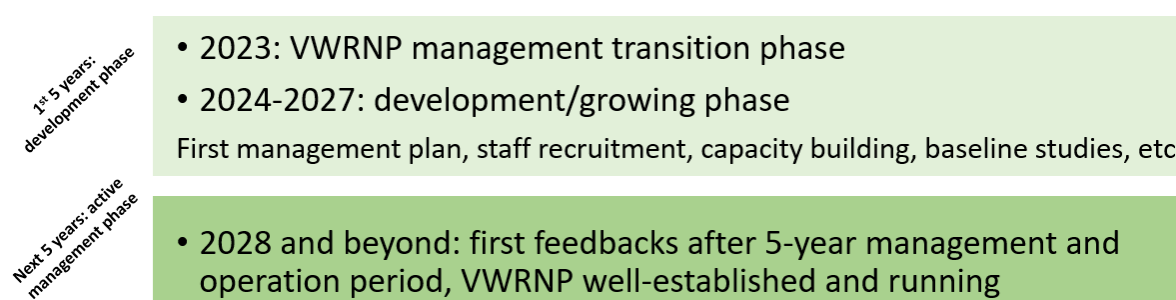


Figure 37: VWRNP development phases

According to discussions with experts and the Steering Committee, the most relevant scenario is the following one:

3.7.2.1 Transition Phase: 2023

For 2023, the funding hypothesis is based on two hypotheses extrapolated from the Park Operations minimum 2023 management scenario, to provide a range of costs:

- a. Only NAPA costs (operational and investments) are considered, which represents the low range of all three scenarios. It means that all other main investments and project-based expenses for the development of the VWRNP management authority should be made starting in 2024 instead, which only shift the investments a year later.
- b. Additional preparatory costs are planned for 2023. During this period, the VWRNP will not be operational, as there are no funds allocated for its management in the 2023 state budget. To best prepare the start of operations by the future management authority as early as 2024, a special working team (hereafter referred to as the Task Force) should be established within the MoTE to deal with

the preparation of the future VWRNP activities and management. During this period, some funds should be granted to the Task Force to prepare additional strategic and operational work (e.g., preparation of the Interreg project application, changes in the legal basis for the implementation of the governance model for the VWRNP, preparation of the budget to be included in the next state budget no later than July/August 2023, selection and training of the future Park staff, purchase of the necessary equipment, basic investments to enable the operation of the Park, etc.). Three scenarios of financing sources are presented, highlighting what could be the lowest, medium and highest requirement from the MoTE/NAPA budget (state budget already budgeted and granted) for 2023, depending on quick capacity to access other fundings in the coming months.

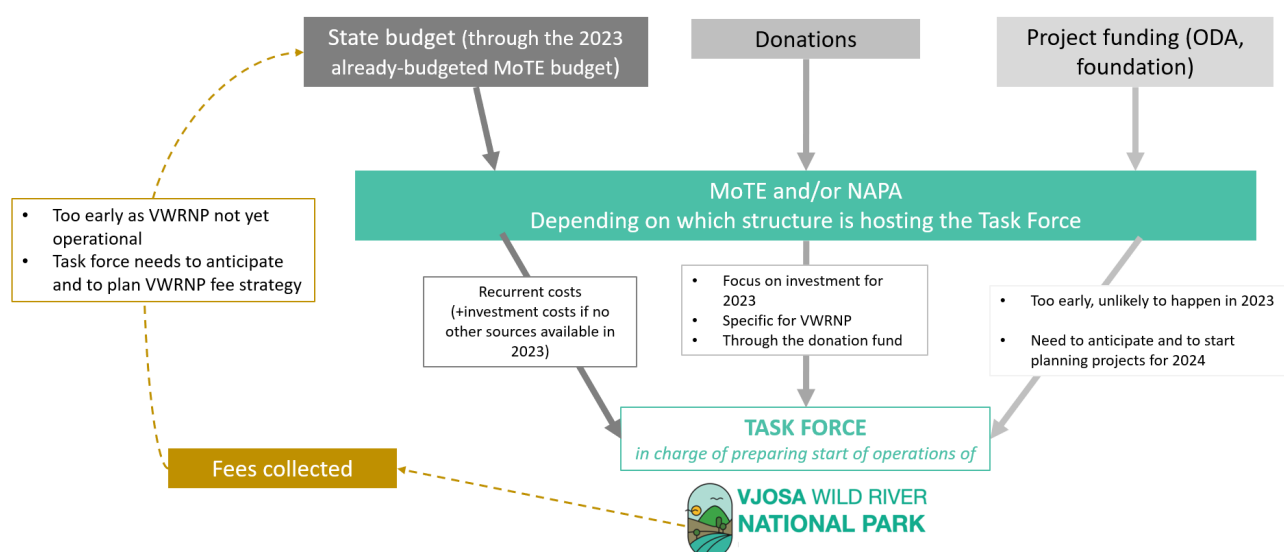


Figure 38: VWR NP 2023 transition year funding scheme

Based on the Park Operations minimum 2023 management scenario (only NAPA costs) and the need to have some preparatory activities conducted by the Task Force, the 2023 needs are estimated around:

2023 needs	
Total	77,406 €
	9,000,698 Lekë
incl. Operational costs	18,158
	2,111,395 Lekë
including investment costs	59,248
	6,889,302 Lekë

For 2023, 3 scenarios, depending on the availability of funding sources other than the state budget, are proposed.

If no other sources than the state budget are available in 2023, according to: (i) the public budget available, and (ii) political will, some prioritization of expenses for 2023 could be done, and some investments planned initially in 2023 could be transferred to 2024. It is important to keep in mind that these scenarios are based on the Park

Operation optimal management calculations. Depending on the amount MoTE/NAPA can provide to best prepare 2024 start of operations, some of those costs might increase (especially, it could be considered to anticipate some investment costs planned in 2024). Most likely, the minimum assumption of an annual cost of 77,406 € should be supported by MoTE/NAPA.

	Low scenario		Medium scenario		Best case scenario	
	€	Details	€	Details	€	Details
State budget	77,406	Cover all 2023 expenses	38,379	Cover operational and investment costs of 2023	18,158	cover operational costs most likely in the first place
Donation	0	No donations available in 2023	39,027	Available only for project-based costs as stated in the Park Operation report	59,248	Including investment costs + project-based costs assimilated here to investment as well to ease the scenarios
Project funding	0	It seems unlikely to start a several-years project in 2023, as: a) A project has to be built according to conservation objectives that still have to be designed; b) A project proposal has to be written and submitted; c) The project proposal needs then to be reviewed and approved upon by the structure it has been submitted to; d) Then the project starts officially, sometimes several months after.				
<i>Chances</i>		<i>HIGH</i>		<i>MEDIUM</i>		<i>LOW</i>
TOTAL 2023	77,406 €					
	9,000,698 Lekë					

Main recommendations for 2023

1. As soon as possible, secure the first donations for 2023/2024.
2. If not possible, prioritization at the decision-making level of priority investments (especially for investments required in 2024 in optimal management scenario) according to the budget available.
3. Donation fund: It is a fund regulated internally by NAPA, according to the Law "On protected areas," which is operative and accessible at any time. Meaning that if any donation happens during 2023, the donation fund will be activated only and namely by the VWRNP.
4. Make law modifications necessary related to the Special Fund addressed in DCM No 19: It can be accessed as a financial mechanism to be used by the VWRNP, but it needs a change in its definition/description. The change addresses a broader scope (field of activity), as per our needs (special counter for the VWRNP), possible to use it for the VWRNP funding in 2023 if other sources are not sufficient/mobilizable.

N.B: For the two other periods, only optimal scenarios of funding will be displayed.

3.7.2.2 Implementation phase: 2024-2027 period

From 2024, the VWRNP management authority is fully operational. State participation in the VWRNP budget is reinforced by additional sources, whose integration in the 2024 budget must be anticipated and prepared as early as 2023.

All fundings, except public national ones, go directly to VWRNP

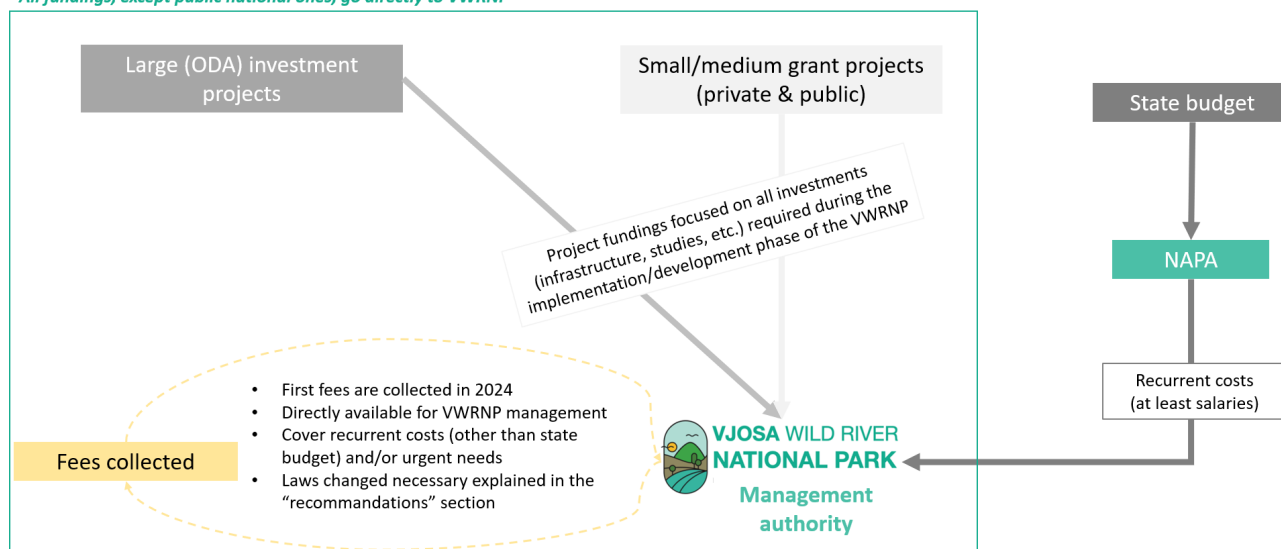


Figure 39: VWR NP 2024-27 operational period funding scheme

	Operational costs		Investment costs		Project-based costs		TOTAL
	Amount	Details	Amount	Details	Amount	Details	
State budget	135,163€	State budget still covers operational costs	285,155€	First year of operations, State budget covers all first investments	0€	State public budget need to offer some matching funds to secure ODA and project-based funding.	420,318
	15,901,544 Lekë		33,547,649 Lekë		0 Lekë		49,449,193 Lekë
Several small/medium Grants Project funding or start of INTERREG	0€		0€		122,656€	A lot of baseline studies need to be conducted in 2024, they can be covered by project-based funding completed with matching funds from the State	122,656
	0 Lekë		0 Lekë		14,262,270 Lekë		14,262,270 Lekë
TOTAL 2024	135,163 €		285,155 €		122,656 €		
	15,901,544 Lekë		33,547,649 Lekë		14,262,270 Lekë		
			542,974 €				
			63,711,463 Lekë				

	Operational costs		Investment costs		Project-based costs		TOTAL
	Amount	Details	Amount	Details	Amount	Details	
State budget	178,950€	State budget still covers operational costs minus some costs covered by fees collected in the Park	24,256€	State budget still covers around a third of investments...	123,162€	State public budget need to offer some matching funds to secure ODA and project-based funding.	326,369€
	21,052,999 Lekë		2,853,711 Lekë		14,321,205 Lekë		38,227,915 Lekë
Small to medium project based funding (private or public) INTERREG	0€		78,814€	... while the rest of investments start to be covered by project-based fundings	363,405€	A lot of baseline studies need to be conducted in 2024, they can be covered by project-based funding completed with matching funds from the State	442,219€
	0 Lekë		9,272,200 Lekë		42,256,395 Lekë		51,528,595 Lekë
Large ODA investments	0€		0€		1,550,933€	ODA can cover the development of infrastructure, which represents in 2024 mainly the construction of the visitor centre	1,550,933€
	0 Lekë				180,341,100 Lekë		180,341,100 Lekë
Natural resources use fees	9,771€	First attempt in 2024 to experiment tourism-based fee revenues across hotels in major touristic destinations in Vjosa. Rerepresents 5% of operational costs in the first year.	0€		0€		9,771€
	1,149,530 Lekë		0 Lekë		0 Lekë		1,149,530 Lekë
TOTAL 2025	190,164€		103,070€		2,037,500€		
	22,372,262 Lekë		12,125,911 Lekë		236,918,700 Lekë		
			2,330,735€				
			271,416,873.68 Lekë				

During the first year of operations, the state budget is fully supporting the implementation of the VWRNP. In 2025 and 2026, a lot of large investments are expected. It is assumed here that, when covering a specific need, project-based fundings and ODA only cover 85% of it, while the matching fund to cover the cost needs to be covered by the State. Once again, this approach at the very beginning

of the Park shows the strong commitment of Albania to Vjosa, and can facilitate the attraction of donors looking for matching governmental funds. The option of using matching funds from other sources could be assessed as well.

	Operational costs		Investment costs		Project-based costs		TOTAL
	Amount	Details	Amount	Details	Amount	Details	
State budget	216,054€	State budget still covers operational costs minus some costs covered by fees collected in the Park	0€	The few remaining investments in third year are covered by projects	188,165€	State public budget need to offer some matching funds to secure ODA and project-based funding. However, additional matching funds are found and the % of matching from State decreases (5%)	404,218€
	25,418,134 Lekë		0 Lekë		21,879,619 Lekë		47,297,753 Lekë
Small to medium project based funding (private or public)	0€		35,925€	Some minor investments are covered by projects	522,680€	A lot of baseline studies need to be conducted in 2024. they can be covered by project-based funding completed with matching funds from the State	558,605€
INTERREG	0 Lekë		4,226,514 Lekë		60,776,719 Lekë		65,003,232 Lekë
Large ODA investments	0€		0€		2,520,267€	ODA can cover the development of infrastructure, which represents in 2024 mainly the construction of the visitor centre	2,520,267€
	0 Lekë		0 Lekë		293,054,288 Lekë		293,054,288 Lekë
Natural resources use fees	17,192€	With the implementation of the sustainable fee strategy, fee budget share increases in the operational budget (10%)	0€		0€		17,192€
	2,022,556 Lekë		0 Lekë		0 Lekë		2,022,556 Lekë
TOTAL 2026	233,246€		35,925 €		3,231,111€		
	27,440,690 Lekë		4,226,514 Lekë		375,710,625 Lekë		
			3,500,282€				
			407,377,828 Lekë				

In 2026, operational costs and investments stay at the same level and should be funded in the same proportion by the State and the projects, while project-based infrastructure development rises to reach 3 million euro (2 million in 2025). It is assumed that in 2026, and until 2027 (the first five years of the VWRNP existence), project-based activities will be covered by ODA and donations, with a matching contribution from the State.

Every year, we can expect the fee budget to cover an increasing portion of the overall costs, while never representing more than 20% of operational costs (a conservative figure provided by the expert, to be refined once a tourism projections study has been done).

Main recommendations for the 2024-2027 operational period

Regarding project-based funding:

1. In this scenario, it will be especially important that, in 2023, the task force anticipates large investments and project development and work (alongside MoTE and NAPA) on project development for several project proposals that the future management authority could then take over, to gain time.
2. That kind of proposal can take some time; it could be good to: (i) start as soon as possible, and (ii) cooperate with other ministries/Albanian institutions to see if some international fund requests could be joined.

Regarding the possibility to start implementing fees VWRNP-wise:

1. Review the fee collection process and fees that may be applicable within the National Park and conduct a socio-economic study in 2023 about all existing or potential activities in the VWRNP in the years to come.
2. Conduct a cost-benefit analysis of the implementation of the fees ("do the amounts generated by these fees exceed the investment/human resource costs necessary for their implementation?").
3. Make necessary law amendments in 2023 to: (i) allow the VWRNP to directly use their fees³, and (ii) to be able to change the amount of the fees⁴.

3.7.2.3 Year 2028 and beyond

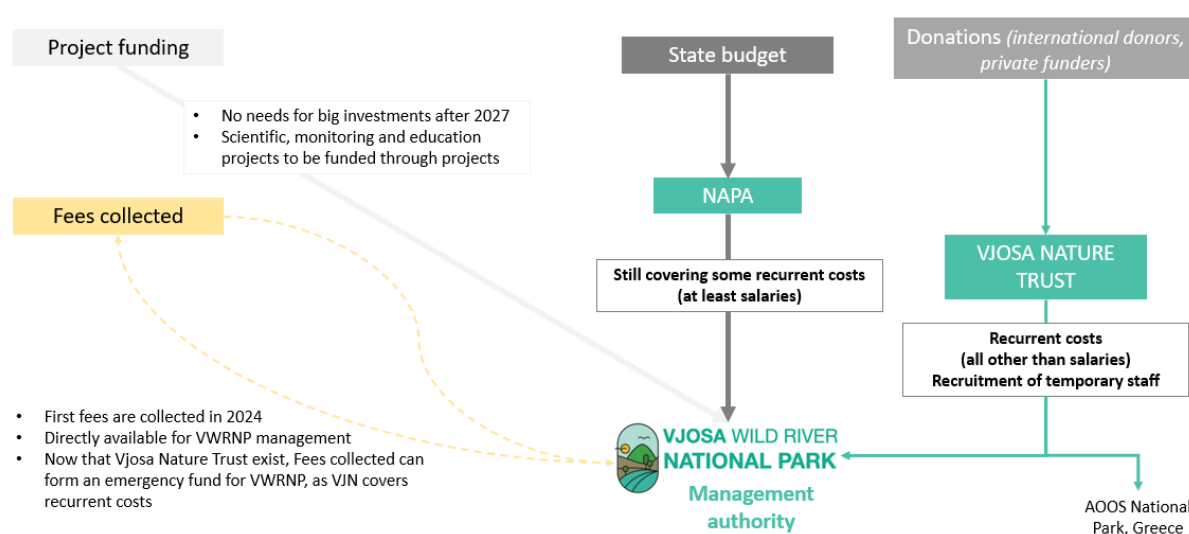


Figure 40: VWR NP 2028 forward maturity period funding scheme

In 2028, the funding scheme from the previous period has been tested and is well operating, and is reinforced by an additional financing vehicle: the Vjosa-Aoös Nature Trust (VANT). In a phase in which the main budget is related to operational costs, the creation of VANT (or using an existing Nature Trust) could sustain the funding of salaries and running costs by matching the state budget.

Nature Trusts (or Conservation Trust Fund, CTF) are "mission-driven conservation finance institutions that manage a diverse suite of financing mechanisms for nature conservation" (Bath et al., 2021). Currently, there are more than 100 CTFs operating around the world. They collect resources from international donors, States or private

³ Art. 38 (5)/h, Art. 57 (2), and Art. 58(3), to include the individual PA Management Authority to administer any income category generated by the individual PA, beside NAPA.

After the legal changes have been approved, DCM No 1156 needs to be amended, allowing individual PA Management Authority to decide on the use of income generated by the PA itself.

⁴ Amend Art.58 (4) of the PA law, in order to allow room for individual PA Management to decide on different types/subcategories of fees, beyond or other than those decided by DCM.

Consider the fees types/subcategories and their amount, determined by DCM No (1156), as the minimum required, and amend DCM No 1156 to add a provision that allows individual PA Management to decide on additional types/subcategories of fees and/or a bigger amount of such fees/tariffs.

sector stakeholders, enabling them to generate, through diversified investments, a financial return paid back in the form of grants to protected areas or NGOs that act in favor of biodiversity conservation.

The development of this type of financing vehicle is however a long process, especially to: (i) secure the governance procedures, (ii) gather enough starting funding, and (iii) implement their practice standards.

Main recommendations for year 2028 and beyond

1. The steps required to implement a Nature Trust (or Conservation Trust Fund) should already be assessed by the VWRNP management authority in the first years of operation, even if the Trust is created only in 4+ years. It is worth noting that it may well be that the costs and difficulty of setting up such a long-term fund may not be worth the effort.
2. When fundraising among potential donors, consider reaching out to those already committing to a Nature Trust and/or discussing this type of program with donors not yet committed.
3. While assessing the feasibility of the VANT, it would also be relevant to assess the transformation of the management authority into a State Limited Liability Company after 5 years.
4. Assess PONT willingness to expand in a new geographical area, to optimize what is already existing and functioning. It is more likely to happen if there is a transboundary project.

3.8 Stakeholder engagement report – a summary

This section is prepared by the Stakeholder Engagement expert, Besjana Guri, *EcoAlbania*. A summary of the full report prepared by the expert is integrated here, while the full report can be found as an annex to this study. References of this section can be found in the related annex.

The purpose of engaging with stakeholders and involving them during the preparation of this study is to:

- Understand who the key stakeholders are
- Get a baseline of current local attitudes to the National Park
- Understand stakeholders' initial views in terms of positive benefits and concerns about the Park

3.8.1 Introduction and methodology

This assessment is an integral part of the knowledge setup phase that is mainly linked with the “stakeholder engagement” in relation to the process of the declaration. In this respect, the assessment gives the current picture of the stakeholders that may affect or be affected by the declaration of Vjosa as a National Park, as well as shows the preliminary outcomes of the stakeholder engagement process where the key stakeholders have been identified, mapped, and analyzed.

The stakeholder engagement was conducted in accordance with the combination and adoption of the following methodologies from Tool 3, described in the Enhancing Our Heritage Toolkit and published jointly by UNESCO World Heritage Center and IUCN, as well as from the Stakeholder tools of the Center for Effective Services.

The methodology of the stakeholder engagement is a step-by-step leveled methodology that includes 5 phases: i) Identification of Stakeholders; ii) Clustering of Stakeholders; iii) Stakeholders Analysis; iv) Stakeholder Engagement, and v) Evaluation of Stakeholder Engagement.

As regards the identification step, there have been identified around 180 stakeholders in the Vjosa River Basin. Stakeholders represent GOs, NGOs, and the private sector. A stakeholders database has been set up at the initial stage.

After the identification, the stakeholders database was further processed in different phases via a clustering method. Initially, the stakeholders were clustered based on their geographical distribution by municipality. In the second stage, the clustering followed the division of the stakeholders based on their influence and importance regarding the process of declaration of the Vjosa Wild River National Park.

In the third stage, there was a mapping of the different clusters of stakeholders where the preliminary analysis was considered regarding the key stakeholders to the process. In this regard, a stakeholder map was created as a stepping stone for the following process that was stakeholder engagement.

The analysis of the stakeholder engagement was based on the stakeholder engagement matrix, consisting of a powerful tool to evaluate the role and status of different stakeholders. This allows the identification of trends for stakeholder engagement in upcoming periods of the project implementation, allowing better planning of stakeholder management. In this context, after identification and rapid analysis, stakeholders are categorized into 5 levels of engagement with the project and project outcomes: i) Unaware (U) when the stakeholder is not aware of the project or its impact; ii) Resistant (R) when the stakeholder is aware of the project, but is resistant to change their attitude in order to support it; iii) Neutral (N) when the stakeholder is aware of the project, but is neither supportive nor resistant; iv) Supportive (S) when the stakeholder is aware and supportive of the project, and v) Leading (L) when the stakeholder is aware of and actively engaged in ensuring the success of the project.

3.8.2 Data from the process

To complete the matrix, each stakeholder, based on the indications from the rapid analysis, is designated both their current level (marked with a "C") and desired level (marked with a "D"). Thus, based on the methodology, a stakeholder matrix for the Vjosa Wild River National Park process was developed, while the status of each of the stakeholders was evaluated.

In this regard, based on this process, the current status of engagement of the stakeholders appeared to be: 46 % of them are supportive (S) of the project, 26 % are neutral (N), 20 % are leading (L), 6 % are resistant (R), and 2 % are unaware (U).

Although the situation looks promising, according to the team that has prepared this assessment, there is still a lot more work needed to realistically change the situation for the better as regards stakeholder engagement. In this respect, based on the analysis, the stakeholder map at the Desired Level would look as follows: 57 % of them are supportive (S) of the project, 10 % are neutral (N), 33 % are leading (L), 0 % are resistant (R), and 0 % are unaware (U).

As regards the involvement of the stakeholders, there has been a combined method of approaching and engaging the key ones. The key stakeholders have been contacted via direct meetings, questionnaires and workshops conducted between September and November 2022.

In this regard there have been 10 direct interviews with the stakeholders; 25 online interviews were conducted through the "google form" online tool that was chosen as an easy and effective way to reach the identified stakeholders, and 3 workshops with stakeholders from across 11 municipalities of the Vjosa River with more than 100 participants, who are representing GOs, NGOs, local communities and the private sector.

Most of the stakeholders have replied that the Park will have a positive effect on the region and also they think the protection of the Vjosa River should be extended also to the Greek part in order to have full protection and benefits from the transboundary protected area.

The majority of them see the declaration of the Vjosa Wild River National Park as an opportunity for environmental problem-solving, the protection of nature, and a push toward sustainable development.

Nonetheless, this is the picture of the preliminary process, while it is recommended that a deeper, capillary and comprehensive stakeholder engagement process should be conducted in the next phase of the process for establishing the Vjosa Wild River National Park. In this context, the second round of stakeholder engagement is recommended to take place from early 2023 and on.

Based on the stakeholders' proposals, 77% of them see the direct meetings as the most efficient tool for the exchange and engagement of the stakeholders in the process of planning the Vjosa Wild River National Park. Public campaigning and the media are also tools to be used.

The next stakeholder engagement program followed 5 main steps:

- i) Informing the stakeholders: by using pull communication and making sure that the plans for the future of the Vjosa River Basin, decision-making timelines, and opportunities for consultation are actively broadcasted to the stakeholders. The tools used at this level are the *informative meetings* organized along the Vjosa valley, *press releases*, *social media* and *traditional media reporting* in the local and national media.
- ii) Consulting the stakeholders: at this part of the process the stakeholders' role is more limited, but on the other hand, the consulting level ensures their greater involvement in the process. The tools used at this level are *the interviews* and questionnaires distributed to the key stakeholders.
- iii) Involving the stakeholders: at this stage, the aim is to have a two-way engagement that has its limits to their responsibility. The stakeholders are considered as being part of the process. The tools used at this level are the three *workshops* held in 3 main cities of the Vjosa valley, involving 105 stakeholders covering the geographical space of the Vjosa River and its main tributaries: Drino, Shushica, and Bënça.
- iv) Collaborating with the stakeholders: *this* is a two-way engagement entailing joint learning, decision making, and being a partner in the process. At this level, they proved to be more engaged. The tools used to support this level were *the workshops* and *direct communications*, especially institutional ones, on topics related to the National Park planning process. Through these interactions, data and information were collected, and technical and official solutions were discussed.
- v) Co-creating: The final stage of involvement is also a two-way engagement tool. It aims to empower specific stakeholder groups affected by the National Park, who are not included in the decision-making process, to involve them in discussing decisions for the planning of the Park, and to take action together.

3.8.3 Main outcomes

The following are considered the main outcomes of the stakeholder engagement process:

1. The declaration of the Vjosa Wild River National Park is perceived as an opportunity to stop the environmentally damaging activities that are currently taking place or planned in the area.
2. The stakeholders see the Vjosa River as a “lever” for economic growth and prosperity for the local communities and the entire valley. For them, Vjosa is a “life-giving” river supporting biodiversity and the daily life of the local communities.
3. The main economic activities that stakeholders believe should be implemented in the VWRNP are tourism and ecotourism, agriculture and livestock farming. Fishing activities and agriculture should be carefully regulated and taken into consideration when developing the management plan for the VWRNP.
4. The local communities, especially those living in rural and remote areas, farmers, hunters, fishermen, local businesses, women, and marginalized groups should be informed and consulted during the planning phase and in the implementation phase of the National Park.
5. Consideration must be given to including other potential tributaries of the Vjosa River Basin in the future Park in order to ensure their protection in the case of free-flowing rivers, and to increase the level of control in the case of already degraded rivers.
6. The pressures from the residents that live near the river should be carefully considered.
7. Some flood risk management and erosion measures need to be considered and taken into account when defining the Park's boundaries.
8. The problem of deforestation, illegal fishing and waste management are three other urgent environmental issues raised by stakeholders that affect the environmental status of the future park, and especially ecotourism in the Vjosa valley.
9. government institutions should coordinate transboundary protection measures for the river with the Greek Government.

3.9 Proposal for compensatory measures

Article 6 of Law “On protected areas” (81/2017) states that, when preparing the declaration of the establishment of a protected area, a description should be prepared of the potential compensatory measures that may be required to regulate the transfer of property and rights for the conservation of biodiversity.

Phase I of the VWRNP establishment focuses primarily on the active channel and active floodplains on public lands and water features rather than private lands, so no compensatory mitigation is anticipated in Phase I.

The issue of compensatory mitigation may not become relevant until Phase II, when Park boundaries are expanded to include morphological floodplains and other adjacent areas where land ownership may also be private.

According to the law, landowners whose existing income could be significantly affected by the restrictions and prohibitions imposed by the establishment of the biodiversity protection measures within the National Park, and which cannot be replaced by a permitted activity within the permitted activities in certain zones of the National Park, are entitled to compensation. However, it is not currently expected that landowner income will be significantly affected as the IUCN standards for protected areas in Category II allow sustainable use activities in 25% of the protected area; these include, for example, environmentally friendly agriculture and aquaculture. Support for conversion to environmentally friendly farming and aquatic activities will be sought from donors, the EU and international funding mechanisms. In addition, it is often the case that the price customers are willing to pay for food produced in an environmentally-friendly way in a national park, will increase.

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Chapter II

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ANNEXES

The full reports prepared by the experts engaged in the Vjosa Wild River National Park designation process, Phase I, are included in a CD, attached to the Document.

The CD contains:

1. Park Boundaries – Report
2. Governance and Management Model – Report
3. Sustainable Financing Model – Report
4. Sustainable Tourism – Report
5. State “0” Status – Report
6. Stakeholder Engagement – Report
7. Environmental and Social Impact Assessment – Report

