

5. The framework for the management of the water bodies and their basins

The countries of focus have pursued the management of the shared water bodies from a predominantly national perspective. The cooperation efforts for the management of some of the sub-basins of the Drin Basin recorded until now were initiated mainly within the framework of externally funded (UN, bilateral donors etc.) projects or initiatives of stakeholders and NGOs at basin level.

Lake Prespa Basin is the oldest case. It was the first shared lake in the SEE to be declared as transboundary protected area by the Prime Ministers of the riparian countries and an informal joint body has been functioning facilitating a level of joint action. These have set the basis for enhanced coordinated/cooperative management; the initiated GEF “Integrated Ecosystem Management in the Prespa Lakes Basin of Albania, FYR Macedonia and Greece” Project (more information will be given later in the document) is expected to further contribute towards this cause. A relevant agreement is under consideration by the riparian countries.

Lake Ohrid basin can be considered as the most advanced case in terms of formal cooperation. The GEF Lake Ohrid Conservation Programme (1998 – 2004) and the political commitment ever since had as an outcome the signing of an Agreement (2003) for the management of the lake. A joint body exists but much effort is still needed until actual cooperative management is reached.

In the Lake Shkoder basin communication among local stakeholders is in place. The GEF Lake Shkoder Integrated Ecosystem Management Project, initiated in 2008, is expected to facilitate the actual on the ground cooperative management in the area. The countries have already committed for the creation of a joint body. Official cooperation for the management of the Drin River basin including its tributaries Black Drin and White Drin is still absent.

Hence, management of the shared water bodies is, in general, subject to the policy, legal and regulatory frameworks and institutional settings of the riparian countries (discussed in the respective sections of the document). As already mentioned, these are at large under an on-going revision process. Governments are striving to adopt/approximate the EU acquis and integrate policies for the management of environment and natural resources.

The EU Water Framework Directive (EU WFD) when fully adopted and implemented, is expected to have a significant positive impact on the management of the water bodies and their resources both at national and transboundary levels. The main goal of the EU WFD is to ensure good ecological, chemical and hydro-morphological status in all water bodies. It sets standards for water quality and calls for integrated watershed management and transboundary cooperation. One of its advantages is that it exerts a strong pressure to implement improvements in water management processes, with defined goals and a set of fixed deadlines. The main tool for achieving good ecological status is the River Basin Management Plan (RBMP), for each river basin ‘district’. These should include a plan for abatement measures and be prepared at regional management levels with extensive involvement of the stakeholders and the public. For transboundary watersheds, the establishment of an international stakeholder panel providing opportunities for various stakeholders to meet and discuss the challenges is recommended, in order to provide important inputs to the RBMP process. A RBMP is a detailed account of how the objectives set for the river basin(s) (ecological status, quantitative status, chemical status and protected area objectives) are to be reached within the timescale required. The plan should include the analysis results of the river basin(s) characteristics, a review of the impact of human activity on the status of waters, an estimation of the effect of existing legislation and the remaining "gap" to meet these objectives, and a set of measures designed to fill the gap. One additional component is that an economic analysis of water use within the river basin(s) must be

carried out. This is to enable a rational discussion on the cost-effectiveness of the various possible measures.

In Greece, the appropriate legal framework in accordance with EU legislation is in place but its implementation faces various challenges. In Albania, the Law on Water Reserves is under revision; the transposition of EU WFD is expected. Watershed authorities in six basins⁶² are in place. The elaboration of the National Inventory on Water Resources (Water Cadastre), and based on this, the elaboration of management plans for the basins is within the plans of the government. Laws dealing with management issues of sub-basins of the Drin were adopted in Albania as well as in FYR Macedonia: the Law on the Protection of Trans-boundary Lakes (2003) and the 1978 (revised in 1993) Law for Protection of Lakes Ohrid, Prespa and Dojran respectively. The first aims at protecting transboundary lakes, by guaranteeing the appropriate conditions for the development of life and ecosystems and stopping activities that threaten them. It provides among others for the formation of a Lake Administration to ensure sustainable management of the productive sectors within the watershed. The latter regulates construction, prohibits the introduction of non-native species and controls water use and gravel removal. In FYR Macedonia, besides the adoption of the Law on Waters that transpose the EU WFD, steps for its implementation have already been made: a preliminary typology of water bodies in accordance to the EU WFD has been proposed and activities aimed at defining the typology of water bodies by basins have been initiated. Nevertheless, much are still to be done. A new water law has been adopted in Montenegro in an effort to adopt/approximate to the EU WFD –yet not in full accordance to the directive according to the EC- thus, including elements for integration in the water resources management framework.

Besides the aforementioned developments at the level of legal framework, there have been also efforts at the level of strategic planning to achieve integration with regard to the management of the basins. Policy documents i.e. strategies, action plans, spatial plans etc. have been developed in the recent past being in accordance with relevant national policies aiming to analyze the current situation and define the framework for sustainable development at the local/regional levels and/or call for environmental protection and sustainable natural resources management⁶³. A water related example at the regional level is the Water Master Plan in Prespa and Ohrid regions in FYR Macedonia; unfortunately there is no information available regarding the water uses that the plan covers and the level of integration that introduces.

Box 12. The Spatial Plan of FYR Macedonia

The Spatial Plan of FYR Macedonia provides for spatial and structural grouping of the national territory into environmental management regions in the frameworks of basins of major rivers, in order to identify homogenous areas the morphological connection of which, leads to effects on the quality of the environment from different activities within the specific area. Identification of planning areas is carried out for the purpose of coordinated and integrated management of the quality of environment, where primary carriers of activities, based on mutual interaction and agreement, are the units of the local self-government. The Black Drin and Ohrid-Prespa forms one of such a regions in the country.

Source: Spatial Plan of FYR Macedonia, 2004

Overall, integrated water, and furthermore, ecosystem/natural resources management at basin level has only partially been adopted. Implementation, where adopted, is an issue; the weak administrative

⁶² The Drin watershed/basin in Albania includes the Drin River and its tributaries, the Ohrid, Prespa and Shkoder Lakes and the Buna River.

⁶³ Examples in Albania and Montenegro (referring to Shkoder) includes: In Montenegro, the Environmental Action Plan, the Strategy for Sustainable Development, the draft National Spatial Plan, and the Master Plan for Tourism. In Albania the National Environmental Action Plan, the National Strategy for Socio-Economic Development (2003), the National Biodiversity Strategy and Action Plan, the Regional Economic and Social Development in the North of Albania and Perspectives of European Integration, the Local Environmental Action Plan (LEAP) for Shkodra, the Strategy of Economic Development of Shkodra Municipality, the Regional Plan for Shkodra – Lezha 2005 – 2020, the Shkodra Region Area Based Development Program. In FYR Macedonia the Local Environmental Action Plan for Prespa is among such documents.

capacity especially at the basin and local levels represents a significant constraint also for the implementation and enforcement of policies and laws that, despite their deficiencies, provide a basic framework for the management of the basins and include provisions for integration. This is recognized by the competent institutions but also the basin stakeholders; it is recorded in policy and strategic and project documents at local and transboundary levels e.g. in the SAP for Shkoder lake basin and in GEF Project document for Prespa. The latter describes a number of constraints for the adoption of integrated management of natural resources in the Prespa Basin; an overview is given in the Box below. These are to a great extent, taking into account the particularities of each case, valid for the other shared sub-basins as well.

Box 13. Constraints for the adoption of integrated management of natural resources in the Prespa Lakes Basin Region*

At National level:

- Weak environmental and natural resource governance capacity at the municipal government level (AL, FYROM, GR⁶⁴).
- Sectoral decision makers are unaccustomed to applying a watershed perspective to resource management challenges. Sectors are managed and regulated independently and often have different goals and objectives within the same watershed/basin (AL, FYROM, GR).
- In FYR Macedonia, the protected areas are required to fund their own management activities and receive no financial or institutional support from the Government, precluding any active conservation work from being done.
- Protected area managers have little experience in applying landscape ecology and conservation biology principles to the challenge of conserving biological diversity within and around the protected areas (AL, FYROM, GR).
- Existing data is largely outdated and incomplete in Albania and FYR Macedonia and country data on ecosystem parameters is held and not shared by interested organizations and individuals. This is a clear constraint to the adoption of ecosystem management practices in the national sectors of the Prespa Basin.
- Community and user involvement in natural resource management in all three countries is very low and there are no functioning mechanisms to give local authorities and resource users more of a stake in the benefits of conservation. This is true for virtually all sectors including agriculture, fisheries, forestry, wildlife, protected areas.

At Trans-boundary Level

- Transaction costs associated with moving to the next level from trans-boundary agreement upon the principles and basis for trans-boundary cooperation to developing and supporting specific mechanisms for cooperation (i.e. the PPCC or cooperative fishery management or water management). For example, the trans-boundary coordination capacity of the Prespa Park Coordination Committee (PPCC) has yet to be demonstrated and will require the countries to endow the Committee with a formal legal mandate, changes in the structure of the committee, full-time professional staff, and appropriate allocation of resources.
- Data sharing on key issues affecting Prespa is limited to a few narrow topics and hampered by disparate sampling strategies, methods of gathering data, and ingrained reluctance to share data without payment. Data is perceived as a commodity and not a shared scientific resource.
- Restricted access to data and poor communication among the three littoral states has led in the past to differing interpretations of the priorities affecting the sustainable management of the Prespa and these views often reflected national, rather than trans-boundary priorities.

Source: (Adapted from) UNDP, Project document. GEF "Integrated Ecosystem Management in the Prespa Lakes Basin of Albania, FYR Macedonia and Greece" Project

At the absence of River Basin Management Plans - which constitute the main tools for rational and integrated management of water resources in a basin- it seems (based on the available information) that the major efforts for on-the-ground management of natural resources in the Drin sub-basins, that include elements of integration, have focused on designating protected areas. The management of these areas, that include in some cases the whole part (e.g. Greek and Albanian part of Prespa Basin) or the entire littoral zone (e.g. Montenegrin part of Shkoder Basin) of a basin within the territories of a country, may be seen as a component within the framework of integrated basin management, offering a "core" minimal management framework also for water resources. The protected areas

⁶⁴ AL stands for Albania, FYROM for FYR Macedonia and GR for Greece

status confers, in principle, a number of advantages. At the policy level it establishes nature conservation and sustainable use of natural resources as the core management objectives. It also provides a legal framework for the competent institutions to establish and enforce relevant regulations.

Protected areas

There is a number of existing and proposed protected areas, under different protection status, in the Drin Basin in Albania, FYR Macedonia, Greece and Montenegro (see respective maps and tables 20, 21). Different administrative schemes can be found in each of them with different responsibilities and operational capacity.

In Albania⁶⁵, there are a number of protected areas in the Albanian Drin watershed. The Prespa Park, Ohrid landscape, Shebenik-Jabllanice are national parks while Shkoder Lake and Buna River are nature managed reserves.

Table 20. Protected Areas, in the Diber, Kukes and Shkoder prefectures in Albania

Prefectures	IUCN Categories (Ha)						Total Area (Ha)	Number of Protected areas
	I	II	III	IV	V	VI		
Diber	0	1420	50	0	0	5900	7370	102
Kukes	3000	8000	0	30	0	0	11030	58
Shkoder	0	2630	0	26535	23027	0	52192	93

The Protected Area Management Directorate (PAMD) in the MEFWA has overall responsibilities for the management of the protected areas. A law establishing management committees for protected areas was adopted in February 2005; nevertheless there is not enough information available

regarding the level of its implementation. Most of the protected areas in the Albanian Drin Watershed are administrated by the Directorates of Forestry services and the sectoral institutions that have responsibility for the respective natural resources within the protected area. The management the Prespa National Park (PNP) is practiced by the PAMD. Each sectoral institution has to work with PAMD to administer the natural resources in the area.

The Protected Areas Administration of the Ministry of Environment and Physical Planning (MEPP) has the overall responsibility over protected areas management in FYR Macedonia⁶⁶ while the Ministry of Agriculture retains management authority over forests, fishing and wildlife. The protected areas in Prespa encompass both the mountainous ecosystem to the east of Macro Prespa Lake (Pelister National Park), as well as the terrestrial ecosystems straddling the Galicica Mountain located between the Macro Prespa and Ohrid Lakes (Galicica National Park).

⁶⁵ The Law on Protected areas was approved in June 2002. The purpose of the law is the declaration, preservation, administration, management and usage of protected areas and their natural and biological resources; the regulation of conditions for the development of environmental tourism, information and education of the general public and of economic activities by the local population, by the state or the private sector.

⁶⁶ The Law on Nature Protection has been enacted the past years. The law provides for a re-evaluation and re-proclamation of the existing protected areas and the integration of habitats and sites under different management structures. The re-evaluation shall take place within three years after the adoption of the new law. Furthermore, the law specifies options for the financing of operational costs. Important by-laws and administrative steps such as distribution mechanisms for income sources, procedures for financial planning and management, have not been drafted yet .

Figure 13. Proposed and existing Protected Areas in Albania



Source: <http://maps.grida.no/go/graphic/protected-areas-and-conservation-hotspots-in-albania>

“Prespa Drvo”, which is a regional unit of the central public enterprise for management of forests, “Makedonski Sumi” under the Ministry of Agriculture.

Figure 14. Protected Areas in FYR Macedonia (as for 2000)



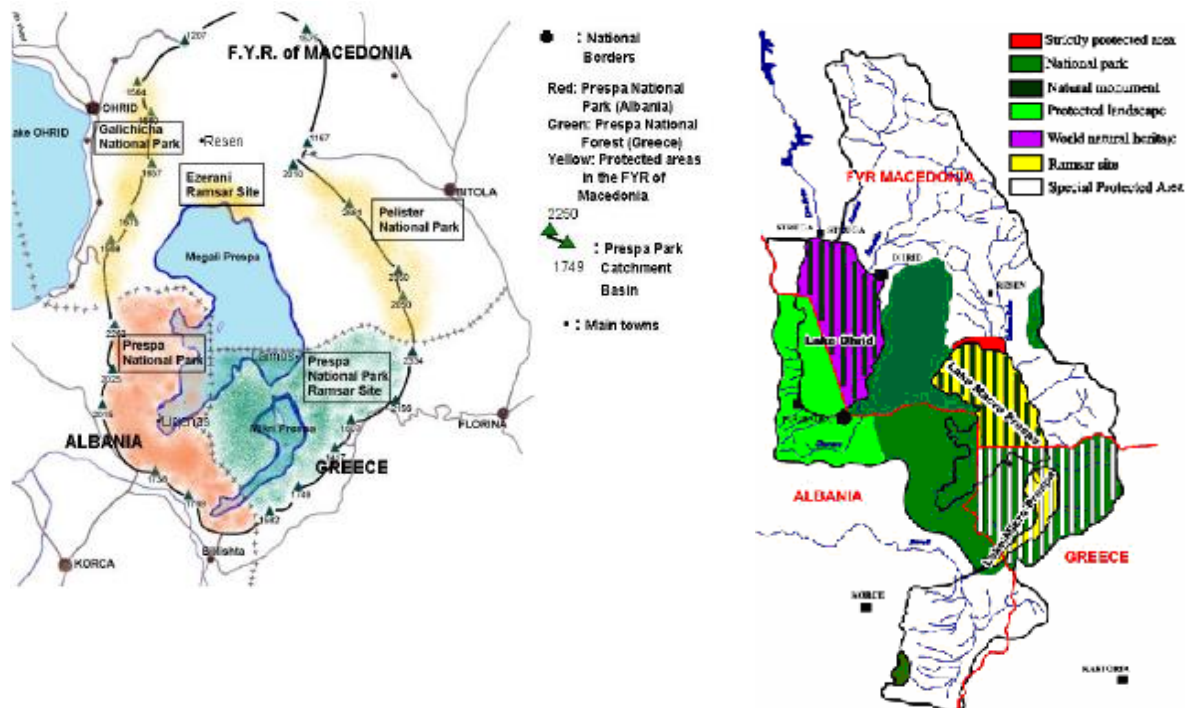
Source: http://maps.grida.no/go/graphic/biodiversity_and_protected_areas_in_macedonia

The MEPP⁶⁷ is responsible for the management of the Ezerani Natural Reserve. Each protected area has a management board which has the authority to adopt management and financial plans. The National Parks Galicica and Pelister⁶⁸ have operational management structures. These function as independent entities with no institutional or financial support from the government. Other authorities have competences on the management of natural resources as well. In the Prespa area, forests are managed by

⁶⁷ A GEF Medium-Sized Project “International Biodiversity Data and GIS” (UNDP is the implementing agency) started in late 2008, will assist FYR Macedonia to create an enabling environment for protected area establishment and management in terms of policy, governance, institutional capacity and management know-how. The objective of the project is to conserve the country’s biological diversity by strengthening the management effectiveness of country’s protected area system as prescribed by its recent Law on Nature Protection. Some of the information regarding the protected areas (boundaries, land coverage etc.) of the country is held in the GIS system of the Ministry of Environment and Physical Planning, which is also in the process of updating a national Corine Land Cover map. The Law on Nature Protection (2004) requires all existing sites are to be re-evaluated, have their boundaries in GIS confirmed (and adjusted if necessary) and be assigned a managing authority and IUCN management category. Further sites may also be designated in order to establish a ‘National Ecological Network’. A Study on National Park Pelister was prepared, that treats in details the NP natural values. Spatial identification of the Park borders was carried out, that resulted in adoption of the Law on Re-Proclaiming Part of Pelister Mountain as National. The territory of the National Park expanded for 6000 hectares.

⁶⁸ The Public Institution Pelister National Park and the Public Institution Galicica National Park are responsible for the protection and management of the respective protected areas.

Figure 15. Protected Areas and status of protection in the Prespa – Ohrid region



Source: S. Shumka, V. Roumeliotou, 2004

In Greece, the Administrative Council (or, Board) of the Prespa Protected Area (PPA) Management Body operates since 2003. The actual management body for PPA was also legally established in 2003, but only recently became operational. It is responsible, among others, for the application of the normative framework in the area of its jurisdiction – the whole Greek part of the catchment area of the two Prespa Lakes. The board has a multi-stakeholder synthesis including representatives of the local communities and a network of NGO's active in the area. The Forest Service and Pastures (GDFF) under the Ministry of Agriculture is the responsible institution for forests.

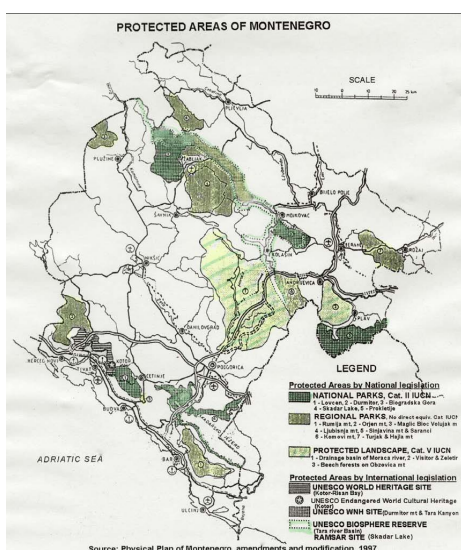
In Shkoder area the combined protected area -Lake Skadar National Park (LSNP) in Montenegro and the Shkoder Lake Management Nature Reserve (SLMNR) in Albania- covers 900 km² with half of this being the lake. The LSNP includes in its border the whole littoral zone of the Lake. In Albania the protected area includes the Lake shore and the immediately surrounding areas, Buna River, Buna Delta, Velipoja beach, Domni Marsh and Viluni Lagoon and Velipoja Forest. Both PAs are multiple-use areas rather than exclusive nature reserves.

The LSNP has an operational management structure, the National Park public enterprise, "National park Skadar". The Forest Management Directorate under the MFWR in Montenegro is responsible for the management of forests. The SLMNR has a legally established management authority that is not yet fully operational. The management units have the mandate to enforce regulations and to approve or disapprove development proposals, land purchases, etc. based on their spatial and management plans and the PA legislation. The management boards of the protected areas are empowered to develop internal by-laws.

All areas contain settlements and privately owned as well as public lands, and their resources (fish, gravel, pastures, etc.) are exploited for both subsistence and commercial purposes. Tourism –despite the problems- is already an established use in the protected areas (especially in Ohrid) and is

expected to grow rapidly. Tourism is seen by the governments in all cases as the main activity for development in the future.

Figure 16. Protected Areas in Montenegro



Source: Royal Haskoning, 2006

Insufficient administrative capacity for the management of the protected areas is a major problem in most of the cases - especially the most recently established ones- and needs to be strengthened. In the Prespa and Ohrid areas overall, the existing management capacity is far from the needed level. The institutional capacity in the Galicika National Park is weak, not focused on the management of the natural resources of the protected area. The main activities of the Galicika National Park management authority (NPG), which is sufficiently staffed, are related to occasional patrolling, the prosecution of cases linked to the illegal construction of houses and to user rights in strictly protected zones within the park. The capacities of the NPG Administration have been absorbed, to a large extent, to income generating activities since operational costs are not funded by external sources. Steps for the improvement of the management of the National Park are underway⁶⁹. In the Greek part, the situation is also far from being ideal. In the Albanian Prespa National Park, staff is not sufficient in number and also in technical qualification while there is limited equipment and infrastructure. Management and law enforcement is an issue in all protected areas in the Albanian Drin Watershed. An indicative example is that there are about 100 fishermen in Prespa of which only the half are licensed. The Management Unit of the LSNP in Montenegro is well established and experienced and according to Salateh T. (2005, Ramsar advisory mission Report), there has been a substantial progress achieved in the recent past with regard to the administration and management of the protected area. Nevertheless, it still faces difficulties to address management challenges, such as illegal fishing and constructions.⁷⁰ The Management Unit of the SLMNR in Albania has been legally established but at present consists only of 10 fisheries rangers, one of whom has been designated as the acting Head of the Unit. The situation is expected to improve through the activities of the GEF project in the Shkoder basin (see respective part of the document).

According to available information situation is better in the Pelister National Park in FYR Macedonia⁷¹. The latter is financially self-sustained with an efficient management unit.

⁶⁹ The Transboundary Biosphere Reserve Prespa – Support to Galicika National Park project is implemented with the financial support of the KfW. The objective of the FYR Macedonian program component is to reduce current and future pressures on the ecosystems and to improve the management effectiveness of the NPG so that it effectively contributes to the sustainable ecological and economic development in the trans-boundary Prespa Park region. The project will work to: re-orientate the activities and capacities of the Park Administration towards conservation management; support the NP administration logistically (vehicles, equipment, a boat if necessary). It will work also to elaborate a participatory Management Plan as the basis for effective conservation management and to improve the conservation management including among others: a clear demarcation of the Galicika NP's boundaries and its zones; the establishment of a local park office and information point on the Prespa side; the restoration of degraded zones (including removal of dilapidated infrastructure and waste) and pastures identified to be actively managed; the development of a monitoring system allowing for planning and following up on measures for protection and conservation and; the development of diversified income sources for the NP Galicika to ensure sustainable conservation. Increased public involvement and awareness campaigns among all shareholders are anticipated.

⁷⁰ There have been recent (2006) sales of lakeshore land by a Municipality to private buyers in despite the fact that new construction is currently legally prohibited inside the boundaries of the National Park (World Bank, 2007).

⁷¹ A project supported by the Swiss Agency for Development and Cooperation (SDC) started in 2004. The second phase is expected to end in 2009. The aim is to assist the management authority towards the sustainable management of the National Park providing a model for the rest of protected areas of FYR Macedonia. The preparation of a management plan is one of the activities implemented under this project. (more information at <http://www.swisscooperation.org.mk>)

Table 21. Protected areas in the Lake Basins of Prespa, Ohrid and Shkoder

	Lake Shkoder Basin		Lake Ohrid and Prespa Basins****					
	Montenegro****		Albania		FYR Macedonia***			Greece*
Protected Areas	Lake Shkoder National Park	Shkoder Lake Management Nature Reserve ¹	Lake Ohrid: ‘Protected Aquatic and Soil Scenery’	Prespa National Park	Galicika National Park	Pelister National Park	Ezerani Nature Reserve	Prespa Protected Area
Other designations	- Ramsar site designated in 1996 - Sites within the National Park: Ornithological Reserves; Nature Reserves; Nature Monuments (The number and extent of these specially protected areas are under revision)	- Ramsar site designated in 2006: Albanian part and the wetlands along the Buna river, including the Viluni lagoon near Velipoja at the Adriatic					- Ramsar site designated in 1995 - Strictly protected reserve in 1996	- Ramsar site designated in 1974 (Micro Prespa) - Special Protected Area under the EU Birds Directive (the wetland system) - Natura 2000 site under the EU Habitats Directive (Prespa catchment area and lakes)
Area (km ²)	400	495	**	135	221,5	108,7	20,8	**
Date of designation	1983	2005	1999	1999	1958	1948	1996	2002*
Management Constraints (Indicative)				Limited equipment				
	Lack of sufficient monitoring programs			Lack of Integrated Management Plan				
	Insufficient patrolling			Insufficient legal status of the Protected Area Management Directorate result in unclear management and budgetary authority over park resources		Management activities have to be self-financed		Insufficient patrolling
	Insufficient zoning system			Understaffed				
				Personnel limited technical capacity				
	Non harmonised management objectives, targeted habitats and species, and monitoring indicators			Non harmonised management objectives, targeted habitats and species, and monitoring indicators				
Operational Management Structures	Yes	Legally established but not fully operational yet	**	Yes	Yes	Yes	No	Yes
Preparation of new Management plans	**	**	**	**	**	Yes – Prepared in 2006 with the assistance of the SDC	**	**

* In Greece, Prespa National Forest was designated in 1974 for the protection of the lakes Micro and Macro Prespa and their catchment area, with a focus on the terrestrial part of Prespa, under the management responsibility of the Forest Directorate of Florina. In 1975, the same area was declared a “landscape of exceptional beauty”. According to the Special Environmental Study for the area, the limits of the Prespa Protected Area were modified to include the whole catchment. In 2002, the Greek Government declared the whole catchment area of the Prespa as a protected area. Also, the Greek side of the wetland system is declared an area of great ornithological value (Special Protection Area (SPA) under the EEC Birds Directive).

** No relevant data is available

*** In 1979/80, the FYR Macedonian side of Lake Ohrid was identified as a mixed cultural/natural world heritage site by UNESCO’s World Heritage Committee.

**** In addition other designations have been made or proposed to be made: In Montenegro the Moraca River Canyon is designated as EMERALD site, in accordance to the Convention on Protection of European Habitats and Wildlife (Bern Convention). The Albanian government proclaimed the Albanian side of Lake Ohrid as a “Protected Aquatic and Soil Scenery”; in December 2002 the Nature Monuments of Albania have been established – fourteen of these are in the District of Pogradec. In FYR Macedonia the Bird Sanctuary Ezerani (declared Ramsar site), bordering the northern section of Macro Prespa Lake, was established in 1996 for the protection of migratory waterfowl and other water-bird species. The Kalojzana Neprtko Rupa have been designated as an area with “Individual flora and fauna species outside natural reserves”; the Ohrid and Prespa Lakes have been designated while the Makedonski Dab Ostrovo is proposed to be designated as “Monuments of Nature”. The Osoj, Studencista, Golem Kotel, Kula are proposed to be designated as “Strictly Protected Natural Reserve” the first and as “Scientific and Research Natural Reserves” the other three. In Montenegro the Velika Plaza beach in the Buna Delta area is protected under the status of “Natural Monument”.

¹ Lake Shkoder and the downstream floodplain along the out flowing Buna River, including the lagoon next to Velipoja village at the Adriatic Sea is a national protected area. It includes several categories (IUCN), as following: Shkoder Lake, Buna River, Buna Delta, Velipoja beach, Domni Marsh and Viluni Lagoon are under the Category IV (Habitat/Species Management Area); Rrenci Mountain is under Category V (Protected Landscape); while Velipoja Forest has the status of a Nature Reserve (Category I) and has been claimed as a Hunting Reserve from the communist government since 1964 (Dedaj Z. and Beqiraj S. , 2005).

Sources: UNDP, Project document. GEF “Integrated Ecosystem Management in the Prespa Lakes Basin of Albania, FYR -Macedonia and Greece” Project, Spatial Plan of FYR Macedonia, Watzin et al 2005, Salateh T., 2005 , Royal Haskoning, 2006.

Management plans of protected areas stipulate the instruments and regulations to be used, drawing on the relevant provisions of the legislative framework, in the specific area in question. Since, usually, the management of natural resources is subject to sectoral planning and management, management plans may offer a level of integration. Nevertheless, none of the protected areas have an approved integrated management plan. Attempts for drafting management plans go back to the early 1980's at least for some parts (e.g. Greek Prespa) and are at different stages of preparation and maturity and follow different approaches and standards.

Conservation focus in the management plan of the Albanian PNP is single orientated: on forests. A new management plan needs to include other priority shoreline and aquatic habitats and incorporate integrated management principles. In Greece, the formal designation of the zoning areas and allowed activities within the boundaries of the protected areas is pending. The Pelister National Park has an approved management plan –prepared in 2007- which is in the implementation stage. In Galicica National Park a conservation oriented management plan focusing on the natural resources within the protected area is expected to be ready within 2009 (see footnote 69 in page 55). Forestry resources in the GNP are managed according to an updated forestry management plan, which is valid up to 2012. A study for the re-volalorization⁷² of the protected areas in Ohrid Lake is under preparation and will be one of the supporting documents for the preparation of the management plan that is going to be prepared within 2009. Nevertheless this plan will apply only to the boundaries of the World Heritage site of Ohrid Lake in the FYR Macedonian side.

In Montenegro, the “Program of protection, improvement and exploitation of natural resources” was adopted in 1988 and updated in the 90's. Management of the LNSP is done in accordance with the “Physical Plan of Skadar Lake as National Park”. Based on this document, LNSP developed a Conservation and Development Programme for the period 2005 – 2010, partly fulfilling the role of a management plan (Salateh T., 2005 Ramsar advisory mission Report), and annual plans for the conservation and development of the park. In the Albanian protected areas of the wider Shkoder-Buna/Bojana area, an appropriate management plan is not in place. The preparation of a lake-wide zoning and management plan both Montenegrin and Albanian sides, is anticipated in the framework of GEF Lake Shkoder/Skadar Integrated Ecosystem Management Project (more information about the project in chapter 5.1). These will be integrated in the national-level spatial and sectoral plans.

Management Instruments

Several instruments are in use for the management of the natural resources of the basins. In the absence of integrated management plans either for the basins or the protected areas the establishment of management instruments has been mostly “in line” with the sectoral management in the countries of focus. Although both Command and Control (CAC) and economic instruments exist –it is common to combine them because of their complementary strengths- the former seem to dominate the management of the natural resources in the basins. Indicative examples of such policies and respective regulations as well as other instruments used for the management of the natural resources are provided in the following paragraphs. Environmental education, public awareness, information and consultation which are also essential to gain acceptance of (and compliance with) the instruments, are used with diverse intensity and results.

- CAC instruments/policies

Regulations defining the permitted activities and natural resources uses in certain zones of protected areas are provided by the legal system of the countries of focus. In *FYR Macedonia* the classification of IUCN has been incorporated in 2004; this classification has to be applied in the existing system of

⁷² In accordance to IUCN categorization – the relevant provision is included in the Law on Nature Protection. All the protected areas in the country will be subject to revalorization.

protected areas in the country. A zoning system is in place for Galicika National Park – see box bellow. A new zoning system is planned to be prepared being in line with the evolving protected areas related legal framework. Zoning system in Pelister Park is in place, established in the framework of the management plan prepared in 2007. The Law on Nature Protection and Law on Environment include provisions regarding the protected area management regulations, categorization of allowed and forbidden activities, licensing procedures for the use of protected species inside protected areas, data management etc. In addition, rulebooks that have been prepared under the Law on waters regulate issues relevant to water resources management in the protected areas.

Box 14. Current Zones in the Galicika National Park

Strictly protected

Areas and biotopes of national and universal significance are included in the group of strictly protected parts of the park. These areas are characterized with plant and animal communities in unspoiled condition.

Tourist - Recreational

This zone is divided to two sections: for summer tourism and recreation, and for winter tourism. Sections for summer tourism on Ohrid side, begin at Bej Bunar locality, and stretches between the shore of the Lake Ohrid and the newly marked road Ohrid – St. Naum. On the Lake Prespa, this section starts at Sir Han settlement, and stretches all the way to the Albanian border between the lake and the edge of the forest. Along this stretch there are rocks and cliffs, and those are declared strictly protected areas. Section of winter tourism is on the mountain plateau of Galicica.

Commercial

This zone covers the rest of the National Park, mostly covered by forest.

Source: Galicika National Park website



In Albania the Decision Concerning the Declaration of Nature's Monuments as Protected Zones (2002) supplements the law on Protected Areas. The law regulates the protection in six (6) categories of protected areas – according to the IUCN criteria. It provides for the declaration of a buffer zone around the areas classified under certain categories.

Box 15. Zones in the protected areas of the Albanian part of Shkoder

The protected area in the Albanian part of Shkoder includes three zones:

- The core zone* comprises: the lake shore from the western extreme of Zogaj village to the border between Republic of Albania and Montenegro, the slope of Taraboshi Mountain from altitude 494 m in the south to 200 m within the lake waters, in the segment Zogaj-Albanian-Montenegrin border in the north.
- Habitat Management Area* comprises: the whole lake water surface, except the one included in the area mentioned above; the Albanian western shore from Bojana/Buna bridge in the east, to Zogaj village in the west including all the latitude of this segment up to the altitude of 300 m in Taraboshi mountain slope in the south.
- Traditional Development Area* comprises: the whole eastern surface of the lake bordering on the west with the area mentioned above of this point up to Shkodër-Hani i Hotit motorway in the east and Shkodra city in the south-eastern end.

Source: APAWA, CETI, 2007

In Montenegro there are six categories set to characterize the protected natural resources. The Republic Institute for Protection of Nature enacts regulations for granting the status of protected areas. Criteria for categorization, protection and allowed use of the protected natural resources should be determined in subsidiary legislation (REC, 2005). The Law on National Parks provides managing, use, protection and improvement measures for National Parks. The Law on Environment

regulates protection of nature and defines prohibitions and licensing. Law on Nature Protection defines categories of protection of natural areas in Montenegro and provides for managing tools. In Shkoder Lake National park in Montenegro, most of activities are restricted in accordance to the Law on National Parks and are subject to an Environment Impact Assessment. The decision regarding the implementation of the activity is taken by MTE.

In the Prespa basin in *Greece*, zoning system and relevant regulations exist from the 70s (Prespa National Forest). However these are due to be replaced by a new legislative regime (joint ministerial decision) regulating zoning and activities in the framework of a Prespa National Park.

Land use planning

Land use planning and respective regulations that determine the allowed activities and uses in specific areas are essential for the sustainable management of the basins. Steps taken so far are not adequate but could be considered as promising for the future. In the Greek part of Prespa basin, a regional spatial plan is in force providing the overall land use and planning framework. An urban and spatial plan for the municipality of Prespa is under preparation. In FYR Macedonia the existing national legislation foresees except for the development of National Spatial Plan⁷³, spatial plans for regions, for municipalities and national parks⁷⁴. The draft Regional spatial Plan for Ohrid-Prespa region, of which the Prespa and Ohrid basins is an integral part, has been prepared by the State Agency for Spatial in consultation with various relevant stakeholders. It is now in the stage of public hearing, and is expected to be adopted soon.

In Albania, following a legal analysis a draft “Law on the Preparation and Land use Plan for the Lake Ohrid Watershed Region” has been prepared. In 2003, the Territory Adjustment Council of the Municipality of Pogradec adopted Terms of Reference for the preparation of the new Urban Plan that includes the 50 percent of the total area of the town (Watzin et al., 2003). There is no available information on recent developments with regard to these initiatives. The protected areas in Shkoder have been designated as special planning areas for which detailed spatial plans are to be developed and approved by Government; these can supersede local/municipal level plans. The Regulation and Urbanization Plan of Shkodra, Albania (including the coast of the Shkoder Lake) was designed in 1998. In Montenegro the national Spatial Plan has been prepared (March 2008) and so is the special purpose Spatial Plan for Shkoder area.

In the Buna/ Bojana area, Albania is preparing a physical plan for Velipoja while in Montenegro, a draft physical plan prepared to preserve and manage the coastal estate (“morsko dobro”) has been prepared.

Zoning systems for protected areas and spatial planning (where these exist) do not always serve the objective of a balanced approach between the need for the conservation of the lake’s ecological system and the need for economic development, consistent with the prevailing socioeconomic situation in the area. The insufficient designing of the systems is one reason e.g. unclear criteria for categorization and enforcement of rules for the management of protected areas; the administrative capacity is another.

⁷³ Adopted in 2004 and is valid until 2020 - details basic land use assignments and provides direction for development and conservation including infrastructure and measures for special management.

⁷⁴ The development of these has only begun recently. The body responsible for of their development is the Agency for Spatial Planning.

Obtaining water use permits in both Albania and FYR Macedonia is obligatory for most users but the process is considered to be complicated. In the first overall responsibility on water use⁷⁵ permitting lies with the Ministries of Agriculture and Environment (SPP, 2006). In the latter the Ministry of Agriculture Forestry and Water Economy has the overall responsibility (until 2010). Local inspectorates are responsible for the control and compliance at least for the agricultural water.

In general, the use of surface and ground water remain in most cases difficult to be monitored and controlled. As an example in the FYR Macedonia in Prespa Lake basin, water abstraction from surface streams is often the case. In addition, it is estimated that 8,000 wells have been drilled within the past 15 years and are currently in use – nearly all without license (UNDP). Irrigation in the Albanian side does not exert a significant pressure due to the abandonment and destruction of the relevant infrastructure. Nevertheless, water users are not registered, the extracted quantities are neither measured nor reported and the abstraction taxes/charges are not paid; illegal abstraction is a common practice (SPP, 2006). In Greek Prespa irrigation is fully controlled and paid for.

Fishing

Fishing in Shkoder lake was uncontrolled during 1991-2001. Since then the two countries have made efforts to control the situation mainly through organization of the fishermen and improved licensing. In Montenegro concessions are granted by the Lake Shkoder National Park Public Enterprise to private schemes for the commercial exploitation of specific species. Also five categories of licenses⁷⁶ are issued indicating fishing locations, equipment allowed and fish species that can be caught. Fishing in the Montenegrin part of Shkoder Lake is banned during the spawning season while it is prohibited in specific sections of the lake – in the “oka” (underwater spring halls). A Law on freshwater fishing expected in 2007 would distinguish between professional and leisure fishing and introduce zoning (there is no information available on developments in this regard). In Albania, the respective law provides for fishermen-based organizations for management⁷⁷ of fisheries to be established. A group license would be issued and “sub-licenses” would be provided to its members. In Shkoder two fishing inspectors in collaboration with the central and local authorities monitor the implementation of the respective law and regulations. Law enforcement is minimal due to the lack of financial resources and equipment available for fishing inspectors. Available information suggests that in the Albanian part of the lake the 40 percent of the fishermen (currently 800 – with their number growing) are unlicensed. A number of activities under the recently initiated GEF LSIEM project⁷⁸ will aim for sustainable fisheries management at the national level and provide the information and means for better bilateral coordination.

In Greece, a ban on hand-fishing of the endemic Prespa barbell is enforced. Limits on the catch of trout in Lake Ohrid have been set in the country in 2002 with the establishment of the Association for Fishery Management in Pogradec.

⁷⁵ Law on Protection of Lakes Ohrid, Prespa and Dojran (1978, revised in 1993) is one of the legal instruments that regulate among other the water use in these basins. The new Law on waters also include relevant provisions.

⁷⁶ Commercial and sports licenses are subject to different regulations. Sport licenses can be issued with validity from one day through up to one year. For 2005 about 170-200 commercial licenses for carp fishing were issued, about 25 for eel, 10 for bleak and 300 licenses for sports fishing. A fish factory has a ten-year license for fishing in one of the underwater springs (‘oka’).

⁷⁷ Fishing is being organised into Fishery Management Organizations (FMO); the effort begun under a Fisheries Development Project (World Bank, FAO, Italy) initiated in 2001 to organize and strengthen FMOs. Two FMOs are present in Shkoder involving about 500 fishermen with 260 fishing boats operating in 24 zones in the lake. There is no available information whether this scheme is applied and whether it is operational in all the three shared lakes of the country.

⁷⁸ This includes integrating the results and recommendations of the lake-wide stock assessment and fisheries management plan into national plans, regulations and programs. The project will also provide support and incentives for fishermen who are currently operating illegally to become licensed and to stop using illegal fishing methods. At the same time, it will help to strengthen the governments’ regulatory and enforcement capacity to stop unlicensed boats and the use of illegal fishing methods. If the stock assessment and monitoring confirm that the present level of fishing is excessive and unsustainable, the governments may need to place some currently used fishing areas off-limits and/or to reduce the number of boats and fishermen. (Project Brief, World Bank, 2007)

The respective limits in Ohrid have been set by the FYR Macedonian government through concessions and licenses (Watzin et. al, 2005). As for the rest of rivers, according to FAO (2005), there are no official limits in terms of Total Allowable Catch. Resource management regimes for the lakes were formerly calculated on a five-year basis according to the biology of the fish species involved. The fishery sector in FYR Macedonia is under the jurisdiction of the MAFWM, which is responsible for issuing licenses for concessions for commercial fishing companies and sport fishing associations (SFAs), as well permits for fish farm installation and operation. Five-year concessions are granted through a public bidding process to private fishing companies on each water body. The concession establishes limited parameters for fishing restrictions i.e. species and seasons. It doesn't provide any condition for the maintenance of native fish populations or the aquatic ecosystem health. The company is expected to submit a five-year master plan for protection, improvement and usage of the relevant fish stock during their license period; it is obliged to restock the lake in order to maintain the fish numbers in accordance with the fish- mass that was taken out of the lake. The company is given the right to issue fishing licenses and enforce fishing regulations and bans as required.

Logging is regulated in FYR Macedonia and according to the laws the land must be left in good condition for regeneration. Reforestation is a widely exercised practice. The Ministry of Agriculture through the Directorate of Forests issues licenses and makes on site inspections. In Albania, as mentioned above, illegal lodging and extensive collection of firewood is an issue.

Having “...*Enforcement of environmental legislation by strengthening of the Regional Environment Agencies and inspectorates, improvements in the permitting system*” among the strategic goals and “...*Management of environmental resources through a clear command and control legal framework implemented through a well monitored and enforced permit system. Areas to be targeted are mineral resources, protected zones, soil, flora and fauna protection, water resources and water rights (notably a planning system and the strengthening of river basin authorities)* ...” among the strategic priorities of Albania (National Strategy for Development and Integration, 2008), one can conclude that the current situation with regard to the enforcement of the legislation is not yet at the desired level. Situation is at the same more or less levels in the other two countries with FYR Macedonia being in a more advanced stage.

Steps for the improvement of the situation have been taken at the legal/regulatory level following the process for the restructuring of the framework for the management of the natural resources. These again are undermined by the administrative capacity.

Environmental Impacts Assessment

The EIA and SAA legislation in the three countries provide the infrastructure for more systematic enforcement of the environmental and natural resources management legislation. The particulars of projects/activities should be approved through water use and environmental permitting procedures. This legislation has also provisions for the participation of the stakeholders in the process for the assessment of the projects in question.

Box 16. EIA in Albania

The Law on Environmental Impact Assessment was approved in January, 2003. This law defines the rules and procedures for identifying and assessing the direct and indirect impacts of projects and activities on the environment. The law establishes provisions for all the steps necessary to implement EIA procedures: Presentation of the application, preliminary review, selection and classification criteria, public consultations, access to information, and duties and rights of other bodies. The law provides a list of activities that should be subject to an extended EIA process, such as oil and gas refinery plants, thermal power stations, smelters, exploration of oil and minerals, incinerators, with a certain capacity, etc. The other list of activities includes e.g. agricultural projects, forestry projects, aquaculture, quarries, food industries, and other activities not included in the first list. Activities listed in this annex are subject to a shortened EIA procedure. The

law seems to be close to the EU Directive on the assessment of the effects of certain public and private projects on the environment (85/337/EC with amendments), and contains also provisions regarding the application of Strategic Environmental Assessment. The law on EIA is considered to be a state of the art EIA law, with similar requirements regarding project description, public consultations, etc. as in the mentioned EU Directive. The first part of the Environmental Impact Assessment (EIA)/ Strategic Environmental Assessment (SEA) methodology, covering the preliminary assessment of environmental impact, has been approved in 2007. Nevertheless, further efforts are needed to implement existing EIA legislation. The collection and levels of fines inflicted on transgressors of environmental legislation remain too limited to be dissuasive.

Sources: Watzin et al., 2005, EC reports 2006, 2007, REC, 2005, 2006

Box 17. Regulations for protecting waters against pollution

The 2003 Law on Environmental Treatment of Polluted Waters, which addresses the treatment of polluted industrial and urban waters in Albania, establishes a licensing system on requirements, terms and conditions for construction sites of plants and installations for water purification operations. Permissible norms of liquid discharges are to be determined by the MoE by means of a special decision (REC, 2005). According to Watzin et al., 2005, in the case of Lake Ohrid the discharge limits for the new sewage treatment plant in Pogradec were specified based on the EU Standards for Sensitive Waters. In March 2005, Albania passed a law on norms relating to effluent discharges, according to which no business which discharges wastewater effluents will be issued with a permit to operate unless it installs a water purification facility.

In FYR Macedonia the MEPP has prepared a draft version of several regulations under the new Law on Water: Rulebooks on harmful substances and their emission standards; on the conditions and emission limit values of wastewater discharge upon treatment taking into account specific requirements for protection of sensitive zones; on detailed conditions, on the manner and on the requirements for designing, construction and operation of sewerage systems and urban wastewater treatment plants, as well as technical standards, parameters, emission standards and norms for the quality of pretreatment, removal and treatment of wastewater, taking into account the load and the method of treatment of urban waters discharged in zones sensitive to urban wastewater discharging etc.

In Montenegro the Law on Waters provides for the regulation of: Intake of hazardous and dangerous substances in surface and ground waters that might aggravate the existing status, i.e. exceeding the prescribed water quality standards; Intake of substances that might contaminate water or may cause siltation and salivation of water and settlement of sediments; Use of fertilizers or herbicides on the riparian land, which may exceed a limit of prescribed standards surface water quality; Discharge into the public sewerage system containing hazardous and dangerous substances that: exceed the prescribed standards, might have an adverse effect on the wastewater treatment possibility, might damage the sewer works and water treatment plants, might have an adverse effect on the health of the sewerage system maintenance workers; Disposal of communal and other waste on water land, high river banks, slopes of river canyons, natural pits, valleys and other locations from where they may enter either surface or ground waters and cause water quality degradation; Disposal of the substances that might contaminate water in the high water beds of natural and artificial streams and lakes, as well as on other lands; Washing of motor vehicles, machines, equipment and appliances in surface waters and on water land.

Sources: Watzin et al., 2005, REC, 2005, 2006, EC reports 2006, 2007(for the three countries), Montenegrin Ministry of Tourism and Environment, FYR Macedonian Ministry of Environment and Physical Planning

In FYR Macedonia, an EIA is required for a range of activities. National inspectors are charged with enforcement. The Integrated Pollution Prevention Permit was introduced to be applied in the industrial sector having as an objective the reduction of the industrial pollution. The law on Environment provides for the establishment of two types of integrated environmental permits introducing also penalties for violation of its provisions and financing of activities. According to the EC reports, although the situation has been improving over the last several years, there is still not complete compliance with the environmental regulations among the industries.

In Montenegro, the Law on Environmental Impact Assessment (EIA) and the Law on Strategic Environmental Assessment (SEA) were adopted in December 2005, but were supposed to enter into force only on 1 August 2008. Although there is progress recorded with the adoption of by-laws and implementing regulations of the Law on Environmental Impact Assessment –for example, an administrative and expert procedure of the EIA was developed and adopted- much work has to be

done in other fields. As an instance, the permit system for establishments and undertakings carrying out disposal or recovery operations, as provided for by the Waste Management Law adopted in 2005, has not yet been established. The Law on integrated pollution prevention and control (IPPC) adopted in 2005 entered into force on 1 January 2008. Limited progress can be reported since. The inventory of IPPC installations has not yet been completed. Existing installations are required to comply with the IPPC requirements by 2015. Overall, implementation and enforcement require particular attention. (EC 2007)

- Economic Instruments

With respect to the economic instruments, used at the riparian countries, a number of them can be identified such as fees, charges and taxes (see Table 22). Their success is subject to planning; integration in the economic, environmental and development policies; effectiveness of monitoring and enforcement; institutional co-ordination; and economic stability. These are targeted to the use of water for irrigation, domestic and industrial consumption, exploitation of fisheries and forests, tourism and recreational activities etc.; and charges for actions that potentially damage the environment and its sustainable use e.g. charges for liquid and solid waste management, pollution fines for violating the standards set etc. Challenges with regard to the efficient application of the instruments linked to the regulatory and institutional framework limitations at national level have been discussed previously in the present document and apply at the local level as well e.g. capacity constraints (technical, human etc.) prevent in several cases the efficient monitoring of the enforcement and collection of fees and charges etc.

It is not clear whether the nexus of economic instruments adopted satisfy the objectives. Available information is scattered. From the information gathered a rough picture of the situation could be documented.

In Albania, a number of laws either advocate their use or specify precise details and charges. The Law on Environmental Protection (2002) summarizes the general status of economic instruments and set out a series of potential environmental violations, together with fine and administrative arrangements. A total of 15 types of violation and related fines are defined. The fines are set by the environmental inspectorate and enforced in cooperation with the state police. The fines are paid to the state budget, and delays in payment incur an additional 10 percent penalty daily. Permits with lease rates are required in the exploitation of natural resources e.g. excavation for stone, humus, sand, gravel, etc., in forests and riverbeds; wood coal, tinder and lime production; beehive cultivation; and quarrying. A range of infringements -hunting without permits or outside designated hunting zones; killing or collecting over the limit and out of season; and damaging bird nests-together with associated fines is outlined in the Protection of Wild Fauna and Hunting Law (1994). The Hunting Association has the authority to collect hunting fees. Permits and authorisation for the use of inert material, e.g. sand or gravel, through the mining of rivers, streams or lakes are issued by the water authorities as provided in the Water Sources Law (1996). Tariffs on water use for various purposes, taking into consideration a range of factors are set by the Council of Ministers⁷⁹. Additionally, financial incentives in the form of loans, tax exemptions and fee exemptions for water use are available from the central government for processes, installations and new equipment that reduce water use, water consumption and/or pollution. Several existing laws detail administrative and tariff arrangements for providing public services relating to solid waste and wastewater disposal and water supply, as well as fines for non-compliance. Eco-taxes are collected on a number of products, e.g. carbon and plastic packaging, in accordance with legislation adopted at the end of 2002. The National Environmental Action Plan (NEAP), adopted in 2002 for a period of 5 years,

⁷⁹ The levels of the new tariffs on water uses adopted in 2008 are reduced by 7-10 times, compared with the previous levels.

recognized the need for “*restructuring of economic incentives to encourage and improve, efficient resource utilization*” as a key area of intervention. According to the EC Report, 2007, the government has embraced the “polluter pays” principle, but current legislation does not allow this concept to be implemented in practice. Revenue from non-compliance fines and administrative licensing process are much too small to fund important environmental projects. These are set by the Environmental Inspectorate under the Ministry of Environment, Forests and Water Administration. The collection rate for fines as well as for water use tariffs is very low. In 2004, only 38 percent of the fines, totaling 11.4 percent of the value of the fines were collected. Environmental inspectors lack adequate resources to carry out their duties. The economic and social situation has hampered the efficient use of economic instruments for the management of the environment and the natural resources. As an outcome, command and control instruments dominate Albanian environmental policy.

In FYR Macedonia, the Action Programme 2005 of the European Agency for Reconstruction for the FYR Macedonia underlined that the use of economic instruments for pollution prevention had been fragmented and uncoordinated due to several issues; lack of strategic policy framework, and lack of experience in the MEPP and in other authorities concerning environmental economic and investment appraisal. Nevertheless, steps for the enhancement of the use of economic instruments have been made. The 2005 environmental law introduces new charges for environmental protection based on the polluter pays principle, and introduces a wider range of environmental taxes and charges to be paid by legal and natural entities. Implementation of these environmental taxes and charges, as well as earmarking of the money collected, would be based on the Annual Investment Program. A number of amendments in the existing legislation include penalty provisions e.g. the previous Law on Water was amended in April 2006 to cover issues with regard to payment of water charges; penalty provisions were included in the Law of Environment through an amendment in 2007 - the amendments empower the central and local environmental inspectorates to impose directly the penalties prescribed in the Law. Amendments to the Laws on Environment, Waste Management, Protection of Nature and on Hunting, have been enacted in order to bring the penalty provisions in line with the Law on misdemeanours (EC report, 2007). Charges and taxes for water uses have been adopted. Irrigation fees (applicable in the areas covered by the irrigation network) are regulated at national level (information provided by the MEPP). There are also charges that are applicable for water abstractions from surface or ground waters (after the relevant permission is obtained). Although the authorities see these instruments, in combination with technology solutions, as important tools to control overuse of water, there are still issues regarding their enforcement and control.

The improvement of the economic instruments is among the key objectives of Montenegro. “Among the environmental policy measures and instruments, special attention will be paid to the improved use of the existing and the introducing of new, economic instruments (e.g. product charges related to waste, incentives for the environmentally friendly activities)”.

In Montenegro, polluter pays principle is defined in the Law on the Environment. The Law foresees the introduction of a number of pollution charges and taxes. Sub-laws regulate the amount and method of payment of different eco-instruments. Fees for emission and products which have negative effects on environment (i.e. air emission, hazardous waste, fossil fuels, CFCs and motor vehicles) are established through the Act on “Fees and the process of balancing and payment for environmental pollution”. This Act include progressive provisions e.g. regulates fees for use of fossil fuels. Nevertheless, it was not implemented as for 2006. Some financial instruments for water use and pollution, use of natural resources and biodiversity are being used; fuel, motor vehicle and boat taxation are regulated through the taxation policy. The Law on Waters provide for the full cost recovery of water services. A Draft Law on Water Management Funding has been prepared and

Source: Republic of Montenegro. Millennium development goals report 2004 “A report on the progress towards the achievement of the Millennium development goals in Montenegro”. Podgorica, 2005.

expected to be adopted until the end of the year, prescribing the amount and payment of fees for the protection and use of water resources, in accordance with the European Union's Water Framework Directive. The Law on the Eco-fund, to be adopted until the end of 2008, according to available information, regulates some aspects of financial eco-instruments. Existing financial instruments and fees are insufficient to implement the polluter/user-pays principle and provide an incentive or disincentive for sustainable management of natural resources. Depleted economic power of the citizenry, current low levels of revenue and possible regressive effects of financial eco-instruments are the main obstacles to the introduction of new financial eco-instruments. (REC, 2006)

There are several examples of such instruments used at the basins level. For instance in the Lake Shkoder National Park in Montenegro, these include fees for entering the protected area and a specific tax on transports at the Lake. In addition the National Park Public Enterprise is pursuing an innovative and promising approach to providing incentives for ecologically and economically sustainable fisheries in the Lake (Salateh T., 2005 Ramsar advisory mission Report). In the Albanian Prespa National Park, entrance fees and fees for granting licenses for harvesting medical plants are used. In FYR Macedonian side of Lake Ohrid, fishermen pay 10 percent of the market price of their catch to the fishing companies that are granted concessions, which in turn pay a percentage to the government.

However there are cases where the application of economic instruments can lead to undesirable results. In the latter above mentioned example, the instrument serves as a perverse incentive to over-harvest the fish and under-report the catch (UNDP, Project document. GEF "Integrated Ecosystem Management in the Prespa Lakes Basin of Albania, FYR Macedonia and Greece" Project).

The translation of an economic instrument in actual economic terms is a main factor that could determine its potential for effectiveness in terms of providing an incentive or disincentive in order to control behavior. As an instance, according to the available assessments for the SEE region as a whole, pollution reduction at the source has not been achieved. The unstable economic situation and high inflation rates have had an impact in the use of instruments such as water use charges and pollution charges. Such charges are of key significance since they are also used for generating revenues as means for financing related infrastructures. A move towards full cost recovery can be found in many, but not all (especially after the enlargement of EU to include 12 more countries) EU member states as required for by the EU WFD. Progress towards this direction is rather limited in the countries of focus – often due to affordability concerns – where water prices are often much lower than the cost of supply, offering some perverse incentives regarding efficient water use (Speck, 2006). In addition to the low tariffs comes the low monitoring of water use and the low collection of tariffs. The latter is due to the limited administrative capacity to enforce the regulations and to the lack of willingness of the water users to pay. There are signs of improvement though. The low collection rates that have been a huge issue in Albania –used to be lower than 50 percent- have improved according to the EC: many enterprises have achieved a collection rate of 75 percent and some as high as 97 percent.

The use of economic incentives is of major importance for improving the efficiency of use of natural resources. However, the level of acceptance of the view that these resources have an economic value, and that consumers should pay for their sustaining and improvement (if necessary) is generally very low in the region. Public awareness about the importance of good quality water will help increase the level of acceptability.

Overall, information is scattered and sometimes controversial and is not sufficient in order to assess with precision the real effect of the combined application of CAC policies and economic instruments in terms of contribution to the sustainable management of the lake basins. The fact that despite some

efforts they are not yet part of an integrated basin management policy, and that unsustainable practices in the Lakes and their basins still prevail, suggest that they are not sufficient yet. Among possible reasons are:

- Inadequate planning (e.g. fragmented or sectoral planning) does not allow for proper application of law, leaving many cases uncovered and/or very difficult to implement;
- Unclear procedures and competences among different institutions responsible for the implementation of regulations leads to confusion;
- Limited financial, technical and human capacities and infrastructures that prohibit proper monitoring of compliance and enforcement particularly when strong vested interests oppose the implementation of new policies;
- The negative socioeconomic environment adds to the difficulty.

An additional reason might be that accompanying actions, such as communication and awareness schemes that could have an effect on the efficient use of CAC and economic instruments are limited and in some cases completely absent.

The insufficient nexus of rules at single country level is coupled by a limited – until now – legal framework at transboundary level. A way to promote such a scheme is by promoting the harmonization of existing national legislation. Such effort is essential since only through harmonization can each one of the basins be treated as an uninterrupted system to be managed in an integrated way. Progress until now has been limited, though some steps are taken. In Lake Ohrid, actions towards the harmonization of sectoral regulations have been initiated in the framework of cooperation within the Lake Ohrid Conservation Programme (see following chapters). Going a step further some of the fishing regulations have been unified. An example is the agreement on using the same permissible net size. In Prespa, fishing is banned during the spawning season in all three countries. Yet enforcement problems exist throughout the region. The adoption and furthermore implementation of the EU WFD that would provide a framework of harmonized tools and instruments is in the very early stages.

Table 22. Economic Instruments in use in the riparian countries of the Drin Basin

		Albania	Greece	FYR Macedonia	Montenegro
Environmentally motivated subsidies	Water pollution	Tax allowances for introduction of environmentally friendly technologies	Subsidy for clean technologies and products	Tax allowances for introduction of environmentally friendly technologies	
			Subsidy for waste treatment facilities on farms		
	Natural resource management		Subsidy for ecological areas		
			Subsidy for landscape and nature conservation		
			Subsidy for pesticide-free cultivation		
Fee/Charge	Water pollution		Wastewater user charges <i>Municipal and industrial wastewater</i>		Hazardous waste charge <i>Generation of hazardous wastes</i>
					Water protection charge
	Waste management	Municipal waste user charge	Charge on municipal waste collection / treatment	Waste disposal charge	Hazardous waste charge <i>Disposal of hazardous wastes</i>
			Charge on waste disposal <i>Industrial waste</i>	Waste user charge <i>Enterprises, quantity of waste, surface of premises; Households, fixed monthly charges, surface of premises</i>	Waste user charge <i>Surface of commercial/premises owned by legal persons, of residential premises</i>
	Natural resource management	Charges for exploitation of minerals	Charge on entrance to national parks and monuments	Mining charge <i>Extraction of sand and gravel</i>	Extraction of materials charge <i>Extraction of sand, gravel and stone from watercourses - basic charge</i>
		Wastewater charge	Charge on hunting licenses	Water abstraction charge <i>Abstraction of water for fishponds and hydro power plants, public supply system, thermal power plants</i>	Fees for national parks use <i>Annual fees for commercial activities; Annual permits for mushroom and berries collection; Boat renting;; Camping Fees for filming; Rafting fees; Sports fishing permits</i>
		Water abstraction charges ¹	Charge on irrigation water	Water consumption charge <i>Water consumption by enterprises and households</i>	Fishing permits <i>Annual permit for commercial fishing, for sport fishing; Daily permit for sport fishing Weekly permit for sport fishing</i>
		Water consumption charge (water supply and irrigation) <i>Water supplied to households, private sector, public sector</i>	Charge to acquire grazing rights on public lands	Water effluent non-compliance fees <i>Violations of the Law on Environmental Protection</i>	Forest charges <i>Use of forests - sold timber; Useful forest functions, sectors that benefit from forests, that have a negative impact on forests</i>
		Water pollution non-compliance fees <i>Violations of the Water Reserves Law</i>	Charges for water consumption	Penalties regarding the violation on specific provisions of the Law on Environment ³	Sewage charge <i>Water consumed by households, legal persons (enterprises, institutions)</i>

		Administrative fees to issue water abstraction licence ²		Penalties regarding the violation on specific provisions of the Laws on Nature Protection and Hunting ³	Water abstraction charge 1995 <i>Abstraction for bottling of water; Abstraction of water for agricultural purposes, legal persons' own purposes, public water supply; Use of water for electricity production</i>
		Permit fees/lease rates for exploitation of forests in riverbeds, wood coal, tinder and lime production, beehive cultivation and quarrying			National park entrance fees
		Fees for the violation of the provisions of Wild Fauna and Hunting Law (e.g. hunting outside designated zones or without permits, killing or collecting over limit or out of season etc.)			Water consumption charge <i>Water consumed by households, legal persons</i>
Deposit-refund systems	Waste management				Deposit refund system for glass bottles <i>Beer bottles</i>
Tax	Waste management	Tax on plastic containers for beverages 2002			
	Natural resource management	Tax on the use of fisheries 1993 <i>Aquaculture - fish growing in constructed facilities in the sea, lakes, and reservoirs - mussels growing; Collecting of bivalve mussels with light means; Individual fishing with light means - at coastal lagoons - at the seacoast - fishing in inland waters; Inland aquaculture; Sea fishing - authorized fishing of bivalve mussels - bottom fishing - fishing with selective means - pelagic and bottom fishing - pelagic fishing; Sport fishing at the sea (for any boat)</i>		Irrigation tax ⁴	

Source: (Adopted from) OECD/EEA database on economic instruments <http://www2.oecd.org/ecoinst/queries/index.htm>, UNECE, 2002, Watzin at al., 2003, World Bank, 2003b, REC, 2006

¹ It is not practiced since the actual rates have not been set (World Bank, 2003b).

² UNECE, 2002. There is no available information if these are currently in force.

³ EC, 2007. No further information regarding the specific provisions are available.

⁴ Watzin at al., 2003. Note: No specific information is provided by the author other than that it is high. Since such a tax is not referred in the OECD/EEA database, there might be a possibility for this economic instrument to be the same or part of the Water abstraction charge or Water consumption charge.

Notes: 1. This table includes mostly instruments reported by the countries; information provided in this chapter might present instruments that are not included here. According to the OECD/EEA database, the data were updated on 1/6/2005 for Greece and Montenegro and on 30/06/2007 for Albania and FYR Macedonia.

2. The categorisation of the instruments is following the one that is used in OECD/EEA database.

5.1 Management at transboundary level

Transboundary cooperation for the management of some of the sub-basins of the Drin is in place; yet it is absent for the Drin⁸⁰ its-self (Black Drin, White Drin, Drin Rivers). Cooperation between the riparian countries has been initiated and evolved, at different levels in each case, following different courses which have been subject to given opportunities or even coincidences, always in consistence with the local realities. It has been influenced by the developments at the political and socio-economic scene at national and regional level and the bilateral or multilateral relations of the riparian countries. In an environment - throughout the European Continent - in which cooperation is being promoted at all levels, the involvement of several UN agencies, the EU and as well as other international organizations, bilateral donors and NGOs has been catalytic. The GEF involvement may be seen as the most important catalyzing official on-the-ground cooperation.

In *Prespa*, an important step has been the declaration of Prespa basin as a Transboundary Prespa Park by the Prime-Ministers of the three littoral countries and the establishment of the –informal- Prespa Park Coordination Committee (PPCC) in 2000. It is important to note that this development was in large the result of the work that had been undertaken by the NGOs – international and national - in cooperation with experts. The PPCC may be seen as a trilateral, multi-stakeholder, interim institutional structure that facilitates transboundary coordination of various management activities. Its decisions/conclusions, because of its “non-legal entity” status, have the form of recommendations to the governments of the three countries.

Box 18. Transboundary cooperation in the Prespa Lakes Basin

In February 2000, the Prime Ministers of Albania, FYR Macedonia, and Greece gathered in the village of Agios Germanos and issued a joint declaration declaring that “*the Prespa Lakes and their surrounding catchment are unique for their geomorphology, their ecological wealth and their biodiversity, which gives the area significant international importance (...) The conservation and protection of an ecosystem of such importance not only renders a service to Nature, but it also creates opportunities for the economic development of the adjacent areas that belong to the three countries.*” The Declaration declares the Prespa Lakes and their surround catchment as “*‘Prespa Park’ (...) the first trans-boundary protected area in South Eastern Europe (...)*”.

The Declaration also promises “*enhanced cooperation among competent authorities in our countries with regard to environmental matters. In this context, joint actions would be considered in order to a) maintain and protect the unique ecological values of the ‘Prespa Park’, b) prevent and/or reverse the causes of its habitat degradation, c) explore appropriate management methods for the sustainable use of the Prespa Lakes water, and d) to spare no efforts so that the ‘Prespa Park’ becomes a model of its kind as well as an additional reference to the peaceful collaboration among our countries*”.

The formal initiative which led to the Prime Ministers’ Declaration was the result of a thirty years work by NGOs and experts. Nevertheless, at least to a certain extend it was viewed by some as a very top-down initiative and the participation of local stakeholders other than NGOs around the lakes basin in the decision was initially rather limited. And yet, the declaration successfully laid the foundation for the significant trans-boundary work that has followed.

The three Ministers of the Environment established the *Prespa Park Coordination Committee* (PPCC) as a non-legal entity whose members are appointed by the three Ministers of Environment. Membership of the PPCC is comprised of the following from each of the three countries: One Ministry of Environment, one NGO, and one local authorities’ representative and a permanent MedWet observer. The PPCC has met semi-annually since 2001. The PPCC has no budget from the three countries and indeed, the three governments have no legal commitment to support the PPCC, financial or otherwise. PPCC operations so far have been supported by ad hoc funding provided by the Greek Government, as well as occasionally by KfW and GTZ, while the operation of the PPCC Secretariat has been largely supported by WWF-Greece, which has funded the SPP’s hosting of the Secretariat.

Despite funding problems, the PPCC and its members have moved forward in developing trans-boundary cooperation in the Prespa Basin. The biggest accomplishment of this collaboration was the production in 2002 of a “Strategic Action Plan for the Sustainable Development of the Prespa Park” as a first step in the development of a common vision for the conservation and sustainable development of the Prespa Basin. The Strategic Action Plan was prepared with Greek Government funding. More specifically, the aim of the present Strategic Action Plan is to formulate a joint vision for the area among various stakeholders and to:

⁸⁰ The only form of cooperation in place is a permanent Albanian-Montenegrin sub-commission on Shkoder Lake and Buna/Bojana and Drin Rivers that has been established under the Protocol on “Cooperation on Water Management” signed between Albania and Yugoslavia in 1956; see following pages.