

# A Plan for Transboundary Conservation in Prespa

*The Transboundary Strategic Framework  
for conservation in the Prespa basin,  
developed by the PrespaNet NGO Network*



## What is the Transboundary Strategic Framework (TSF) and why is it needed?

Many of the things that make Prespa special, from its pelicans and endemic fish to its unique landscapes and forests, or that provide the things that Prespiots use every day, such as water for irrigation, healthy soil for crops or wood for heating in the winter, require all three countries that share the lakes basin to plan and work together in order to make sure they are well looked after and protected, so that all these essential parts of Prespa continue to exist and support our lives well into the future.

To do this the organisations that work together for conservation in Prespa need a plan, based on good science, that can tell us what condition all of these things are in, and experience of the area through living and working here, in order to know how to go about conservation in Prespa and what the priorities should be.

This plan is known as the 'Transboundary Strategic Framework' or TSF for short, and it looks at the most important natural resources in Prespa, as well as the many species and ecosystems found in the area, and what problems or 'threats' they face. The plan also sets out where it is possible counter these threats, and how best to do this. The activities the plan proposes are grouped together in 'strategies' that concentrate on a particular subject, like water management for example.

The plan is called a 'framework' because it provides broad outlines for conservation, a structure for what to work on and when to do it. The plan is flexible, so that as the situation changes over time so the guidelines can also change to match what is happening. The TSF was put together to guide the work of conservation NGOs in Prespa, but it is also aligned with the work of the national parks and authorities that are responsible for managing protected areas, to make sure that all of the efforts fit together and don't overlap.



Photo: SPP Archive | F. Marquez

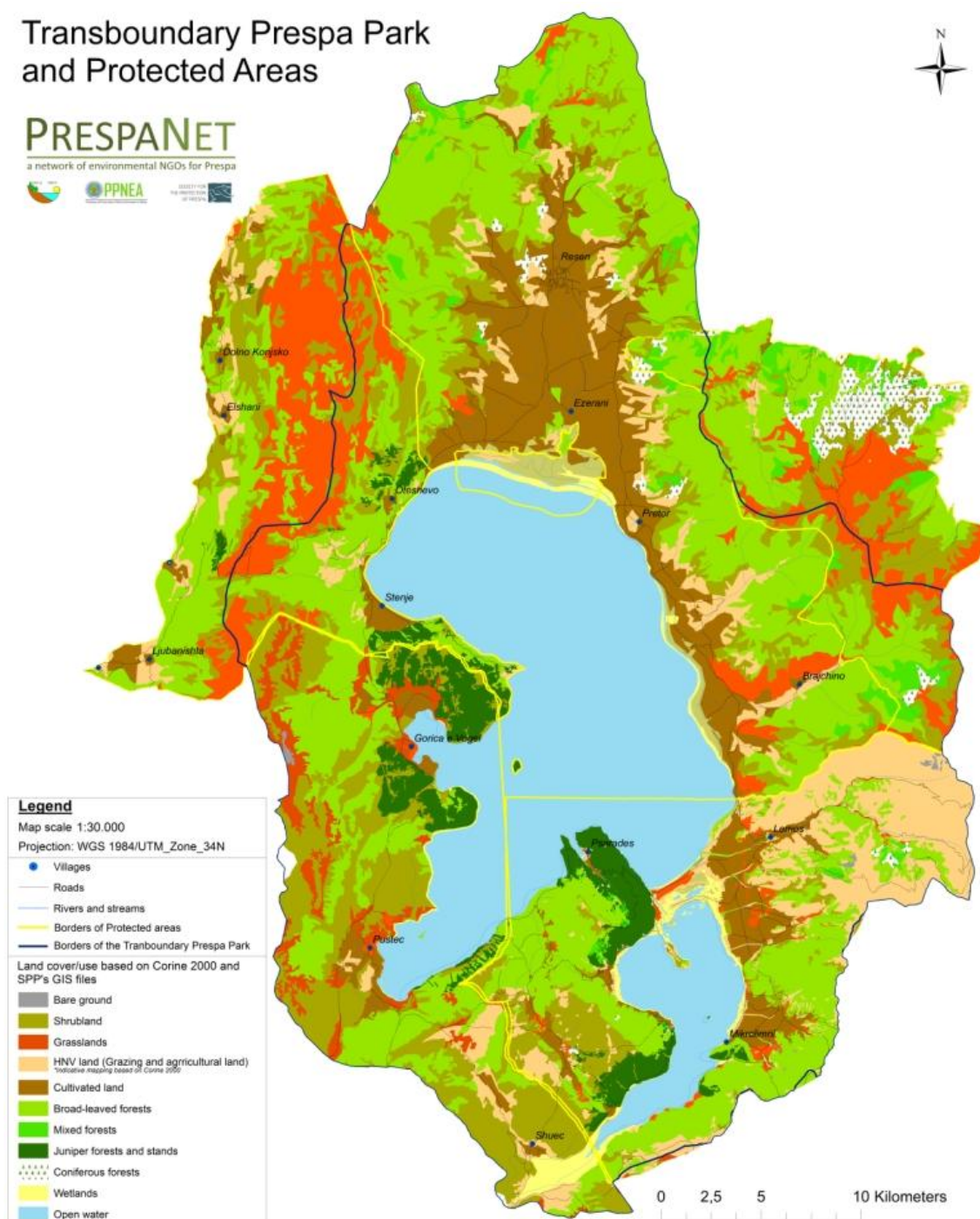
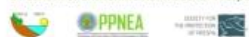
## Where will the TSF be carried out?

*The TSF concerns all of the area of the Transboundary Prespa Park, but also includes the entire Galičica and Pelister National Parks, as these areas are closely connected to the Prespa basin*

### Transboundary Prespa Park and Protected Areas

**PRESpanET**

a network of environmental NGOs for Prespa





# 3 Countries, 2 Lakes, 1 Future - Prespa in numbers

Number of plants recorded in Galičica National Park alone

1,700

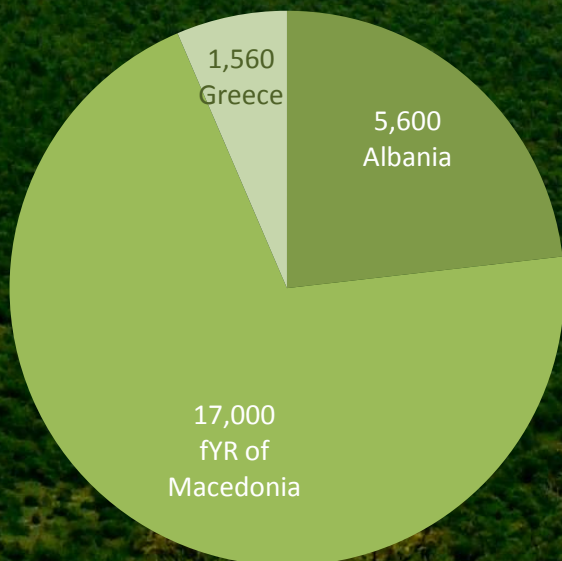
Number of bat species in transboundary Prespa

26

Percentage of Prespa basin land area covered in forest

60.6%

Population sizes per country in the Prespa basin



9 out of 23

Fish species which are endemic to Prespa or the nearby region



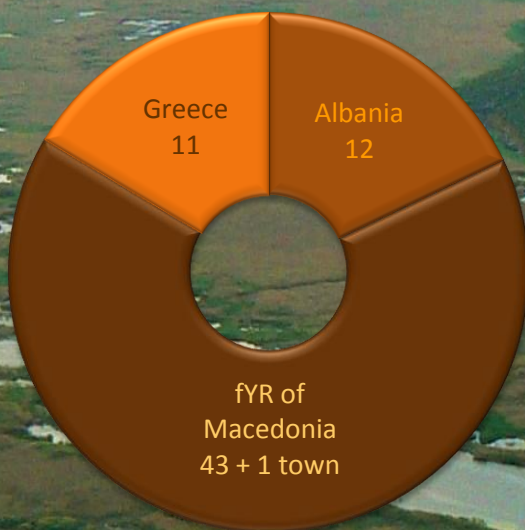
Number of EU habitat types estimated for the Prespa basin

**55-60**

Number of bird species recorded in Greek Prespa

**272**

Number of villages per country in the Prespa basin



**1 of 10**

One of the ten most important wetlands in the Mediterranean

Pairs of breeding Dalmatian pelicans in the largest colony of the species in the world

**1,200+**

**What we want to see happen in Prespa**

*"The natural and cultural character of Prespa and her people is sustained now and in the future"*



# What is it important to protect and why?

Nine features of Prespa's natural heritage and resources have been chosen as targets of the plan; these represent the most valuable elements of the environment of the basin, which make up the reason why Prespa is so important

## Water and wetlands

The waters of the lakes, rivers and streams, together with their wetlands, are essential to Prespa, for their beauty, their importance for agriculture and recreation, and for the life they sustain. Wetlands provide homes for many species, filter water of unwanted nutrients and also provide a place for fish to reproduce and birds to feed. Water and wetlands make up a complex system, which is affected by different factors, especially the removal of water for various uses, changes in the climate and the addition of wastewater or fertilisers and pesticides, amongst other things.

**Aim of the TSF:** To keep Prespa's water and wetlands in good condition, so that they support life

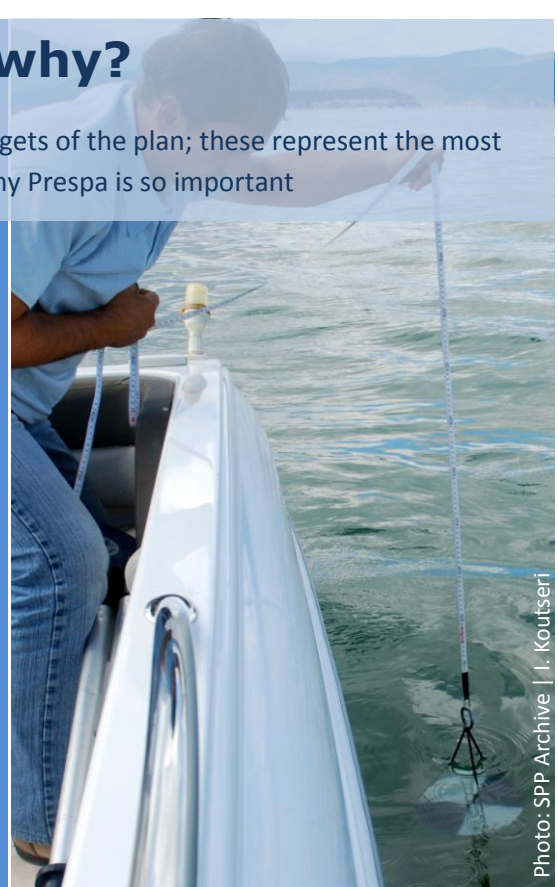


Photo: SPP Archive | I. Koutseri

## Forests

Prespa's forests are vital for both people and wildlife alike, providing food and timber to the local economy and supporting a wide variety of different organisms. Some of Prespa's forests are very special, such as the juniper woods found in all three countries, while all of the forests and trees found in the basin are an important part of the beauty of the area. Many forests in Prespa are managed, while some are not in a good condition due to different problems in each country, such as over-logging which removes too many trees, or lack of grazing which allows the forest to become too dense and vulnerable to wildfires.

**Aim of the TSF:** To ensure Prespa's forests continue to provide for both people and wildlife

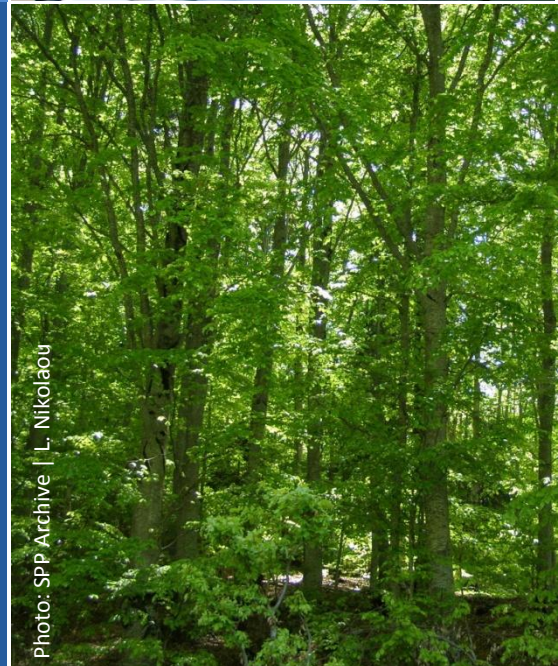


Photo: SPP Archive | L. Nikolaou

## Pelicans and other waterbirds

There are a number of rare and protected waterbirds of global, European, regional or national importance that use the Prespa lakes and their wetlands. The iconic Dalmatian pelicans are well known, attracting many nature-loving visitors to Prespa, with the largest colony in the world at Prespa. Other waterbirds are less familiar perhaps but also unique, species such as the pygmy cormorant, greylag goose, goosander and ferruginous duck, for example, also contribute to the enormous conservation importance of Prespa.

**Aim of the TSF:** To ensure Prespa's waterbird populations continue to exist in good numbers and in a healthy condition



Photo: SPP Archive | F. Marquez





Photo: SPP Archive | L. Nikolaou

## Fish

Prespa is recognised as one of the most important wetlands in the Mediterranean due to its endemic and endangered fish species. In addition, fishing still makes a significant contribution to the local economy, with carp and Prespa bleak being particularly prized. Lastly, Prespa's many important waterbird species also depend on fish as their main source of food.

Prespa's fish are under pressure from introduced fish species, which compete with them for food for example, as well as from changes in water quality and poaching. Changes in the landscape to the places where they reproduce can also affect their numbers, making it important to protect shallow wetland areas and streams.

**Aim of the TSF:** To maintain healthy populations of carp and native fish species



Photo: SPP Archive | L. Nikolaou

## Grasslands and farmlands

Grasslands are home to a wide range of plants and insects, many of which are important for conservation; many grasslands, as well as some forests and lakeside meadows, require a certain level of grazing to support maximum biodiversity. Farmlands that support nature through features such as hedges, trees and uncultivated edges around the fields, which are sometimes known as High Nature Value (HNV) farmlands, are also important, particularly the patchwork of fields and orchards that often surround the villages of Prespa, where traditional local agricultural varieties are also often to be found.

**Aim of the TSF:** To maintain grasslands in a good condition, support HNV farmlands and local agricultural varieties and livestock breeds



Photo: Microsoft

## Bats

The 26 bat species found in Prespa represent 65% of all the bat species found in Europe, a phenomenal number. This diversity is most likely the result of the wide variety of different types of environment found in Prespa, from forests, cliffs and wetlands to mountain meadows, traditional farmlands and villages, all the features that make up the area's unique landscape. Bats are a good indication of how healthy insect life in the basin is, as this is their main food, helping us to understand changes in the condition of the environment, while the many thousands of insects that bats eat each night helps to control numbers of insect pests.

**Aim of the TSF:** To improve knowledge about bats and their conservation, contributing to protecting these species and the places where they live, reproduce and spend the winter



## Wild plants

There is exceptional diversity in plants in the Prespa basin, with very large numbers of species, many of them rare and many of them with different medicinal or culinary uses. Several special Prespa plants have been recorded and these are found nowhere else in the world. Generally our knowledge of plants in Prespa needs improving, in order to see if they need more protection or whether some of them, such as mountain tea for example, can be cultivated, contributing to the local economy .

**Aim of the TSF:** To improve knowledge about plants in Prespa and protect rare and endangered species where needed



Photo: SPP Archive | A. Strid

## Large carnivores

Large mammals, such as bears and wolves, have long co-existed with communities in this part of the world. At the top of the food chain, such animals have a vital role to play in shaping and maintaining the ecological balance of an ecosystem. Absent in much of Europe, large mammals also form an important attraction for ecotourism in the region.

Large carnivores have not been studied in depth in Prespa, affecting our understanding of these mammals and their prey. They are under pressure from disturbance and poaching; conservation measures are required in order to reduce instances of damage to livestock and property.

**Aim of the TSF:** To increase knowledge about large carnivores in order to reduce the damage they can inflict, as part of efforts to conserve their populations



Photo: SPP Archive | L. Nikolaou

## Landscapes

The landscapes of Prespa are a key part of its culture and economy, forming an important reason why many choose to visit or live in the area. They are part of the character of the place, with their beauty appreciated on all three sides of the basin. From the mountains to the lakes, landscapes are a vital ingredient of what it means to be part of Prespa. Landscapes are also important for biodiversity; they connect the different parts of the basin together, providing corridors for wildlife to go from place to place in search of food, water and others of their kind. The more varied a landscape is the better it serves the needs of biodiversity, while it is also important to preserve the unique and distinctive character of Prespa, including its monuments and traditional buildings.

**Aim of the TSF:** To study and maintain the characteristic landscape variety of Prespa



Photo: SPP Archive | L. Nikolaou



# What affects the things we want to protect?

Many things influence the targets chosen for the TSF, but the plan concentrates on the most important of these, which are direct threats to the targets and have been rated as high, medium or low priority.

## HIGH PRIORITY THREATS

### Water pollution

High levels of fertilisers, as well as untreated sewage, raise the risk of 'eutrophication'. This means that algae in the lake can grow too much, reducing the oxygen in the water, which badly affects fish and other aquatic species. Moreover, some algae also produce toxins and cause toxic algal blooms.



Photo: SPP Archive | L. Nikolaou



Photo: SPP Archive | L. Nikolaou

### Inappropriate grazing

In some parts of Prespa grazing has been abandoned, causing problems for biodiversity when pastures begin to be covered by bushes and trees. In other parts there is too much grazing, especially of young trees in places where the forest has been cut in the past.

### Unsustainable forest management

This problem mostly relates to 'clear cutting', where all the trees in a particular area are cut at the same time rather than 'selective cutting', where only a proportion of the trees are cut. Clear cutting causes the topsoil to be washed away, contributes to flooding because water is no longer absorbed by the trees, and negatively affects forest biodiversity.

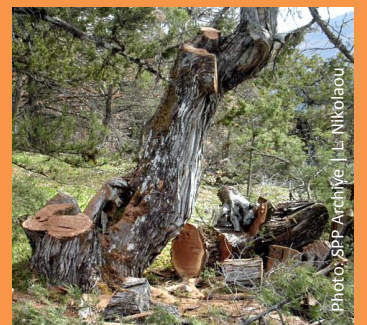


Photo: SPP Archive | L. Nikolaou



Photo: SPP Archive | L. Nikolaou

### Unsustainable agricultural practices

These include the unwise use of fertilisers and pesticides, the illegal expansion of fields, cultivation of the edges of fields, destruction of natural hedges and the burning of vegetation, amongst others, which all contribute to the loss of biodiversity in and around agricultural land.

### Invasive species

Introduced invasive species compete with native species with potentially very negative effects. The main problem in Prespa is with invasive fish species, like the common sunfish and the Prussian carp.



Photo: SPP Archive | L. Nikolaou



## MEDIUM PRIORITY THREATS



### Pressures on water quantity

Uncontrolled use of water for irrigation, through illegal wells for example, can have a serious impact on the amount of water available, both for human use and for wildlife. Likewise, making changes to rivers and streams, with dams or channels for example, negatively affects fish and the flow of water.

### Sand and gravel extraction

The extraction of sand and gravel degrades rivers, the environment and landscape, and causes erosion, as well as potentially destabilising sandy areas, such as that between the two lakes.



### Unsustainable fishing practices

Poaching and fishing during the closed season, or outside of allowed areas, results in overfishing, which threatens fish populations. Illegal practices, such as using illegal nets or dynamite for example, also reduce the numbers of fish.

### Poaching

Hunting outside of allowed areas, or outside the hunting season, setting traps and the use of illegal poisons, as well as the use of poisoned baits are all practices which threaten Prespa's wildlife and biodiversity.



### Unsustainable plant collection

Collecting too much of a particular plant, such as mountain tea for example, causes problems as it may not be able to reproduce fast enough to replace the plants taken, thus reducing the number of plants and the area where they grow, sometimes dramatically.

### Dumping of waste

Uncontrolled dumping of household, agricultural and construction waste, as well as pesticide packaging, pollutes groundwater and negatively affects the environment and the landscape.





## Ill-sited energy installations

Hydro-power plants can seriously reduce the flow of water in rivers and threaten fish. Wind parks that are not well positioned can be a threat to wildlife as well as very damaging to the landscape. The disturbance caused during their construction, and associated infrastructure such as access roads, can also damage the environment.



Photo: SPP Archive | L. Nikolaou



Photo: SPP Archive | L. Nikolaou

## Inappropriate infrastructure development

Examples include: excessive road building, which can divide natural areas and disturb wildlife; building outside villages, which can negatively change the character of the area; ski resorts, which can seriously damage mountain areas; creating new beaches, which can destroy wetlands.

## LOW PRIORITY THREAT

### Off-road driving

Driving off-road, particularly in sensitive areas of the national parks, can damage the environment and disturb wildlife.



Photo: SPP Archive | L. Nikolaou

## UNKNOWN, POTENTIALLY VERY HIGH PRIORITY THREAT

### Climate change

More research is needed to understand the potential impacts of climate change in Prespa; however, the early signs are that this threat may seriously affect both biodiversity and people alike.



Photo: SPP Archive F. Marquez

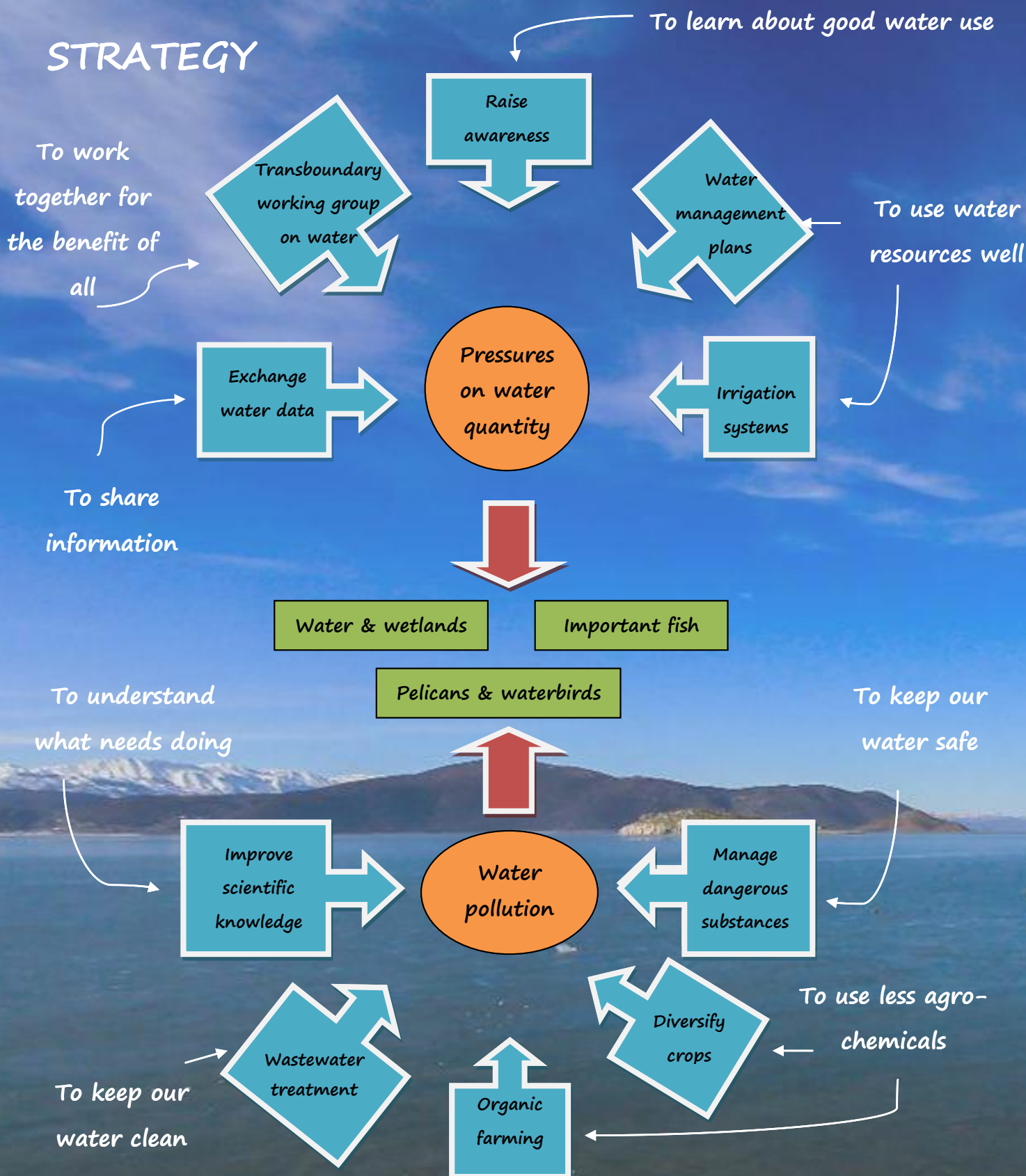
## What do we need to do?

In order to tackle these problems where possible, the conservation organisations working in Prespa have agreed on various activities to intervene where it is most important and practical to do so. The activities the plan proposes are grouped together in five 'strategies' that concentrate on a particular subject, like water or forest management for example.



# WISE WATER MANAGEMENT

## STRATEGY

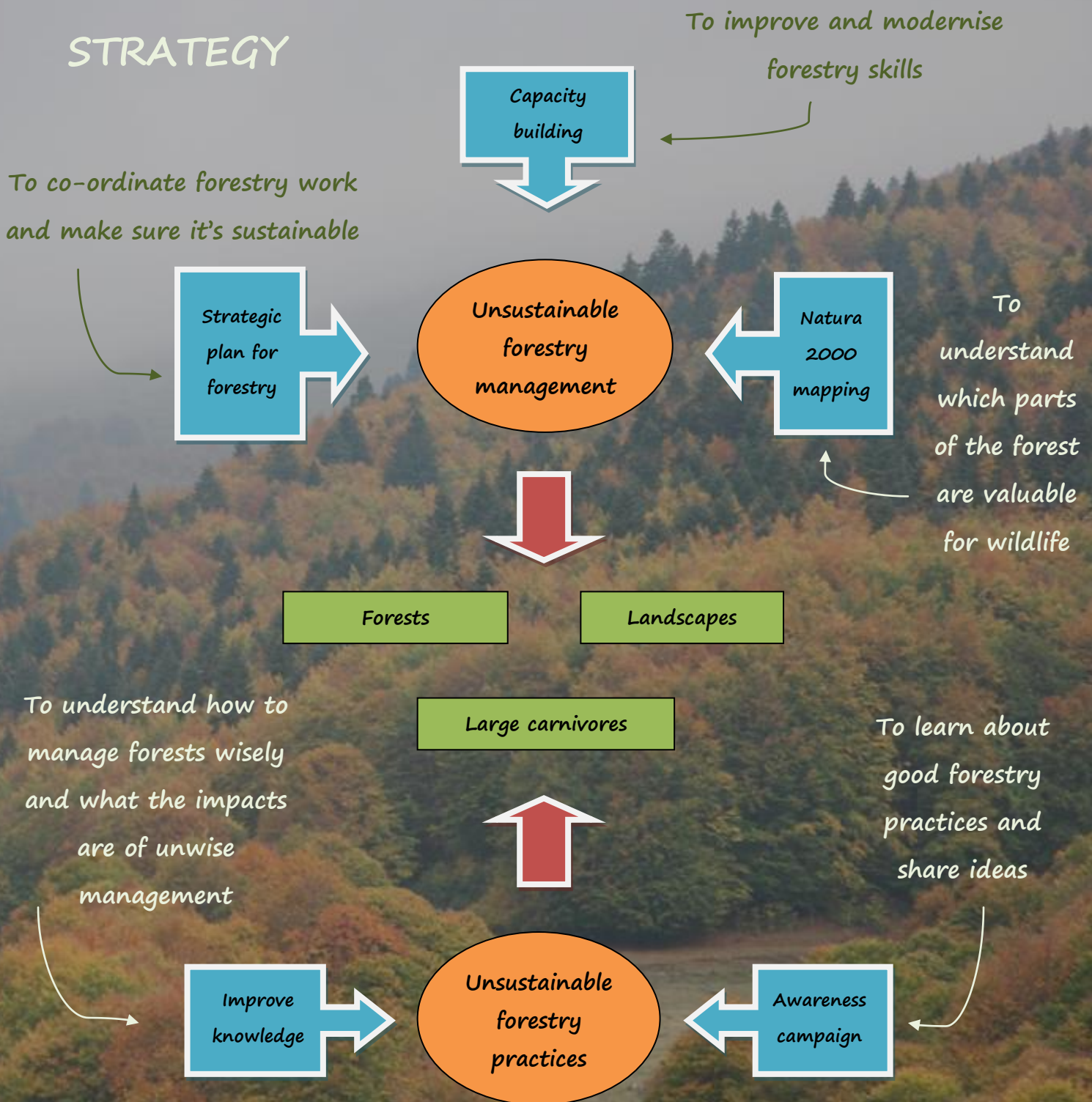


### WISE WATER MANAGEMENT STRATEGY

This group of activities focuses on problems that are connected with water - both the quality of water in Prespa's lakes, rivers and streams and the amount of water available for different uses, such as irrigation and maintaining the water flow in rivers for fish to be able to reproduce, for example. These activities aim to increase our knowledge about water in Prespa and to share this knowledge with everyone who needs it, to ensure that we all use water wisely, to keep our water clean and safe for all who use it, and to use agro-chemicals more efficiently and cost-effectively, so as to protect groundwater.



# WISE FOREST MANAGEMENT STRATEGY



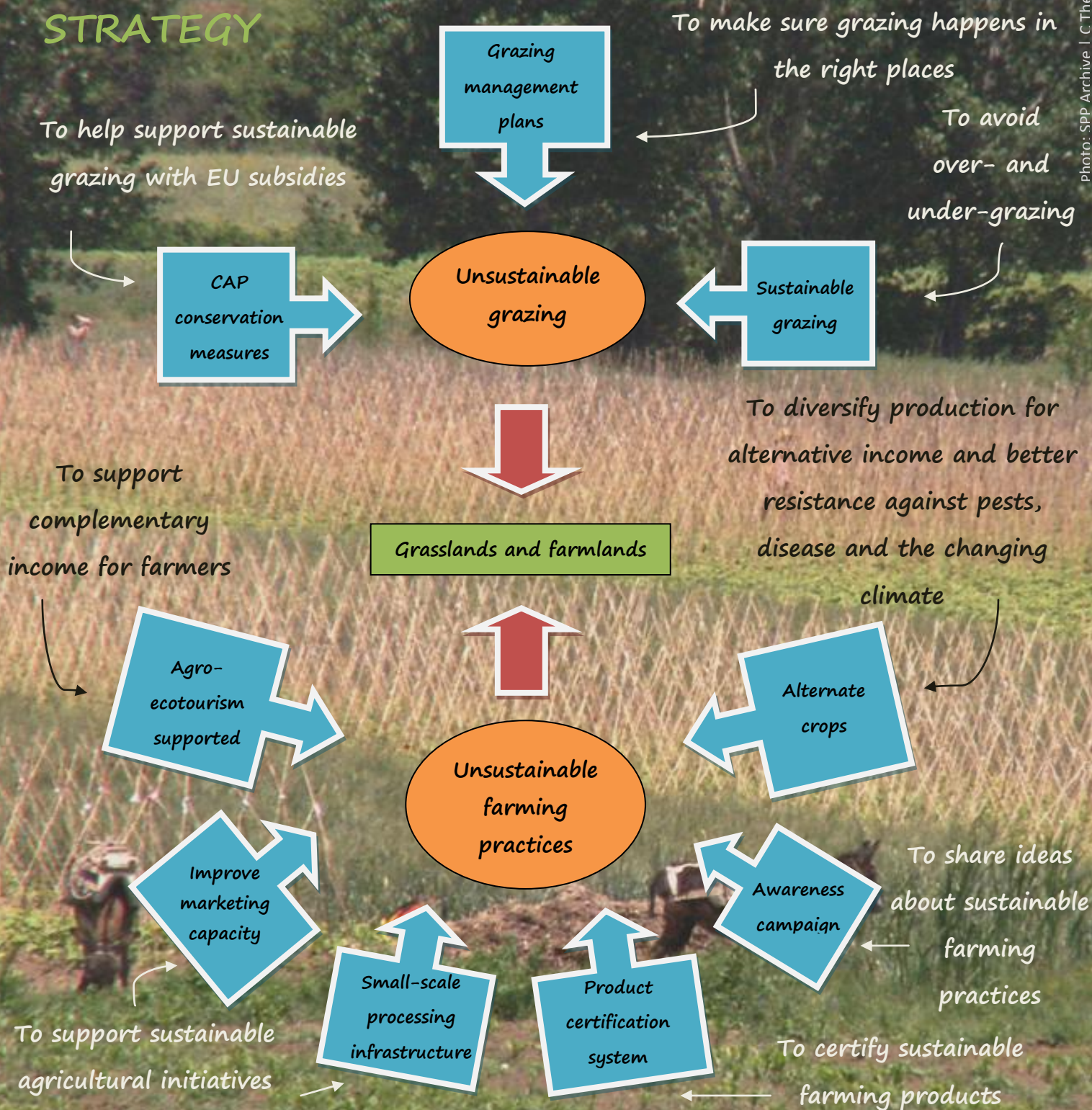
## WISE FOREST MANAGEMENT

This group of activities focuses on problems that are connected with forests - how to make sure that forests are properly managed, for both income and wildlife as well as to maintain the forest for the future, and how to modernise the way forestry is carried out, to make sure that Prespa benefits from the best practices around the world. These activities aim to learn more about forests in Prespa and to share this knowledge, to make sure that our forests are used sustainably for the benefit of all, to ensure forest plants and other products are sustainably harvested, and to protect the wildlife that uses the forests, for its own sake and for visitors to the area to enjoy.



# SUSTAINABLE GRAZING & FARMING

## STRATEGY



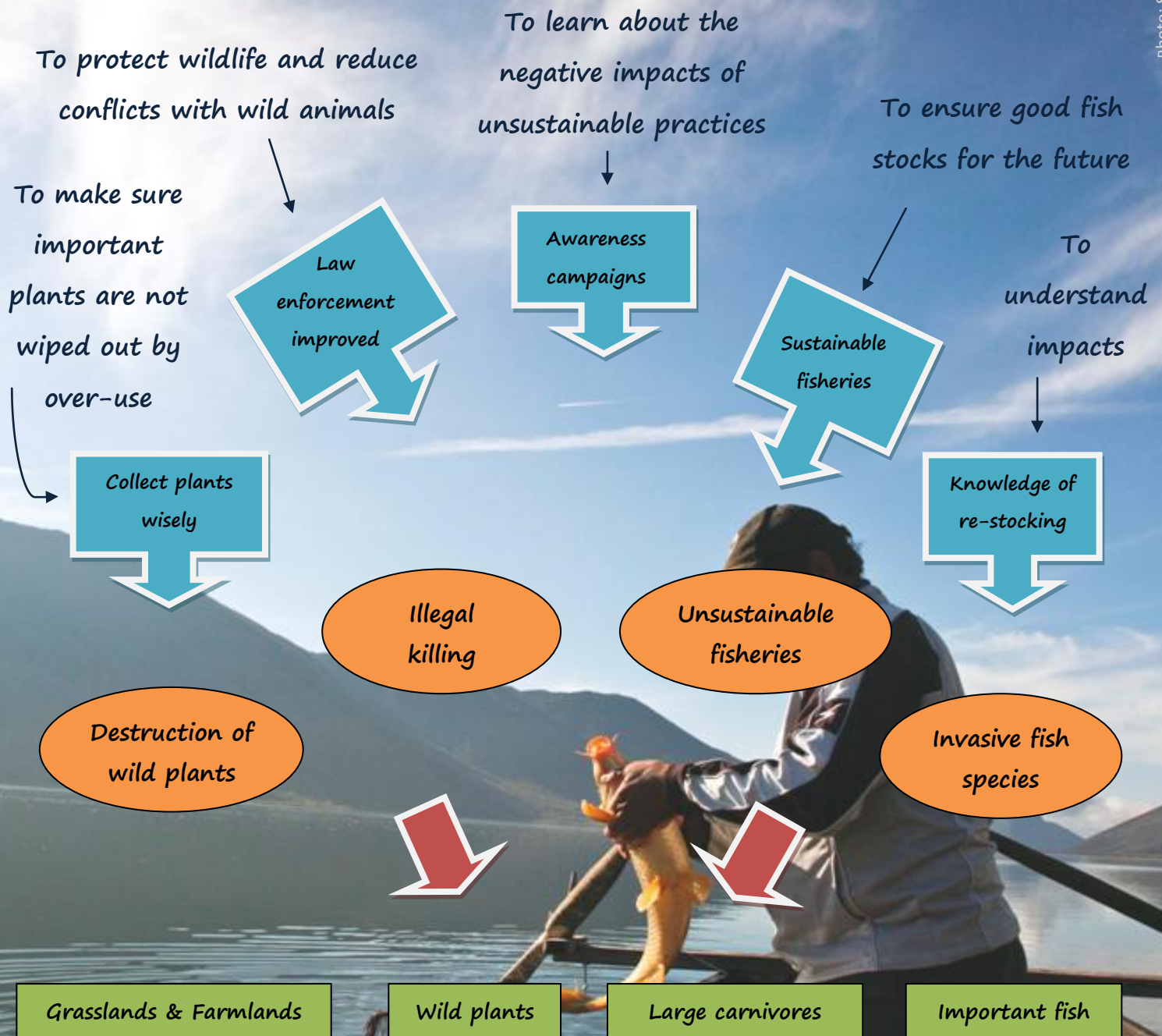
### SUSTAINABLE GRAZING AND FARMING STRATEGY

This group of activities focuses on issues related to both grazing and farming and how to make sure that these vital activities support both local communities and biodiversity. Some places in Prespa suffer from too much grazing, and others from too little; grazing management plans will set out how to overcome these problems. In Greece lobbying can help ensure that subsidies under the Common Agricultural Policy support grazing that helps the environment. Other activities support sustainable agricultural practices and alternative sources of income through alternate crops and agro-ecotourism, as well as improving marketing capacity, small-scale processing and certification schemes. The strategy aims to share ideas and boost the ability of farmers in Prespa to answer the growing demand for traditional and environmentally friendly products.



# STRATEGY FOR SUSTAINABLE CONDUCT TOWARDS WILDLIFE & NATURAL RESOURCES

Photo: SPP Archive | S. Vogiatzis

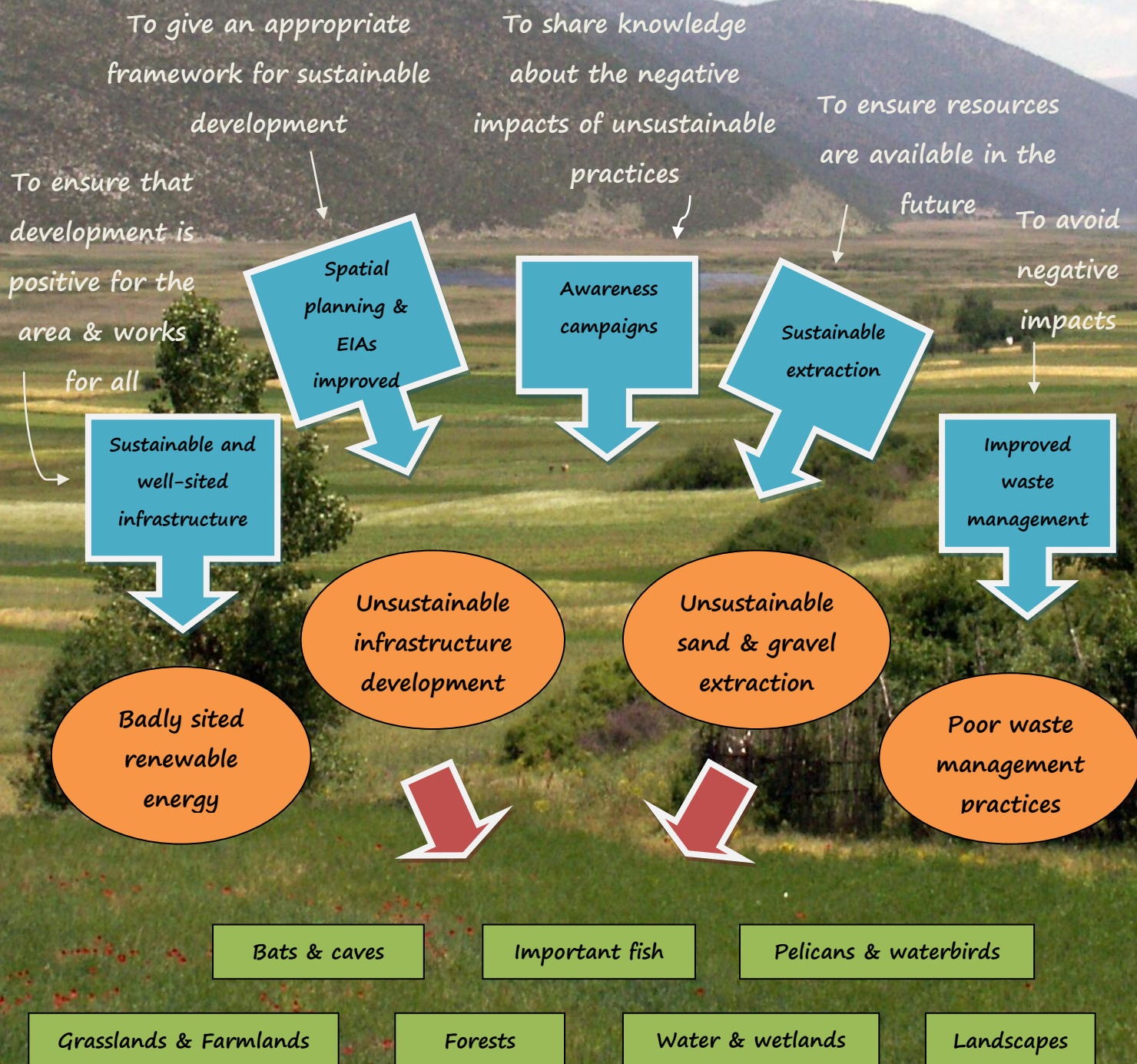


## SUSTAINABLE CONDUCT TOWARDS WILDLIFE & NATURAL RESOURCES

This group of activities focuses on problems that threaten the natural resources and wildlife of Prespa, in order to ensure these resources are available for future generations to use and enjoy. The activities include improving our knowledge in order to understand the impacts of potentially negative practices like re-stocking the lake with fish, and working towards more sustainable fisheries across the basin to ensure healthy fish stocks in the future. Similarly promoting sustainable plant collection helps to protect important and useful plants. Awareness campaigns will help to share knowledge about the negative effects of unsustainable and illegal activities so they can be avoided, while lobbying work will aim to improve law enforcement where necessary, to protect our shared resources.



# STRATEGY FOR SUSTAINABLE APPROACHES TO INFRASTRUCTURE & DEVELOPMENT



## SUSTAINABLE APPROACHES TO INFRASTRUCTURE & DEVELOPMENT

This group of activities focuses on the problems that can arise when development does not follow sustainable principles and causes negative impacts. Improved knowledge about these impacts will be shared in order to avoid such problems in future development, while alternative forms of sustainable infrastructure, which provide income or facilities for Prespa but don't damage the environment, biodiversity or the landscape, will be explored. A better spatial planning process and improved environmental impact assessments will support this work. Waste management will be improved for the benefit of all, while more sustainable extraction will preserve valuable natural resources for future generations to use too.



# Does anything else need to be done?

As well as the groups of activities there are also a couple of other important things to consider: in order to measure the effects of all the activities and see if progress is being made, monitoring is essential; similarly, in order to achieve all these different aims it is vital to have good cross-border collaboration with our counterparts in each neighbouring country.

## Wildlife monitoring

Monitoring the birds, fish and animals affected by the threats described in this plan helps us to understand whether the activities we are carrying out are having positive results. When we can see if populations are improving or not then we know whether to keep working on our activities or perhaps change them. Likewise we also aim to monitor some of the impacts of wildlife on people, such as the damage sometimes caused by large carnivores or wild boar for example. This helps to define work that can mitigate and reduce this damage, improving the situation for those affected and reducing conflicts with these animals.



Photo: SPP Archive | LD. Vayilis

## Transboundary co-operation

Good collaboration between the local authorities, NGOs and people of the Prespa basin is vitally important for the well-being and prosperity of all three countries, as well as for environmental protection and management. Only by working together across borders can the natural resources and cultural heritage of Prespa be safeguarded for all, now and in the future. The collaboration between the PrespaNet NGOs is an important part of this co-operation.



Photo: SPP Archive | A. Bonetti



The TSF was put together by the three organisations that make up the PrespaNet NGO network: *Society for the Protection of Prespa*, *Macedonian Ecological Society* and *Protection and Preservation of Natural Environment in Albania*, and the five international organisations that support their work through the Strategic Platform for Prespa: *EuroNatur*; *Frankfurt Zoological Society*; *KORA*; *Plantlife*; *SAVE Foundation*.

The plan is aligned with the work of the management bodies which work for the protection of the environment in the Prespa basin: *Management Body of the Prespa National Park*, Greece; *Prespa National Park*, Albania; *Municipality of Resen*; *Galičica National Park*; *Pelister National Park*.

The TSF is also in alignment with the strategy of the *Prespa Ohrid Nature Trust*, which supports the organisations working together to preserve the natural wealth of Prespa.



## PrespaNet NGO Network

PrespaNet was formed in 2013 by three NGOs with a long history of working in Prespa, the Society for the Protection of Prespa (SPP), based in Agios Germanos, the Macedonian Ecological Society (MES) in Skopje, and Protection and Preservation of Natural environment in Albania (PPNEA), based in Tirana.

The three organisations work together to protect the natural and cultural heritage of the transboundary Prespa lakes basin for the sustainable benefit of both people and wildlife, now and in the future.

Further information on the activities that the network is carrying out in Prespa can be found on the respective websites of the SPP, MES and PPNEA: [www.spp.gr](http://www.spp.gr), [www.mes.org.mk](http://www.mes.org.mk), and [www.ppnea.org](http://www.ppnea.org)

**PRESPA NET**  
a network of environmental NGOs for Prespa

