REPUBLIC OF SERBIA

Bačko Podunavlje Biosphere Reserve Nomination Form



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AUTONOMOUS PROVINCE OF VOJVODINA

INSTITUTE FOR NATURE CONSERVATION
OF VOJVODINA PROVINCE

NOMINATION FORM FOR

BAČKO PODUNAVLJE BIOSPHERE RESERVE

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BAČKO PODUNAVLJE BIOSPHERE RESERVE NOMINATION FORM

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INTRODUCTION

Biosphere reserves are areas of terrestrial and coastal/marine ecosystems, or a combination thereof, which are internationally recognized within the framework of UNESCO's Programme on Man and the Biosphere (MAB). They are established to promote and demonstrate a balanced relationship between humans and the biosphere. Biosphere reserves are designated by the International Coordinating Council of the MAB Programme at the request of the State concerned. Individual biosphere reserves remain under the sovereign jurisdiction of the State where they are situated. Collectively, all biosphere reserves form a World Network in which participation by States is voluntary.

The World Network is governed by the Statutory Framework adopted by the UNESCO General Conference in 1995 which presents the definition, objectives, criteria and the designation procedure for biosphere reserves. The actions recommended for the implementation of biosphere reserves are set out in the "Seville Strategy" and were further developed in the Madrid Action Plan (2008-2013). These documents should be used as basic references for the completion of this nomination form.

The information presented on this nomination form will be used in a number of ways by UNESCO:

(a) for examination of the site by the International Advisory Committee for Biosphere Reserves and by the Bureau of the MAB International Coordinating Council;

(b) for use in a world-wide accessible information system, notably the UNESCO-MABnet and publications, facilitating communications and interaction amongst persons interested in biosphere reserves throughout the world.

The nomination form consists of three parts:
Part one is a summary indicating how the nominated area responds to the functions and criteria for biosphere reserves set out in the Statutory Framework, and presents the signatures of endorsements for the nomination from the authorities concerned. Part two is more descriptive and detailed, referring to the human, physical and biological characteristics as well as to the institutional aspects. Part three consists of two annexes: the first annex will be used to update the Directory of Biosphere Reserves on the MABnet, once the site has been approved as a biosphere reserve. The second annex will be used to provide promotional and communication materials of the biosphere reserve. Tables, illustrations and maps as appropriate throughout the nomination form are welcomed.

The form should be completed in English, French or Spanish. Two copies should be sent to the Secretariat, as follows:

1. The original hard copy, with the original signatures, letters of endorsement, zonation map and supporting documents. This should be sent to the Secretariat through the Official UNESCO channels, i.e. via the National Commission for UNESCO and/or the Permanent Delegation to UNESCO;
2. An electronic version (on diskette, CD, etc.) of the nomination forms and of maps (especially the zonation map). This can be sent directly to the MAB Secretariat:

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PART I: SUMMARY

1. PROPOSED NAME OF THE BIOSPHERE RESERVE:

[It is advisable to use a locally accepted geographic, descriptive or symbolic name which allows people to identify themselves with the site concerned (e.g. Rio Platano Biosphere Reserve, Bookmark Biosphere Reserve). Except in unusual circumstances, biosphere reserves should not be named after existing national parks or similar administrative areas.]

Bačko Podunavlje Biosphere Reserve

2. NAME OF THE COUNTRY:

Republic of Serbia

3. FULFILLMENT OF THE THREE FUNCTIONS OF BIOSPHERE RESERVES:

[Article 3 of the Statutory Framework presents the three functions of conservation, development and logistic support. Explain in general terms how the area fulfills these functions.]

3.1 "Conservation - contribute to the conservation of landscapes, ecosystems, species and genetic variation".
(Stress the importance of the site for conservation of biological and cultural diversity at the regional or global scales).

The area of the proposed Biosphere Reserve is the largest conserved floodplain complex in the upper course of the Danube River in Serbia and also one of the largest floodplains along the middle section of the Danube, surrounded by a number of traditional villages and settlements. The area has a specific combination of ecological conditions: it is situated in the contact zone between the Central European and South Eastern European forest zone with steppes, and it has characteristic hydrological dynamics. In combination with complex and centuries-long human influences, those natural preconditions have resulted in very rich and specific landscape, habitat and species diversity. The primary habitats are: alluvial forests, Pannonian salt steppes and salt marshes, mesotrophic standing waters, natural eutrophic lakes, muddy river shores, alluvial wetlands, wet meadows, sand deposits, river islets, sand shores, floodplains, oxbows, abandoned river beds, meanders.

The Danube is, to a large degree, free-flowing here and is exposed to natural variations of water levels, caused by spring/summer floods. Alongside the Danube as the largest river, there are two smaller rivers, Plazović and Mostonga, which also provide ecological conditions for many important and still conserved habitats along the banks, such as alkaline pastures and ponds, fish farms with extensive fish production and hardwood forests as the most important.

Looking over the borders, the proposed Biosphere Reserve is only a part of the alluvial complex along the Danube, which comprises very similar landscapes along the Mura, Drava and Danube Rivers in Slovenia, Croatia, Austria and Hungary. The significance of this transboundary asset in the centre of Europe is immense and irreplaceable.

This unique mosaic of wetlands, marshes and terrestrial habitats is an important centre of plant diversity, with a large number of species of national and international importance. Plant diversity

comprises approx. 1000 species with 80 important taxa at the species (74) and subspecies (6) levels. The most important wetland plants are: Yellow Wort *Blackstonia acuminata*, Black Fruited Hawthorn *Crataegus nigra*, Early Marsh Orchid *Dactylorhiza incarnata* subsp. *incarnata*, Marsh Helleborine *Epipactis palustris*, Mare's-tail *Hippuris vulgaris*, Water Violet *Hottonia palustris*, Water Mudwort *Limosella aquatica*, Loose Flowered Orchid *Orchis laxiflora* subsp. *palustris*, Lady Orchid *Orchis purpurea*, Greater Spearwort *Ranunculus lingua*, Marsh Fern *Thelypteris palustris*, Kiev Nettle *Urtica kioviensis*, and Fen Violet *Viola persicifolia*. Salt steppes and salt marshes are habitat for many specialised Pannonic halophyte species, in particular the Pannonian endemics: *Aster trifolium* subsp. *pannonicus*, *Cirsium brachycephalum*, *Lepidium cartilagineum* subsp. *crassifolium*, *Limonium gmelinii* subsp. *hungaricum* and *Plantago schwarzenbergiana*.

The floodplain complex along the Danube has a rich insect fauna, in particular: dragonflies and damselflies (Odonata), aquatic beetles (Coleoptera: Dytiscidae, Gyrinidae, Hydrophilidae, Hydraenidae), aquatic true bugs (Hemiptera: Notonectidae, Nepidae, Gerridae) and mosquitoes and water midges (Diptera: Culicidae, Chironomiidae). One Prime Butterfly Area (PBA) exists in nominated Biosphere Reserve: Gornje Podunavlje. In total, 156 taxa of butterflies have been recorded in this area, including nationally important populations of Freyer's Purple Emperor *Apatura metis*, Marsh Fritillary *Euphydryas aurinia* and Scarce Fritillary *Euphyrdryas maturna*.

In the area of the proposed Biosphere Reserve, 60 species of mammals have been recorded (62% of the mammal fauna of Serbia). The species of particular importance for conservation are Bechstein's Bat *Myotis bechsteinii*, Barbastelle Bat *Barbastella barbastellus*, Otter *Lutra lutra*, Wild Cat *Felis silvestris*, Beaver *Castor fiber* and Red Dear *Cervus elaphus*.

In the Biosphere Reserve, 68 species of fish have been recorded, including endemic species for the Danube: Pigo *Rutilus pigus*, Balon's Ruffe *Gymnocephalus baloni*, Schraetser *Gymnocephalus schraetser* and Mudminnow *Umbra krameri*. The floodplain is also very important as a fish spawning site.

The proposed Biosphere Reserve contains two Important Bird Areas (IBA): Gornje Podunavlje and Karađorđevo. As such, it is one of the most important sites for bird conservation at the national level. It supports populations of many species, especially indicators of the preserved alluvial habitats that are important at the regional and international levels. It is estimated that this area hosts cca 270 bird species, of which 160 are breeders. Species of international importance are the colonial waterbirds: Great White Egret *Casmerodius albus*, Night Heron *Nycticorax nycticorax*, Little Egret *Egretta garzetta*, Purple Heron *Ardea purpurea* and Squaco Heron *Ardeola ralloides*, White Stork *Ciconia ciconia* as well as Black Stork *Ciconia nigra* (the most important breeding and migrating site in Serbia), Ferruginous Duck *Aythya nyroca*, White-tailed Eagle *Haliaeetus albicilla* (the most important breeding and wintering site in Serbia), Black Kite *Milvus migrans* (the most important breeding site in Serbia), Redshank *Tringa totanus*, Red-footed Falcon *Falco vespertinus* and European Roller *Coracias garrulus*

Among the amphibian and reptiles, one regional amphibian endemic is present: Danube Crested Newt *Triturus dobrogicus*. This species is endemic to the Pannonian Region.

3.2 "Development - foster economic and human development which is socio-culturally and ecologically sustainable".

(Indicate current activities and the potential of the proposed biosphere reserve in fulfilling the objective of fostering sustainable economic and socio-cultural development, including by securing flows of ecosystem services from the biosphere reserve).

The area of the Biosphere Reserve has immense importance in the development of the Bačka region, and the whole of Vojvodina Province in northern Serbia. The main economic sources of income are agriculture, industry, forestry, hunting management, tourism and net fishing. In a far smaller scale, there are also areas with traditional cattle breeding (with grazing), as well as bee-keeping and honey production, small-scale handicrafting, vine production and fruit production.

The natural landscapes in the area, spreading along the Danube, have very high ecological value and are extremely picturesque, especially the protected areas. Integral parts of these landscapes are rural mosaics with traditional architecture (e.g. Bački Breg, Bački Monoštor, Sonta, Vajska, Bođani). Important parts of the network of settlements are also small towns and local centres, some of which are very old (Bač and Sombor). Gornje Podunavlje, as a special nature reserve and Ramsar site, is a prominent part of the landscape and it is recognized as a tourist destination and a place with high quality natural resources

The development of tourism and agriculture in the Biosphere Reserve has a potential to influence the overall quality of life of the local communities and contribute to their sustainable economic and socio-cultural development. If synergy is implemented between nature conservation, agriculture and tourism, this could be the motor for the support of some important processes in the area:

1. Preservation of natural resources and values (under threat in the past by non-sustainable commercial activities) through the concept of nature conservation. Tourism, especially eco-tourism, supports nature conservation, as it depends on natural resources.
2. Preservation of the tradition and cultural heritage, which are threatened in the period of economic transition and due to a lack of financing. This is in particular in relation to the preservation of cultural landscapes of local villages. New opportunities should prevent the process of depopulation in the rural areas of the Biosphere Reserve.
3. Certification and branding of tourism and agricultural products originating from the Biosphere Reserve for the purpose of improvement of this competiveness on the market.

Nature conservation efforts in the Biosphere Reserves have been accompanied by an increasing trend of interest for the traditional culture and history of the villages and inhabitants of this area, partly due also to the region's multiethnic and multicultural environment. As a result, ethno-houses have been established and opened for visitors in Bezdan, Bački Monoštor, Kupusina, Sonta, Deronje and Bač. Thanks to this, inhabitants of the area have preserved a significant proportion of the material ethnographic heritage from destruction. These houses have a potential to become a small centres for local heritage conservation (a positive example has already been noted with the Sonta ethno-house).

3.3 "Logistic support - support for demonstration projects, environmental education and training, research and monitoring related to local, regional, national and global issues of conservation and sustainable development".
(Please indicate current or planned activities).

The proposed Biosphere Reserve is certainly a scientific polygon of international importance. The organization and implementation of both research and educational activities, either by government institutions or the civil sector, has a long tradition in the area. The first meteorological station in the area was established in 1884 in the periphery of Sombor, as the most important environmental monitoring point, together with the modern automatic station for measuring the quality of ambiental air, established in Sombor in 2008, and four hydrological stations on the Danube. The first and oldest “ecological classroom” (Baračka near Bezdan) was founded in 1998, with the general aim of

raising ecological awareness. Educational programmes are grouped into several categories: the basics of environment, recreational fishing school, rowing school, scout skills, camping, and forest walking trails. In the northern part of the proposed Biosphere Reserve, in the Gornje Podunavlje Special Nature Reserve, numerous other activities are ongoing for ecological restoration and education. Geography and ecology students at the University of Novi Sad are adopting their knowledge and practice in nature conservation in the Biosphere Reserve (in the Gornje Podunavlje Special Nature Reserve). In central parts of the proposed TBR, activities aimed to popularize bird-watching are organized for school children (Eurobirdwatch), together with a promotion of cycling, healthy living and nature conservation. Students of hunting tourism learn about sustainable hunting in the Karađorđevo Special Nature Reserve and Kamarište and Plavna hunting grounds.

The Institute for Nature Conservation of Vojvodina Province is an expert institution of essential importance for the research and conservation of nature in the Autonomous Vojvodina Province. In joint cooperation with the nature conservation institutions of neighbouring countries, which will also form part of the Biosphere Reserve, the possibility for the improvement of knowledge has been created in the fields of nature conservation, resource management and tourism development

Interest of faculties of the University of Novi Sad, primarily the Faculty of Sciences and Faculty of Agriculture, are excellent potential for the research of this territory. Tens of graduation theses, Master's and PhD dissertations were completed at the Faculty of Sciences in the areas of biology, ecology, chemistry, geography and tourism, with research conducted in the Biosphere Reserve.

Civil society organizations are particularly active in the Biosphere Reserve, especially in the cities and larger villages (Sombor, Odžaci, Bezdan and Apatin), as well as in small villages (Bački Monoštor, Bačko Novo Selo, Stanišić, Bogojevo, Sonta). However, very intensive project activities connected to this area also coming from larger centres: Novi Sad and Subotica. Important thematic areas for project work are education, biodiversity research and monitoring, which take place in research camps, cross-border exchange, and cross-border fairs in local communities, with partners in neighbouring countries and local festivals. Potential for cooperation of civil society organizations and governmental institutions is very high. International organizations, International Union for the Conservation of Nature (IUCN) and the WWF have also, since the beginning of their work in Serbia, focused many of their activities in the area of the proposed Biosphere Reserve.

4. CRITERIA FOR DESIGNATION AS A BIOSPHERE RESERVE:

[Article 4 of the Statutory Framework presents 7 general criteria for an area to be qualified for designation as a biosphere reserve which are given in order below.]

4.1 "Encompass a mosaic of ecological systems representative of major biogeographic region(s), including a gradation of human interventions".
(The term "major biogeographic region" is not strictly defined but it would be useful to refer to the Udvardy classification system (http://www.unep-wcmc.org/udvardys-biogeographical-provinces-1975_745.html)).

The proposed Biosphere Reserve fulfils this criterion for the following reasons:

1. it encompasses a large number of habitat types which are important at the national (in Serbia) and international levels (in the Pannonian Biogeographical Region and in Europe), in particular wetlands and meadows;
2. due to complex ecological conditions, the core area is a mosaic of well-preserved characteristic habitats for the middle sections of the dynamic river floodplains, proving its high ecological value;
3. due to the complex ecological conditions, the core areas also represent the Pannonian alkaline steppes and lakes, a habitat characteristic for the Pannonian Biogeographical Region;
4. due to complex ecological conditions and low-intensity management, the core areas comprise very old stands of floodplain forests at elevated positions, in particular White Willow, Common Oak, Black and White Poplar stands;
5. the buffer zones are composed of a very wide variety of habitats within all 15 identified CORINE land cover types, in particular: inland wetlands, land principally occupied by agriculture with significant areas of natural vegetation, transitional woodland-scrub, natural grasslands, complex cultivation patterns, water bodies, water courses and broad-leaf forests;
6. buffer zones are areas where the local communities perform their economies in co-existence with nature, while supporting social activities;
7. the wide transition area is an area with a wide range of attractions for visitors, created and driven by centuries-old human culture and tradition.

4.2 "Be of significance for biological diversity conservation".
(This should refer not only to the numbers of endemic or rare species, but may also refer to species on the IUCN Red List or CITES appendices, at the local, regional or global levels, and also to species of global importance, rare habitat types or habitats with unique land use practices (for example traditional grazing or artisanal fishing) favouring the conservation of biological diversity).

The proposed Biosphere Reserve fulfils this criterion for the following reasons:

1. it is of very high plant conservation value: the number of registered plant species is approximately 1000, with a large number of species of national and international conservation importance and biogeographical significance, including wetland plants, halophytes, Pannonian and Danube endemics;
2. it is of very high bird conservation value: the number of recorded bird species is approximately 270, with 160 breeders, presence of species/groups of international importance: wintering water birds (up to 50 000), colonial water birds (7 colonies), White-tailed Eagle, Black Stork, Black Kite – all have their national population strongholds here, and it is of very high importance as a migration stop-over site and corridor;
3. it is of very high value for fish conservation, with 57 species recorded, and also an important floodplain fish spawning site;

4. it is of high value for amphibians (11 species) and reptiles (9 species), including important reproduction sites;
5. it is of high value for mammals, with 60 species registered;
6. it is a vital part of the National Ecological Network, network of Ramsar sites, Important Bird Areas, Important Plant Areas, Prime Butterfly Areas and Emerald Network;
7. it supports traditional land use practices which are nature-friendly: semi-extensive carp fish-farm management (6 fish farms) and traditional grazing.

4.3 "Provide an opportunity to explore and demonstrate approaches to sustainable development on a regional scale".
(Describe in general terms the potential of the area to serve as a site of excellence for promoting the sustainable development of its region (or "eco-region")).

The proposed Biosphere Reserve fulfils this criterion for the following reasons:

The entire area of the proposed Biosphere Reserve is physically connected by the Danube. The potential of the Danube in sense of sustainable development has become a matter of public awareness in recent years. The local population and political communities are recognizing the advantages and that coexistence of humans and nature is possible. Having in mind the strong interconnection with the Danube, which has cultural, recreational, tourist, research and economical components, the Biosphere Reserve can become an even stronger and intensively used polygon for research, especially in the transboundary context in the following fields: sustainable flood management, sustainable forest management, breeding of domestic animals suitable for nature management, active protection of biodiversity, multifunctional restoration of natural habitats, usage of medicinal plants, sustainable fish breeding, sustainable tourism and education. In TBRs, the potential for the development of these capacities exist and are still growing.

There are numerous activities which are good examples of sustainable development in connection with nature conservation and the local communities in the proposed Biosphere Reserve. These can serve as role models for the wider region in aiming to create better environmental conditions by considering all three segments of development: ecological, socio-cultural and economical. The established and managed protected areas are particularly good examples of nature conservation efforts. The Gornje Podunavlje and Karađorđevo Special Nature Reserves, Tikvara Nature Park, Junaković Forest Nature Monument and Bukinski Hrastik Park-forest with their characteristics and preserved ecosystems and biodiversity are of crucial importance for the region as a whole. There are an increasing number of activities and initiatives within these areas aimed at actively conserving and restoring wetlands that are performed by the official site managers and by civil society organizations.

Conservation and ecological restoration of habitats in the protected areas within the proposed Biosphere Reserve is very motivating and serves as a role model for taking active care of the unprotected natural values. It is especially important for the sections of the Danube floodplain which were under the strong influence of regulation, especially flood control dam construction, e.g. the Bogojevo floodplain, former river branches Živa and Berava, floodplains at Plavna and Bačko Novo Selo.

The tourism potential of the proposed Biosphere Reserve is very high. The landscapes of the proposed Biosphere Reserve represent a combination of natural and cultural features, in which the natural values of the meandering Danube and its adjacent floodplains, backwaters, lakes, ponds, alluvial and hardwood forests, and meadows overlap with villages and rural mosaics with preserved traditional architecture and heritage. Such a landscape is under the threat of poverty and economic

transition, and it is progressively losing its authenticity. Biosphere Reserve status will give a unique new opportunity for the entire region and will benefit nature conservation, the cultural specificities and their mutual ties through careful and sustainable development. Designation of the Gornje Podunavlje Special Nature Reserve has had a significantly positive impact on the local communities in developing their own path in rural tourism and ecotourism. Before its designation, Gornje Podunavlje was a village of Bački Monoštor and had no tourism service providers and did not offer a single accommodation facility. Nowadays (2016), 15 households are engaged in this kind of entrepreneurship, with two ethno-houses operating. As well, *Bodrogfest*, a local festival of tradition, music, culture and old crafts is held annually. Under the Landscape Convention (Council of Europe), the project "Backi Monostor – the Gate of Gornje Podunavlje" received a certificate confirming that this project was of high value for presenting and promoting European landscapes. Various other activities, initiated by the local community, have taken place since 2005: erection of information boards in the village and creation of tourist routes. An important project which outlined the great potential of the area is called Wealth of Diversity**.** The project is implemented by the Danube Tourism Cluster Istar21 and with the support of the Vojvodina Provincial Government.
By awarding European Charter for Sustainable Tourism in Protected Areas to Gornje Podunavlje Special Nature Reserve in December 2014, high tourism potentials of the area have got an international recognition. Stakeholder forum established for sustainable tourism development and Strategy for sustainable tourism adopted for this purpose, for sure provide excelent basis for development of tourism in the whole area of the future Biosphere reserve.

There is strong potential for cross-border cooperation within the future transboundary UNESCO Biosphere Reserve Mura-Drava-Danube. A number of relevant cross-border projects are already supported under the IPA Cross-border Programme Croatia-Serbia e.g. Improving the International Danube Bicycle Route Cycling Danube **(**Vukovar-Srijem County as the Croatian partner, Municipality of Bačka Palanka as the Serbian partner) and Tradition for the future - Rural tourism across borders (Centre for Entrepreneurship Osijek and Municipality of Apatin), DANUBEPARKS – Network of protected areas and DANUBEPARKS STEP 2.0 (Kopački Rit Nature Park Public Institution as Croatian partner, Vojvodinašume Public Enterprise as Serbian partner, Danube-Drava National Park as Hungarian partner); Wildlife health and conservation of selected NATURA 2000 species within Danube cross-border region in Serbia and Hungary (Danube-Drava National Park as Hungarian partner and Vojvodinašume Public Enterprise as Serbian partner).

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4.4 "Have an appropriate size to serve the three functions of biosphere reserves"
(This refers more particularly to (a) the surface area required to meet the long term conservation objectives of the core area(s) and the buffer zone(s) and (b) the availability of areas suitable for working with local communities in testing and demonstrating sustainable uses of natural resources).

The size of the core and buffer zones is designed in such a way so as to encompass the most preserved natural habitats that are under the influence of the dynamics of natural processes, to the greatest possible extent. All are protected within four protected areas at the national level. Meanwhile, the use of natural resources in buffer zones enables optimal communication of wildlife populations, gene flow and non-interrupted and safe performance of the ecological needs of wild species. Core and buffer zones comprise different habitats in a way that each habitat in the proposed Biosphere Reserve (except agricultural fields) is well represented in these two zones. These two

zones are also defined in such a way that key species, especially birds (good examples: White-tailed Eagle and Black Stork) are able to fulfil all their ecological needs during the entire life cycle. The buffer zone is wide enough and accessible for different forms of human activities that are permitted in this zone. The transitional area functions very well for development purposes.

Within the proposed Biosphere Reserve, there are two floodplain areas protected under the national legislation, with a total area of 22 560 ha. Gornje Podunavlje is the largest floodplain area in the Republic of Serbia, while Karađorđevo, due to the low-intensity of human presence and management is the best conserved floodplain area. The size of the area and size of zones provide an almost ideal set of preconditions to serve the three functions of the Biosphere Reserve.

4.5 Through appropriate zonation:
"(a) a legally constituted core area or areas devoted to long term protection, according to the conservation objectives of the biosphere reserve, and of sufficient size to meet these objectives".
(Describe the core area(s) briefly, indicating their legal status, their size, the main conservation objectives).

The core zones comprise the best conserved and the most important spatial units in the forest mosaic within the floodplains, as well as the most valuable forest compartments and alkaline meadows outside the floodplains. The core zones are legally protected within protected areas or compartments of the National Ecological Network designated at the national level, as follows:

- Gornje Podunavlje Special Nature Reserve (Regulation on the Protection of Gornje Podunavlje Special Nature Reserve; Official Gazette of the Republic of Serbia no. 45/2001, 107/2009);
- Karađorđevo Special Nature Reserve (Regulation on the Protection of Karađorđevo Special Nature Reserve; Official Gazette of the Republic of Serbia no. 37/1997)
- Junaković Forest Natural Monument (Decision on the Protection of Junaković Forest Natural Monument (Official Gazette of Apatin Municipality no. 11/2005)
- Tikvara (Decision on the Protection of Tikvara Nature Park; Official Gazette of the Bačka Palanka Municipality no. 4/2015)
- Regulation on the Ecological Network (Official Gazette of the Republic of Serbia no. 102/2010).

Core zones comprise areas under the conservation regime of the I and II degree, of the existing protected areas as defined by Article 4 of the Decree on the Protection of Gornje Podunavlje Special Nature Reserve, Decree on the Protection of Karađorđevo Special Nature Reserve, Decision on the Protection of Junaković Forest Nature Monument and Decision on the Protection of Tikvara Nature Park. The core zone also comprises selected meadows and wetlands within the forest in Gornje Podunavlje Special Nature Reserve and forests and wetlands along the major flood control embankment, all in the regime of III degree. Core zone also comprise areas which are part of the National Ecological Network within the Ecologically Important Area ‘Slatine Severne Bačke’ (Alkaline Meadows of Northern Bačka).

Core zones are the most valuable habitats within the protected areas and the national Ecological Network in the Biosphere Reserve. These are mainly wetlands, alluvial forests and alkaline meadows of high value, comprising extensive stands of natural vegetation. The only goal of the core

areas is the conservation of wildlife habitats, as it is defined by Article 35 of the Act on Nature Conservation.

The total surface of the core zone is 11 242 ha.

"(b) a buffer zone or zones clearly identified and surrounding or contiguous to the core area or areas, where only activities compatible with the conservation objectives can take place".
(Describe briefly the buffer zones(s), their legal status, their size, and the activities which are ongoing and planned there).

The buffer zones comprise a mosaic of forests, wetlands and grasslands in the floodplains (in four existing protected areas: the areas under the conservation regime of III degree), as well as areas surrounding the part of the National Ecological Network within the Ecologically Important Areas: "Slatine Severne Bačke" (Alkaline Meadows of Northern Bačka), a site planned for conservation "Šume uz Mostongu" (Forests Along the Mostonga), and the surroundings of "certain habitats of wild species" determined in accordance with the Rulebook on the Designation and Protection of Strictly Protected and Protected Wild Species of Plants, Animals and Fungi (Official Gazette of the Republic of Serbia no. 5/2010, 47/2011). The largest part of the existing floodplain (inundation zone) of the Danube is in the buffer zone.

The total surface of the buffer zone is 45 744 ha.

The activities permitted in buffer zones are in line with the nature conservation objectives within the existing protected areas, as areas in buffer zones function in order to prevent possible harmful impacts to the core zone. In the existing protected areas (i.e., Gornje Podunavlje, Karađorđevo, Junaković Forest and Tikvara), these activities include:

Gornje Podunavlje: scientific research (including the "citizen science project", e.g. International Waterbird Census, Eurobirdwatch); active bird conservation and monitoring projects (including the Black Stork *Ciconia nigra*, White-tailed Eagle *Haliaeetus albicilla*, Sand Martin *Riparia riparia*, Little Ringed Plover *Charadrius dubius* and Tawny Owl *Strix aluco* population censuses, monitoring and conservation); the installation and promotion of walking paths with information signs and bird observation towers; organizing youth working camps; restoration of open habitats, in particular dry and wet meadows, and shallow ponds; site visits of school children; production of natural history documentaries; traditional commercial fishing and recreational fishing; bee-keeping and mushroom collection; reed cutting and the production of reed-based products, and cycling. There are 14 sites where weekend cottages have been built, which are frequently visited by numerous visitors (owners and their guests). This also includes sites for bathing and swimming.

Karađorđevo: scientific research; active bird conservation and monitoring projects (in particular White-tailed Eagle population census, monitoring and conservation); the installation and promotion of walking paths, and clearing of watercourses and shallow ponds. There are many traditionally visited sites for recreational fishing. Trophy hunting on managed game species (Mouflon *Ovis musimon*, Fallow Deer *Dama dama*, Red Deer *Cervus elaphus*, White-tailed Deer *Odocoileus virginianus* and Wild Boar *Sus scrofa*) exists.

Tikvara: traditional place for recreation, in particular bathing, canoeing and fishing, occasionally ice-skating in winter.

Junaković Forest: recreational site for the visitors of the nearby Junaković Spa.

Existing activities in the buffer zone outside the protected areas include: fish production in a semi-extensive way (the largest semi-extensive carp fish farms: Mostonga near Bač with 700 ha, Svilojevo with 560 ha, Srpski Miletić with 300 ha, Kolut with 220 ha and smaller near Bezdan, Riđica, Čonoplja and Deronje), reed cutting and production of reed-based products, recreational fishing, bathing, hay-making on natural grasslands, forestry and agriculture.

Planned activities in the buffer zone in protected areas include: building of two visitor centres in Gornje Podunavlje, equipping a camping site in Gornje Podunavlje, turning existing abandoned structures into research centres (3) in Gornje Podunavlje, building a nautical tourism centre near Bezdan and further promotion of the existing nautical tourism centre at Apatin, comprehensive inventory and mapping of fauna and flora, and combating the spread of invasive species.

"(c) an outer transition area where sustainable resource management practices are promoted and developed".
(The Seville Strategy gave increased emphasis to the transition area since this is the area where the key issues on environment and development of a given region are to be addressed. Describe briefly the transition area(s), the types of questions to be addressed there in the near and the longer terms. The Madrid Action Plan states that the outer boundary should be defined through stakeholder consultation).

The transition area includes settlements, hamlets (groups of traditional households) and their vicinities which lie outside the core and buffer zones in all five cities and municipalities, as follows:

Administrative area of the City of Sombor: settlements: Bački Breg, Kolut, Bezdan, Bački Monoštor, Sombor, Rastina, Gakovo, Riđica, Stanišić (part), Doroslovo; hamlets: Bukovac, Rančevo, Bilić, Lugovo, Žarkovac, Nenadić, Gradina, Lenija, Šaponje, Milčić, Obzir, Čičovi, and Kozara.

Administrative area of the Municipality of Apatin: Apatin, Kupusina, Prigrevica, Sonta, Svilojevo

Administrative area of the Municipality of Odžaci: Bogojevo, Srpski Miletić, Karavukovo

Administrative area of the Municipality of Bač: settlements: Deronje, Vajska, Bođani, Bač, Plavna, Bačko Novo Selo; hamlets: Labudnjača, Živa

Administrative area of Municipality of Bačka Palanka: Mladenovo, Karađorđevo, Bačka Palanka

The transition area comprises some of the oldest settlements in Serbia containing preserved cultural monuments. These settlements have always depended on the natural features created by the Danube and the people living in these villages and towns are still connected with the Danube by means of economy and recreation. Vast areas in the geomorphological inundation zone which were regularly flooded have since been drained, especially after the construction of the Veliki Bački Canal (completed in 1802) and the building of the flood-control embankment of the 1st line and the 2nd line (approx. 120 km), which was finished in 1960s, following a devastating flood (1956).

Today, the main source of the income in the local economy is agriculture (in some cases and some areas very intensive, as the type of local soil is mainly the highly fertile alluvial chernozem), performed either by private land owners (some 80% of the agricultural land) or by agricultural companies. Industry was once widespread, but has suffered recently and has remained only around the bigger cities. Industry at Apatin is still very developed, with a brewery founded in 1756, shipyard and timber-processing factory. Industry at Bačka Palanka is also among the most developed in the country, with food processing as the leading branch.

There are many other sources of income in the transition area. The most valuable for the function of the transition area within the biosphere reserve is tourism. An overview of the values is given below for each municipality.

- Sombor is a typical medieval town, which is reflected in its rectangular-shape centre whose architecture is the main feature for visitors and includes many buildings from the 18th and 19th centuries. Old carriage drivers, numerous traditional houses and rural architecture in nearby villages as well as in the solitary *salaši* farms, village festivals, together with industrial and water management heritage are the main advantages of Sombor and the nearby vicinity in the transitional area.
- The Odžaci area is known for the Donja Branjevina archaeological site near Deronje, with artefacts from the oldest land cultivation culture in Europe and the Red-haired Goddess feminized statuette (early Neolite era).
- Bač and its vicinity host the oldest and best preserved historical structures in Vojvodina Province. The oldest is the Franciscan Monastery and Church of the Ascension of Mary (12th century), the oldest Roman Catholic Church in Serbia, as well as the Fortress of Bač (14th century), the oldest medieval building in Serbia. The picturesque Serbian Orthodox Monastery of Bođani was built in 1722.
- Apatin, situated on the left bank of the Danube, hosts the building of the Apatin Brewery (1756), numerous sacral buildings of the Baroque, Romanesque and Gothic styles, massive City Hall (1909) and Fernbach Castle near Sonta.

There are many functions of the transition area that are yet to be addressed and which are connect the issues of development, nature conservation and sustainability:

1. Establishing multifunctional forest belts/tree lines within arable land complexes in order to create substitute habitats and to connect forest fragments;

2. Improvement of existing land use practices through harmonization and intersectoral cooperation in the process of designing spatial plans and in the processes of management planning in the agriculture, water management and tourism sectors;

3. Promotion of traditional products produced in the buffer zone (e.g. Sombor cheese) in sites popular for visitors and the branding of these products;

4. Establishing and promotion of local festivals (promoting local traditional products and life-style) in all villages where this is suitable by transfer of knowledge from the experienced to less experienced local communities;

5. Stronger engagement in conservation and promotion of rural architecture, especially that based on natural products produced in the buffer zone (e.g. reed-based construction and isolation material).

(d) Please provide some additional information about the interaction between the three areas.

The spatial planning sector is producing spatial plans for the core, buffer and transitional areas in order to design the activities which are emphasized and allowed in each particular zone. Following designation of the Biosphere Reserve, all the spatial plans to be created will take the provisions and practices in the Biosphere Reserve into the account, in accordance with the Seville Strategy and the Statutory Framework of the Biosphere Reserves. Already now, designation of the Biosphere Reserve and zonation is foreseen in:

- Spatial Plan of the Republic of Serbia (Act on the Spatial Plan of the Republic of Serbia from 2010 to 2020, Official Gazette of the Republic of Serbia no. 88/2010)
- Regional Spatial Plan of the Autonomous Province of Vojvodina (Official Gazette of Autonomous Province of Vojvodina no. 22/2011)
- Special Purpose Spatial Plan of Gornje Podunavlje Special Nature Reserve (Official Gazette of Autonomous Province of Vojvodina no. 13/2012)
- Special Purpose Spatial Plan of Cultural Landscape of Bač (Official Gazette of Autonomous Province of Vojvodina no. 14/2015)

4.6 "Organizational arrangements should be provided for the involvement and participation of a suitable range of inter alia public authorities, local communities and private interests in the design and the carrying out of the functions of a biosphere reserve".

4.6.1 Describe arrangements in place or foreseen.
(Describe involvement of public and/or private stakeholders in support of the activities of the biosphere reserve in core, buffer and transition areas (such as agreements, protocols, letters of intent, protected area(s) plans)).

Prior to the proposing the area and internal zonation of the Biosphere Reserve, 10 major consultation meetings were held for local actors, i.e. representatives of local communities, major users of natural resources, civil society, managers of protected areas and municipality leaders. These events were considered sufficiently informative to give stakeholders a clear overview of the idea, philosophy and perspectives of the Biosphere Reserve and to involve them in further development. All the meetings were initiated and executed in cooperation between the Institute for Nature Conservation of Vojvodina Province and WWF. Below is a list of the meetings held:

1. Workshop entitled “Gornje Podunavlje as part of the Mura-Drava-Danube Biosphere Reserve”, Bački Monoštor, 26 July 2011
2. Meeting with city majors/municipality leaders (or other representatives of local authorities responsible for environmental and local development issues) from the five cities/municipalities encompassed by the proposed Biosphere Reserve, Novi Sad, 3 July 2011
3. Workshop entitled “The Danube Area in Bačka as part of the Mura-Drava-Danube Transboundary Biosphere Reserve”, Odžaci, 17 July 2012
4. Meeting with the top management of the Vojvodinašume Public Enterprise, Petrovaradin, 28 May 2013
5. Meeting with representatives of the Serbian Armed Forces, Ministry of Defence of the Republic of Serbia and the Morović Military Institution, Novi Sad, 28 May 2013

6. Meeting with Dr. Živorad Smiljanić, Head of the Municipality of Apatin, Apatin, 10 June 2013
7. Meeting with Mr. Nemanja Delić, Mayor of the City of Sombor, Sombor, 25 June 2013
8. Meeting with the top management of the Vode Vojvodine Public Enterprise, Novi Sad 9 August 2013
9. Meeting with city majors/municipality leaders (or other representatives of local authorities responsible for environmental and local development issues) from the five cities/municipalities encompassed by the proposed Biosphere Reserve, Sombor, 23 July 2013.
10. The first session of new members of MAB Committee of Serbia (within the Comission of the Republic of Serbia for Cooperation with Unesco) on 29 December 2015 in Belgrade, where decision was brought that national nomination for Bačko Podunavlje Biosphere Reserve will be sent in 2016.
11.

4.6.2 Have any cultural and social impact assessments been conducted, or similar tools and guidelines been used?

(e.g. Convention on Biological Diversity (CBD)'s Akwé: Kon guidelines; Free, Prior, and Informed Consent guidelines, Biocultural Community Protocols, etc.). *(UNESCO's Programme on Man and the Biosphere (MAB) encourages biosphere reserves to consider and respect indigenous and customary rights through programmes or tools, in accordance with the United Nations Declaration on the Rights of Indigenous Peoples* (*http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf when relevant and appropriate)).*

During the two workshops and the many meetings (see 4.6.1.), and through the sending of official letters within the boundaries of the Biosphere Reserve and the planned internal zonation (to a total of 17 local authorities and major land users), participants were asked to review and comment on the proposal of the Biosphere Reserve. Media reports were launched in the preparation period, as were project activities carried out by WWF and which excited the interest of the general public, though there were no negative comments regarding the social issues. No specific methodological tools or guidelines were used in this process.

4.7 Mechanisms for implementation:

Does the proposed biosphere reserve have:
"(a) mechanisms to manage human use and activities in the buffer zone or zones"?
If yes, describe. If not, describe what is planned.

Human use and activities are regulated comprehensively in the buffer zones belonging to the protected areas established in the national legislation (two Decrees, two Decisions, see 4.4), as well as by the following main nature conservation legislation:

- Act on Nature Conservation (Official Gazette of the Republic of Serbia no. 36/2009, 88/2010, 91/2010 and 14/2016)
- Regulation on the Ecological Network (Official Gazette of the Republic of Serbia no. 102/2010)
- Rulebook on Criteria for the Classification of Habitat Types, on Habitat Types, Sensitive, Threatened, Rare and Habitats of Priority for Conservation and on Measures for their Conservation (Official Gazette of the Republic of Serbia no. 25/2010).

The following legislation from other sectors is relevant for the management of natural resources and other resource-related activities:

1. Forests and forestry: Forests Act (Official Gazette of the Republic of Serbia no. 30/2010, 93/2012,89/2015)
2. Waters and water management: Waters Act (Official Gazette of the Republic of Serbia no. 30/2010)
3. Hunting and game: Act on Hunting and Game Animals (Official Gazette of the Republic of Serbia no. 18/2010)
4. Agricultural land: Act on Agricultural Land, (Official Gazette of the Republic of Serbia no. 62/2006, 65/2008, 41/2009)
5. Tourism: Tourism Act (Official Gazette of the Republic of Serbia no. 36/2009, 88/2010, 99/2011, 93/2012, 84/2015)
6. Spatial planning: Act on the Planning and Construction (Official Gazette of the Republic of Serbia no. 72/2009, 81/2009 - corr, 64/2010 – decision of CC, 24/2011, 121/2012, 42/2013 – decision of CC, 50/2013 – decision of CC, 98/2013 – decision of CC, 132/2014 and 145/2014).

There are no other mechanisms for management of the activities in buffer zones. There is no management plan in place for the Biosphere Reserve. The *Seville Strategy and Statutory Framework of the World Network of Biosphere Reserves* and *Madrid Action Plan for Biosphere reserves (2008-2013)* are planned to be the milestone documents which will serve for the internal functioning of the Biosphere Reserve, alongside the national legislation. Documents which will be the products of the work of the Stakeholder Council will also serve to manage and harmonize activities in the buffer zone.

"(b) a management policy or plan for the area as a biosphere reserve"?
If yes, describe. If not, state how such a plan or policy will be developed, and the timeframe. (If the proposed area coincides with one or more existing protected natural area(s), describe how the management plan of the proposed biosphere reserve will be complementary to the management plan of the protected area(s)).

The management plan for the proposed Biosphere Reserve is not yet developed. It will be one of the priority tasks for the Stakeholder Council. However, the coopMDD project proposal, developed with the cooperation of project partners from all five countries, encompasses activity planning regarded to the management of entire area. The proposal is submitted under Interreg Danube Transnational Programme. There are nature conservation management plan for the Gornje Podunavlje Special Nature Reserve for the period 2011–2020 and for Tikvara Nature Park. There are no management plans for other protected areas. Sectoral management plan exists especially in sectors of forestry and water management,

There are spatial plans of particular municipalities in the area, which address the existing legislation, management, conservation objectives and activities in the administrative areas of particular municipalities:

- Spatial Plan of the Municipality of Apatin (Official Gazette of the Municipality of Apatin no. 6/2013)
- Spatial Plan of the Municipality of Odžaci (Official Gazette of the Municipality of Odžaci no. 11/2011)
- Spatial Plan of the Municipality of Bačka Palanka (Official Gazette of the Municipality of Bačka Palanka no. 20/2012).
- Spatial Plan of the City of Sombor (Official Gazette of the City of Sombor, no, 5/2014)

- Spatial Plan of the Municipality of Bač (Official Gazette of the Municipality of Bač, no, 9/2015)

A very important spatial planning document is the Special Purpose Spatial Plan of Gornje Podunavlje Special Nature Reserve (Official Gazette of Autonomous Province of Vojvodina no. 22/2011), which refers to the very wide area of the settlements situated within this protected area.

All these spatial planning documents are aligned with the existing nature conservation legislation and therefore form a good basis for the further functioning of the Biosphere Reserve. The most important principle in the joint heritage of the spatial planning sector and the nature conservation sector is intersectoral cooperation and the acknowledgement of many different interests of the actors in the area of the proposed Biosphere Reserve at all levels, from local to international.

“(c) a designated authority or mechanism to implement this policy or plan"?

For the purpose of management coordination, a Council of Stakeholders of Bačko Podunavlje Biosphere Reserve will be established following approval of the nomination. The Council will be coordinated by the nominated expert of the Institute for Nature Conservation of Vojvodina Province and will be composed of one representative of each of the following institutions (directly nominated by the mayor/municipality head/company director): City Administration of the City of Sombor, Municipal Administration of Apatin Municipality, Municipal Administration of Bač Municipality, Municipal Administration of Odžaci Municipality, Municipal Administration of Bačka Palanka Municipality, representative of the manager of Gornje Podunavlje Special Nature Reserve, representative of the manager of Karađorđevo Special Nature Reserve, representative of the manager of Junaković Forest Natural Monument, representative of the manager of Tikvara Nature Park, and representatives of major users in the buffer zone: Vojvodinašume Public Enterprise and Vode Vojvodine Public Enterprise for Water Management.

The initial tasks of the Council will be as follows:

a) Develop a long-term vision for the proposed Biosphere Reserve that is shared by the majority of stakeholders.
b) Review the existing management plan for Gornje Podunavlje Special Nature Reserve and either expand it or provide a supplement to address at least the following biosphere reserve requirements: zonation map showing core area(s), buffer area(s) and transition area(s); management objectives and activities for research, training and education; and management objectives and activities for demonstration of sustainable development.
c) Develop an Action Plan for the proposed Biosphere Reserve that is based on the expanded Management Plan.
d) Contribute to defining an appropriate governance model for the proposed Biosphere Reserve and identify the key stakeholder groups to be represented in the Management Committee or Board.

Again, in the interest of fast-tracking of the process, a governance model is already proposed for further discussion and development during the above mentioned meetings and workshops with stakeholders. Details on management structures are given in chapter 17.

“(d) programmes for research, monitoring, education and training"?
If yes, describe. If not, describe what is planned.

Existing/on-going monitoring programs in the Biosphere Reserve include: regular monitoring of climate elements at the Sombor meteorological station, monitoring of hydrological parameters at the following stations on the Danube: Bezdan, Bogojevo, Apatin and Bačka Palanka (both performed by State Hydrometeorological Institute of Serbia); monitoring of air quality by the automatic station at Sombor; monitoring of water quality in the water bodies (performed by the Faculty of Sciences, University of Novi Sad), monitoring of wildlife:

- Black Stork, White-tailed Eagle, Little Ringed Plover, Sand Martin, Tawny Owl, Collared Flycatcher (performed by the Vojvodinašume Public Enterprise and Bird Protection and Study Society of Serbia),
- Waterbirds (International Waterbird Census) – performed by Bird Protection and Study Society of Serbia
- Fish stock – performed by Faculty of Sciences, University of Novi Sad.

Education programmes exist and are organized and carried out by a range of stakeholders. The main education programmes are ecological camps, mainly organized by the Vojvodina Volunteer Service and youth education activities in the protected areas (most within the Gornje Podunavlje Special Nature Reserve).

Permanent training activities are not in place.

5. ENDORSEMENTS:

(If a large number of Authorities are involved, please enclose the additional endorsement letters as a separate Annex).

5.1 Signed by the authority/authorities in charge of the management of the core area(s):

Full name and title: Vojvodinašume Public Enterprise
Address: Preradovićeva 2, 21131 Petrovaradin, Serbia
E-mail: info@vojvodinasume.rs
Phone: +381 (0)21-431-144; +381 (0)21-6433-139
Date:

Full name and title: Morović Military Institution
Address: Bosutska 8, 22245 Morović, Serbia
E-mail: office@vumorovic.rs
Phone: +381 (0)22-736-033
Date:

Full name and title: Tikvara Sport and Recreation Centre
Address: Veselina Masleše bb, 21400 Bačka Palanka, Serbia
E-mail: tikvarasrc@mts.rs
Phone: +381 (0)21-6041-333

Date:

5.2 Signed by the authority/authorities in charge of the management of the buffer zone(s):

Full name and title: Vojvodinašume Public Enterprise
Address: Preradovićeva 2, 21131 Petrovaradin, Serbia
E-mail: info@vojvodinasume.rs
Phone: +381 (0)21-431-144; +381 (0)21-6433-139
Date:

Full name and title: Vode Vojvodine Public Water Management Company
Address: Bulevar Mihajla Pupina 25, 21000 Novi Sad, Serbia
E-mail: office@vodevojvodine.rs
Phone: +381(0)21- 4881-888
Date:

5.3 Signed as appropriate by the National (or State or Provincial) administration responsible for the management of the core area(s) and the buffer zone(s):

Full name and title: Ministry of Agriculture and Environmental Protection
Address: Omladinskih brigada 1, 11000 Belgrade, Serbia
E-mail: info@eko.minpolj.gov.rs
Phone: +381(0)11-3131-357
Date:

Full name and title: Provincial Secretariat for Urban Planning, Construction and Environmental Protection
Address: Bulevar Mihajla Pupina 16, 21000 Novi Sad, Serbia
E-mail: ekolog@vojvodina.gov.rs
Phone: +381(0)21-487-45-90 ; +381(0)21- 487-4719
Date:

5.4 Signed by the authority/authorities, elected local government recognized authority or spokesperson representative of the communities located in the transition area(s).

Full name and title: City of Sombor (Mayor's Office)
Address: Trg cara Uroša 1, 25000 Sombor, Serbia
E-mail: gradonacelnik@sombor.rs
Phone: +381 (0)25-468-111
Date:

Full name and title: Municipality of Apatin (Municipality Head's Office)
Date:
Address: Srpskih vladara 29, 25260 Apatin, Serbia
E-mail: kabinet@soapatin.org
Phone: +381 (0)25- 773-131
Date:

Full name and title: Municipality of Odžaci (Municipality Head's Office)
Address: Knez Mihajlova 24, 25250 Odžaci, Serbia
E-mail: protokol@odzaci.rs
Phone: +381 (0)25-466-000
Date:

Full name and title: Municipality of Bač (Municipality Head's Office)
Address: Trg dr Zorana Đinđića 3, 21420 Bač, Serbia
E-mail: info@bac.rs
Phone: +381 (0)21-770-075; +381 (0)21-770-330
Date:

Full name and title: Municipality of Bačka Palanka (Municipality Head's Office)
Address: Kralja Petra I 16, 21400 Bačka Palanka, Serbia
E-mail: info@backapalanka.org.rs
Phone: +381 (0)21-2101-192
Date:

5.5 Signed on behalf of the MAB National Committee or focal point:

Full name and title: Jasmina Tatarac-Nikolić, Secretary General of the National Commission of Republic of Serbia for Cooperation with UNESCO
Address: Ministry of Foreign Affairs, Kneza Milosa 24-26, 11000 Belgrade, Serbia
E-mail: jasmina.tatarac@mfa.rs, serbia.unesco.natcom@mfa.rs
Phone: +381 (0)11-3068-306
Date:

PART II: DESCRIPTION

6. LOCATION (COORDINATES AND MAP(S)):

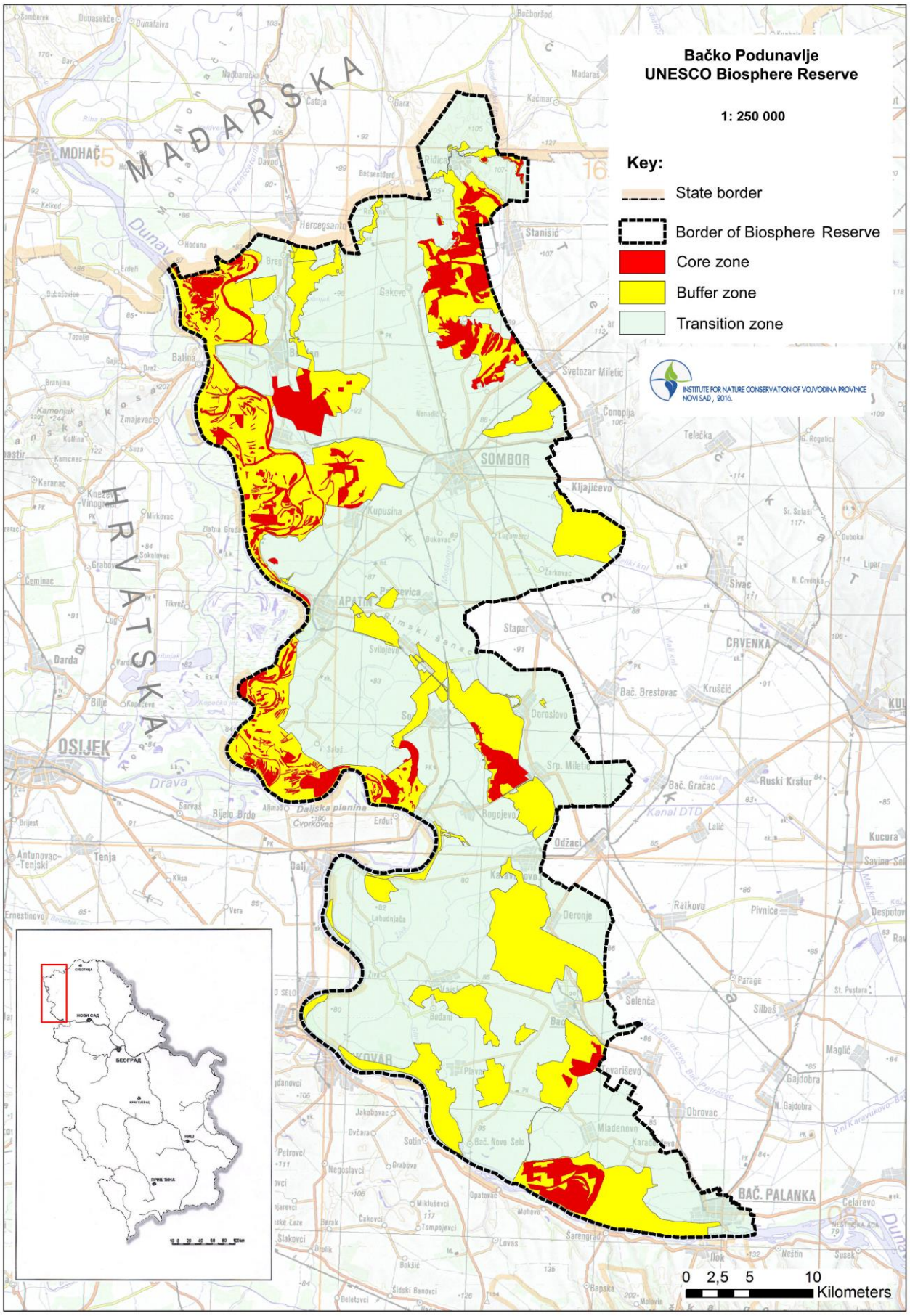
6.1 Provide the biosphere reserve's standard geographical coordinates (all projected under WGS 84):

Cardinal points:	Latitude	Longitude
Most central point:	45.811824	18.960779
Northernmost point:	46.040225	19.109762
Southernmost point:	45.234232	19.435681
Westernmost point:	45.908748	18.821004
Easternmost point:	45.239374	19.435540

6.2 Provide a map(s) on a topographic layer of the precise location and delimitation of the three zones of the biosphere reserve (Map(s) shall be provided in both paper and electronic copies). Shapefiles (also in WGS 84 projection system) used to produce the map must be attached to the electronic copy of the form.

If possible, also provide a link to access this map on the internet (e.g. Google map, website…).

Map of the proposed Biosphere Reserve with zones:


Bačko Podunavlje
UNESCO Biosphere Reserve
1: 250 000
Key:
State border
Border of Biosphere Reserve
Core zone
Buffer zone
Transition zone
INSTITUTE FOR NATURE CONSERVATION OF VOJVODINA PROVINCE
NOVI SAD, 2016.
MAĐARSKA
HRVATSKA
SOMBOR
OSIJEK
APATIN
CRVENKA
BAČ. PALANKA
Kilometers
0 2,5 5 10

7. AREA (see map):

	Terrestrial	Marine (if applicable)	Total
7.1 Area of Core Area(s):	11 242 ha	0 ha	11 242 ha
7.2 Area of Buffer Zone(s):	45 744 ha	0 ha	45 744 ha
7.3 Area of Transition Area(s):	119 649 ha	0 ha	119 649 ha
TOTAL:	176 635 ha	0 ha	176 635 ha

7.4 Brief rationale of this zonation in terms of the respective functions of the biosphere reserve. If a different type of zonation also exists indicate how it can coexist with the requirements of the biosphere reserve zonation.
(e.g., if national criteria exist for the definition of the area or zones, please provide brief information about these).

The core zone is composed of:

1. areas in the existing Special Nature Reserves which are under the conservation regime of the I and II degree (pursuant to the national legislation),
2. areas which are open water, meadows, ponds, canals and clearings in Gornje Podunavlje Special Nature Reserve,
3. area of the existing National Ecological Network: Alkaline Meadows of North Bačka Ecologically Important Area,
4. two other selected areas in the National Ecological Network, important for conservation of selected strictly protected species.

The buffer zone is composed of:

1. areas in the existing Special Nature Reserves which are under the conservation regime of III degree (pursuant to the national legislation),
2. other protected areas,
3. all forests outside of protected areas,
4. immediate surroundings of the existing National Ecological Network: Alkaline Meadows of North Bačka Ecologically Important Area and two other selected areas in the National Ecological Network that are important for conservation of selected strictly protected species,
5. watercourses and associated wetlands along Plazović River
6. area of the Gornje Podunavlje Ramsar Site which is not within the Special Nature Reserve.

The transition area is composed of all other areas within the proposed Biosphere reserve bounded by:

1. the state border between Serbia and Hungary to the north,
2. the Danube River – the state border between Serbia and Croatia to the west, south-west and south, and
3. the administrative borders of cadastre units of the following settlements to the east: Riđica, Gakovo, Sombor, Prigrevica, Svilojevo, Doroslovo, Srpski Miletić, Bogojevo, Karavukovo, Deronje, Bač, Mladenovo, Karađorđevo and Nova Palanka.

This type of zonation is completely in line with the provisions from the Statutory Framework of the World Network of Biosphere Reserves, joining the main type of management/land use with three

functions of the Biosphere Reserves: conservation-core zone, limited use-buffer zone and development-transition area.

8. BIOGEOGRAPHICAL REGION:

[Indicate the generally accepted name of the biogeographical region in which the proposed biosphere reserve is located.] (The term "major biogeographic region" is not strictly defined but you may wish to refer to the Udvardy classification system (http://www.unep-wcmc.org/udvardys-biogeographical-provinces-1975_745.html)).

The proposed Biosphere Reserve is located in the Pannonian Biogeographical Region (pursuant to the administrative-geographical division of the biogeographical regions in Europe used by nature-related legislation of the European Union, mainly: Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds and Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora).

9. LAND USE:

9.1 Historical:
(If known, give a brief summary of past/historical land use(s), resource uses and landscape dynamics of each zone of the proposed biosphere reserve).

- Agriculture is the most important human activity in the Autonomous Province of Vojvodina today (comprising the southern part of the Carpathian Basin). This has strong historical implications since the communities of the first inhabitants of this part of the Danube plain were primarily oriented to agriculture. The archaeological site Donja Branjevina (near Deronje, within the proposed Biosphere Reserve) contains remnants of the Neolithic Starčevo Culture. This period of the early Neolithic era brought important changes in the behaviour of human communities. The survival strategy based on hunting and gathering was gradually replaced by food production. The mobility of hunters/gatherers was replaced with the tendency of establishment of long-term settlements. New technologies were invented: the using of dried clay and stone products.
- Primary use of the land resources was twofold: land and cattle cultivation are the oldest used techniques. In this early period, relatively small amounts of cereals were produced. Domesticated animal species included: cattle, sheep, goat and pigs. Human settlements were erected along the Danube and Mostonga Rivers.
- As late as in the period of the Habsburg Empire in the area of present day Vojvodina, extensive watercourse regulations began. The main objective of such land management was to colonize new inhabitants and give them the opportunity to manage the land and empower the whole region. New opportunities for land cultivation attracted people from a wider region and resulted in multi-ethnic communities which are still preserved today.
- In the second half of the 18th century, agriculture became very prosperous after the start of production of domestic cannabis, which was very fertile and of good quality. This caused the development of the cannabis-processing industry. In this century, fish harvesting began its rapid development. The milestone of the development of this type of income-generation was the arrival of a large group of settlers from present day Germany to Apatin. These were experienced fish harvesters and transferred their experience to the local people. That included the use of large fishing nets. Since 1830, Apatin was the main centre of fish harvest and sale throughout the Empire.
- After the first geodetic surveys in 1791, the first project to build a navigable canal between the Danube and Tisa Rivers began. Construction commenced in 1793 and lasted until 1802. The Danube–Tisa–Danube Canal (DTD) is a unique hydro-engineering system for flood control, hydrotechnical works, amelioration, forestry, water supply, wastewater removal, navigation, tourism, fishing and hunting. It covers the northern part of Serbia in the territory of Vojvodina (Bačka and Banat regions). The main canal is the "Veliki Bački kanal" which runs from Bezdan (on the Danube) to Bečej (on the Tisa). The canal is 118 km long and is part of Danube-Tisa-Danube Canal system.
- The flow of the Danube was altered several times around the turn of the 20th century by cutting meanders, intended to shorten the route. Three shortcuts were created.
- Regulation of the Mostonga River was mentioned as early as the 15th century, when it was deepened for the purpose of the navigation from the Danube to the Bač Fortress. After the

Veliki Bački Canal was created, the Mostonga river bed was cut. During the creation of the Danube-Tisa-Danube canal, it was completely channalized from Sombor to Bač.

- The erecting of flood control embankments gave the landscape of the Biosphere Reserve its final appearance. This was completed in the 20th century, in 1956, following a devastating flood.
- Commercial forestry experienced rapid development after World War II, when production of the first clones of the fast-growing trees (mainly poplars) took place; since then, many natural floodplain stands have been cleared and replaced by poplar plantations.



Figure 1: Fisherman on the Danube. By: Szilard Kovacs

9.2 Who are the main users of the biosphere reserve? (for each zone, and main resources used). If applicable, describe the level of involvement of indigenous people taking into account the "United Nations Declaration on the Rights of Indigenous Peoples". (http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf).

Only the resources relevant for the Biosphere Reserve concept are listed in the table below.

Zone	**Resource**	**Users**
Core	Grass	Local communities: Stanišić, Bilić, Rančevo, Svetozar Miletić, Srpski Miletić
	Bathing water	Local population: Bački Breg, Bezdan, Kolut, Bački Monoštor, Sonta
	Tourist paths	Vojvodinašume Public Enterprise and visitors
Buffer	Forest	Vojvodinašume Public Enterprise, Military Institution Morović
	Water	Vode Vojvodine Public Enterprise, Zapadna Bačka Public Enterprise for Water Management, Dunav Public Enterprise for Water Management, Tikvara Sport and Recreation Centre
	Tourist zones (14 aggregation of weekend houses)	Private owners
	Wild honey-making plants	Private bee-keepers
	Kolut Fish Farm	Kolut Ltd, Kolut
	Svilojevo Fish farm	Jedinstvo Ltd, Apatin
	Srpski Miletić Fish farm	DTD Ribarstvo Ltd, Bački Jarak
	Bač Fish Farm	Mostonga Ltd (Bač)
	Hunting grounds/hunting game	Hunting societies: Zapadna Bačka, Sombor I, Sombor II (Sombor), Kurjačica (Apatin), Fazan (Sonta), Bođanski Rit (Bač), Lalinske Livade (Odžaci), Mostonga Fish Farm (Bač), Ristovača-Vojvodinašume (Petrovaradin), Morgaš (Bač), Tikvara (Palanka-Mladenovo), Apatinski Rit and Kozara (Petrovaradin-Vojvodinašume)
	Danube Waterway	Plovput Directorate for Inland Waterways, Belgrade
	State agricultural land	Ministry of Agriculture, Forestry and Water Management
Transition	Tourism facilities (in settlements)	Private owners, Tourist boards of cities/ municipalities
	Agricultural land	Private owners, Ministry of Agriculture, Forestry and Water Management, private agricultural companies

9.3 What are the rules (including customary or traditional) of land use in and access to each zone of the biosphere reserve?

Forests
Forests are under the ownership of the Republic of Serbia (state owned). Most forested areas are permanently entrusted for management to the Vojvodinašume Public Enterprise and Morović Military Institution. Management is regulated under the Forests Act. It is a commercial activity and all income generated from timber and other forest products is subject to tax procedures. Every forest user pays a specific fee for timber (based on quantity) and these funds are directed to the state budget and used for the conservation and improvement of forests. Additionally, forests in protected areas are managed pursuant to the legislation regulating nature conservation and a matter of a special code of conduct. State-owned forests are legally defined as public property (ownership of all citizens) and all have equal opportunities to enjoy the benefits these habitats bring to mankind. In reality, in protected areas there are certain restrictions which concern conservation issues of protected species and habitats. Management of forests is based on 10-year cycle and requires the development of a forest management plan. Management plans are approved by the minister responsible for forestry.

One of the principles of the Vojvodinašume Public Enterprise is the integral management of forests, which implies that other resources (i.e. game and wetlands) are managed simultaneously. Game animals are managed for commercial use, pursuant to the Act on Hunting and Game Animals. Fenced hunting grounds in Gornje Podunavlje and Karađorđevo have restricted access for security reasons and for preventing the disturbance of animal reproduction cycles. Hunting grounds in buffer and transition areas are managed and controlled mainly by local hunting associations (civil organizations).

Wetlands are managed almost exclusively for fish stock management, pursuant to the Act on the Protection and Sustainable Use of Fish Populations. Fishing area managers organize the control and guarding of water bodies. Their primary source of income are charges from fishing licences (daily or seasonal) which are obligatory for every kind of fishing, both recreational or professional. There are spatial (spawning areas), temporal (fishing seasons for particular species) and quantitative (minimal or maximal size of fish) restrictions in fishing areas.

Meadows/pastures
Most meadows/pastures are completely state-owned (except for a very small proportion owned by villages). They are mostly used for grazing by local farmers. The fee for grazing is paid to the local cities/municipalities. The Ministry responsible for agriculture, as the formal custodian of state owned agricultural land including meadows and pastures, rents these areas usually in 3-year cycles. Meadows and pastures can be transferred into arable land by the legal process of change of land purpose.

Fish farms
These are privately owned. Income comes from the produced fish and from the hunting of game animals (mainly waterfowl). Access is strictly regulated (all are surrounded by fences or deep ditches). Hunting management is based on management plans developed for a ten-year period.

Other hunting grounds

Usually on open, agricultural land (mainly private), but game animals are public ownership (public resource) and their management is entrusted to the hunting associations approved by the Provincial Secretariat for Agriculture for a 10-year period. Obligatory hunting management plans are approved by the Ministry responsible for agriculture (in 10-year cycles). They provide hunting activities for their members (local population) but also for guests from other parts of the country or from abroad.

Agricultural land
Land is mainly private (a small portion is owned by limited companies with shares), managed by owners and functioning on the basis of commercial interests. Individual land holds are usually small (on average 4.7 ha).

Bathing areas and other water-related resources
Bathing areas are mainly located along the Danube banks and on lakes, and are mostly unmanaged and with open access. Some are very popular recreational sites and have been used for many generations. Cities/municipalities occasionally invest in their maintenance and charge an entrance fees (one case).

9.4 Describe women's and men's different levels of access to and control over resources.
(Do men and women use the same resources differently (e.g., for subsistence, market, religious/ritual purposes), or use different resources?).

There are no legally imposed gender differences concerning resource use. However, there are traditionally invoked differences which are connected to the traditional, rural-agricultural organization of livelihoods.

10. HUMAN POPULATION OF PROPOSED BIOSPHERE RESERVE:

[Approximate number of people living within the proposed biosphere reserve]

	Permanently	Seasonally
10.1 Core Area(s)	0	0
10.2 Buffer Zone(s)	unknown	approx. 15,000
10.3 Transition Area(s)	**147,405**	unknown
Total:	**147,405**	**approx. 15,000**

10.4 Brief description of local communities living within or near the proposed biosphere reserve.
(Indicate ethnic origin and composition, minorities etc., main economic activities (e.g. pastoralism, tourism) and the location of their main areas of concentration, with reference to the map (section 6.2)).

According to the results of the 2011 Census, there are 147,405 inhabitants in 26 settlements in the proposed Biosphere Reserve (all within the transitional area). Depopulation is present, especially in rural areas, and the number of inhabitants in comparison with the 2002 Census has decreased by 16,651. The inhabitants of almost all settlements are demographically very old, and this trend will probably continue in the future. The number of inhabitants per settlement is presented in the table below.

City/municipality	Settlement	Inhabitants in 2011
Sombor	Sombor	47,623
	Bački Breg	1,140
	Rastina	411
	Riđica	2,011
	Gakovo	1,810
	Kolut	1,327
	Bezdan	4,623
	Bački Monoštor	3,485
	Doroslovo	1,497
Apatin	Apatin	17,411
	Kupusina	1,952
	Prigrevica	4,016
	Svilojevo	1,219
	Sonta	4,331
Odžaci	Srpski Miletić	3,038
	Bogojevo	1,744
	Karavukovo	4,215
	Deronje	2,487

City/municipality	Settlement	Inhabitants in 2011
Bač	Bač	5,399
	Vajska	2,834
	Bođani	952
	Plavna	1,152
	Bačko Novo Selo	1,072
Bačka Palanka	Bačka Palanka	28,239
	Mladenovo	2,679
	Karađorđevo	738
Total		147,405

The largest concentration of inhabitants is in the City of Sombor (northern part of the proposed Biosphere Reserve) and in the Municipality of Bačka Palanka (southern part of the proposed Biosphere Reserve). The size of the urban population is 98,672 people, while 48,733 people live in villages. The least populated villages are along the national border with Croatia.

The ethnic structure of inhabitants is very complex, which makes it one of the main demographic and cultural features of the region as a whole. Around 20 different ethnic groups live within the area of Biosphere Reserve, with Serbs, Hungarians and Croats prevailing. Other numerous ethnic groups include Slovaks, Ruthenians, Ukrainians, Bunjevci, Roma and others. This ethnic spectrum is a result of numerous colonisations (which have occurred in this area in the previous centuries), political systems and countries. The Serbs have several times left and recolonized the area during the Turkish and Habsburg periods. The most intensive colonization took place between 1689 and 1690. Other colonisations of Serbs were recorded after both of the World Wars. Hungarians left this area in particular after the battle at Mohacs (1526), but after the fall of the Ottoman Empire, recolonization began, starting from 1745. Croats (both sub-ethnic groups: Šokci and Bunjevci) settled the villages along the Danube at the end of 17th century. There is very strong German heritage in the construction, architecture, cuisine and way of life in the area. However, almost the entire German population left this area after the events following World War II.

The prevailing religions in the area are the Serbian Orthodox and Roman Catholic Churches, with Slovak Evangelical, Byzantine Catholic and Christian Reformed Churches with significant congregations.

The dominant economic activities are agriculture, forestry and industry, which employ the largest number of people. The most frequent crops are wheat, corn, sunflower, soya and sugar beet. Livestock breeding is less developed and its share has dropped in the last two decades. The most important tourism centres are Bačka Palanka, Apatin and Sombor.

10.5 Name(s) of the major settlement(s) within and near the proposed biosphere reserve with reference to the map (section 6.2):

The major settlements are: Sombor, Bačka Palanka, Apatin, Bač and Odžaci.

10.6 Cultural significance:

(Briefly describe the proposed biosphere reserve's importance in terms of past and current cultural values (religious, historical, political, social, ethnological) and others, if possible with distinction between material and intangible heritage (c.f. UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage 1972 and UNESCO Convention for the Safeguard of the Intangible Cultural Heritage 2003 (http://portal.unesco.org/en/ev.php-URL_ID=13055&URL_DO=DO_TOPIC&URL_SECTION=201.html and http://portal.unesco.org/en/ev.php-URL_ID=17716&URL_DO=DO_TOPIC&URL_SECTION=201.html)).

Testimony of the presence of prehistoric cultures include the many archaeological sites, the most prominent of which is Donja Branjevina (Neolithic period). The statuette of Red-haired Goddess is a marvellous piece of that culture, which is considered the goddess of fertility and was worshipped to bring fertile crops. Not far from Sombor, between the villages Bezdan and Bački Monoštor, there is an archaeological site at the ruins of the medieval fortification Bortanj in Kozarska forest.

The medieval period is marked by two cities/fortifications: Bodrog and Bač. Today, the remnants of Bodrog are not visible, but the ruins of medieval Bač still present the history of this part of Bačka (the area between the Danube and Tisa called upon Bač). Today in Bač, two structures of outstanding importance have been preserved. The Monastery in the city that was founded by the Templars in 1169, but was taken later by the Franciscans. A major reconstruction event took place between 1734 and 1745 and the new detailed renewal will, reportedly start in 2017 within the project financed by EU. The monastery features a mixture of Baroque, Romanesque and Gothic construction styles. The Bač Fortress was built between 1338 and 1342. Remnants of the public bathing rooms from the Ottoman period have also been conserved in Bač. Historical place of Bač and its surroundings, including Bač Fortress, is on the tentative list of UNESCO world heritage sites in Serbia.

The Habsburg Empire significantly influenced the social and cultural shaping of the area. The Monarchy aimed to colonize the region with settlers from different regions of the Empire. New villages for newcomers were built in a uniform way. The Habsburg Monarchy supported the development of crafts, which were planned to supply the entire Empire with their products. Thanks to this support, a network of small economic centres was created, in particular: Apatin, Odžaci, Bačka Palanka and Bezdan. This contributed to the development of modern industry at the turn of the 20th century.

After World War I, the area became a part of the Kingdom of Serbs, Croats and Slovenes (later: Kingdom of Yugoslavia), while the later important events were, in particular, World War II and the creation of Socialist Yugoslavia (in 1943), and its dissolution in 1991-1995.

Rural settlements have kept their characteristics until nowadays. Picturesque facades have adopted the trend of the time when they were built and these houses can be seen today in Bački Monoštor, Kupusina and Sonta. However, the most prominent architecture can be found in Sombor. The prosperity of the City of Sombor, as the seat of the former Backa-Bodrog County, began in 1749 when the city acquired the status of a free royal town. After World War I, the administrative seat of the Danube region was moved to Novi Sad. Sombor, which had been built to be an administrative and cultural centre, found itself at the edge of the province and facing relative stagnation. However, thanks to that, the old urban structure that tells the history of the town and its former splendour has been preserved. Its morphology, with predominant Baroque buildings in a rectangular-shape city centre, is a remnant of what was once a fortification. Alongside the rural and urban lifestyles, the

traditional way of life in the isolated *salaši* farms, especially numerous around Sombor, are now used primarily as tourist attractions. The border between Serbia, Croatia and Hungary has become a hub for cultural exchange and new opportunities for cooperation.
Local celebrations of rural lifestyle are also famous here. Customs, folk dressing (often specific to each village), and playing of the *tambura* (a local type of string instrument) are very recognizable features of the Biosphere Reserve.

In total, 47 cultural monuments are present in the proposed reserve, 2 cultural spatial units, 2 archaeological sites and one attraction site. Furthermore, there is evidence of historical water-management and other historical heritage, though these have still not been granted official protection.

10.7 Specify the number of spoken and written languages (including ethnic, minority and endangered languages) in the biosphere reserve.
(Refer, for instance, to the UNESCO Atlas of Endangered languages (http://www.unesco.org/culture/languages-atlas/index.php)).

Spoken languages in the Biosphere Reserve includes: Serbian, Hungarian, Croatian, Slovak, Roma, German, Ruthenian, Montenegrin, Macedonian, Albanian, Slovene.

All the languages except Serbian are minority languages in the Republic of Serbia. Serbian, Hungarian, Croatian, Ruthenian, Slovak and Romanian are official languages in the Autonomous Province of Vojvodina.

11. BIOPHYSICAL CHARACTERISTICS:

11.1 General description of site characteristics and topography of area:
(Briefly describe the major topographic features (wetlands, marshes, mountain ranges, dunes etc.) which most typically characterize the landscape of the area).

The proposed Biosphere Reserve lies in the northwest part of the Republic of Serbia and its Autonomous Province of Vojvodina. It is situated in two administrative counties: West Bačka (City of Sombor, Municipalities of Apatin and Odžaci) and South Bačka (Municipalities of Bač and Bačka Palanka). It partially follows the state borders of Serbia with Croatia and Hungary.

Situated mainly in recent and historical alluvial zones of the central Danube plain (on the left bank), influenced primarily in its natural development by the Danube waters (frequent floods) and later by intensive human activities, the proposed Biosphere Reserve today is a mosaic composed mainly of remnants of historic floodplains and man-made landscapes influenced by agriculture and human settlements. Floodplain includes alluvial forests (partly under a regular flooding regime), marshes, reed beds, freshwater habitats, alluvial wetlands, and flood-protected forests with significantly changed hydrology dynamics. Agricultural complexes also include fragments of natural habitats, including courses of the small Plazović River (total: 192 km, mostly in Hungary- Kigyós River, in Serbia 37 terminal kilometres) and Mostonga River (length: 70 km, but mostly channelized), but also melioration canals and, finally, settlements.

11.2 Altitudinal range:

11.2.1 Highest elevation above sea level: 107 meters

11.2.2 Lowest elevation above sea level: 81 meters

11.2.3 For coastal/marine areas, maximum depth below mean sea level: _____metres

11.3 Climate:
(Briefly describe the climate of the area, you may wish to use the regional climate classification by Köppen as suggested by WMO (http://www.wmo.int/pages/themes/climate/understanding_climate.php)).

The area of the proposed Biosphere Reserve is in the continental climatic area, though the climate is characterized by certain specificities and is called “Pannonian-continental” climate or “semi-arid” (in some cases even “Steppe” climate”). Summers are short and dry, while winters are cold and sharp with strong frosts. Transitional seasons are very short. At the end of winters, the snow melts very quickly.

11.3.1 Average temperature of the warmest month: 20.9°C

11.3.2 Average temperature of the coldest month: 0.9°C

11.3.3 Mean annual precipitation: 557 mm, recorded at an elevation of 93 metres

11.3.4 Is there a meteorological station in or near the proposed biosphere reserve? If so, what is its name and location and how long has it been operating?

There is one meteorological station in the Biosphere Reserve: Sombor Meteorological Station (location: 45°46'2.95" N, 19° 9'59.72" E). It has been in operation since 1884.

11.4 Geology, geomorphology, soils:
(Briefly describe important formations and conditions, including bedrock geology, sedimentary deposits, and important soil types).

Geology
The area is composed of the sediments from the Quaternary over Neogene sediments, up to 10 m thick. On the basis of sediments, several zones are described. The higher fluvial terrace of the Danube (elevation 80-88 m) is composed of sand in several layers. Dunes of live sand, pond and terrestrial loess lie over this. The lower fluvial terrace of the Danube lies at an elevation of 80-84 m, is composed of Danube sand and mud, covered by sandy loess. The alluvial plain of the Danube is the lowest positioned and is composed of recent sediments: sand, gravel and mud.

Geomorphology
The area is situated on the alluvial plain of the Danube, and alluvial terrace, loess terrace and fragments of Subotica-Horgoš sands. The alluvial plain of the Danube is the lowest unit of the local relief, permanently or temporary flooded by the Danube. The alluvial terrace of the Danube is several meters higher in comparison with the alluvial plain and is intersected by numerous old river valleys and meanders and small elevations along them, composed of loess and sand. These also include current and former river valleys of the Plazović and Mostonga Rivers. The lowest part of the alluvial plain is called the inundation plain and is formed by the regular flooding of the river. The alluvial terrace is created by accumulated loess over the sediments of the alluvial terrace. The loess sediments are massive, in some cases up to 60 m deep. Fragments of the Subotica-Horgoš sands are found near Riđica and Bački Breg and are marginal parts of the extensive sands between the Danube and the Tisa Rivers, spreading mostly in Hungary. The highest elevations in the Biosphere Reserve are the tops of the sandy dunes near Riđica.

Soil types
Major soil types are deposits on alluvial layers.

11.5 Bioclimatic zone:
(Indicate the bioclimatic region in which the proposed biosphere reserve is located, refer to the table below and tick the appropriate box for each area of the biosphere reserve).

The proposed Biosphere Reserve is situated in the semi-arid bio-climatic zone, on the basis of the average annual rainfall. All the zones in the Biosphere Reserve are situated in this bio-climatic zone.

Areas	Average annual rainfall/mm	Aridity index		Core area(s)	Buffer zone(s)	Transition area(s)
		Penman	(UNEP index)			
Hyper-arid	P<100	<0.05	<0.05			
Arid	100-400	0.05-0.28	0.05-0.20			
Semi-arid	400-600	0.28-0.43	0.21-0.50	x	x	x
Dry Sub-humid	600-800	0.43-0.60	0.51-0.65			
Moist Sub-humid	800-1200	0.60-0.90	>0.65			
Per-humid	P>1200	>0.90				

Table 1: Aridity index resulting from the use of P/ETP
*Mean annual precipitation (**P**)/mean annual potential evapotranspiration (**ETP**)*

11.6 Biological characteristics:

List main habitat types (e.g. tropical evergreen forest, savannah woodland, alpine tundra, coral reef, kelp beds) and land cover types (e.g. residential areas, agricultural land, pastoral land, cultivated areas, rangeland).

For each type, indicate:
- REGIONAL if the habitat or land cover type is widely distributed within the biogeographical region within which the proposed biosphere reserve is located, to assess the habitat's or land cover type's representativeness;

- LOCAL if the habitat or land cover type is of limited distribution within the proposed biosphere reserve, to assess the habitat's or land cover type's uniqueness.

For each habitat or land cover type, list characteristic species and describe important natural processes (e.g. tides, sedimentation, glacial retreat, natural fire) or human impacts (e.g. grazing, selective cutting, agricultural practices) affecting the system. As appropriate, refer to the vegetation or land cover map provided as supporting documentation.

1. Inland wetlands (REGIONAL)

This land-cover type comprises the following habitats in proposed Biosphere Reserve: water-fringing reed beds and tall halophytes other than canes, periodically inundated shores with pioneer and ephemeral vegetation, bare or sparsely vegetated shores with soft or mobile sediments, reed beds normally without free-standing water, beds of large sedges normally without free-standing water and swamps and marshes dominated by *Juncus effusus* or other large *Juncus spp.*

Characteristic species
Plants: *Phragmites australis, Typha latifolia, Limosella aquatica, Cyperus glomeratus, Cyperus michelianus, Scirpus lacustris ssp. lacustris, Carex acuta, Carex riparia, Juncus effusus, Carex elata* and others.

Birds: *Ixobrychus minutus, Acrocephalus arundinaceus, Acrocephalus scirpaceus, Acrocephalus schoenobaenus, Locustella luscinioides, Emberiza schoeniclus, Circus aeruginosus, Panurus biarmicus, Porzana parva, Porzana porzana, Rallus aquaticus, Gallinula chloropus, Ardea purpurea, Ardea cinerea, Luscinia svecica, Cuculus canorus*

Mammals: *Lutra lutra, Arvicola terrestris, Neomys anomalus*

Amphibians: *Triturus dobrogicus, Rana lessonae, Rana ridibunda, Bombina bombina*

Reptiles: *Emys orbicularis, Natrix tesselata, Natrix natrix*

Fish: *Rhodeus sericeus amarus, Tinca tinca, Cobitis taenia, Umbra krameri, Misgurnus fossilis*

Important natural processes: eutrophication, variation of water level (sudden flooding and drying, sometimes influenced by man), spreading of invasive vegetation

2. Pastures (REGIONAL)

This land-cover type comprises the following habitat in the proposed Biosphere Reserve: continental inland salt steppes

Characteristic species:
Plants: *Puccinellia limosa, Festuca pseudovina, Rannunculus ophioglossifolius, Cirsium brachycephalum, Camphorosma annua, Artemisia santonicum, Scilla autumnalis, Plantago maritime*

Birds: *Vanellus vanellus, Tringa totanus, Grus grus, Anser albifrons, Motacilla flava, Miliaria calandra, Alauda arvensis, Galerida cristata, Falco tinnunculus, Falco vespertinus, Ciconia ciconia, Lanius collurio, Lanius minor, Falco cherrug*

Mammals: *Mustela eversmani, Vulpes vulpes, Cricaetus cricaetus, Spermophilus citellus, Mus spicilegus, Capreolus capreolus*

Amphibians: *Pelobates fuscus*

Reptiles: *Zamenis longissimus, Natrix natrix*

Important natural processes: fires, grazing by wild animals and domestic cattle, fires, floods during high underground water (spring), desalinization, resalinization, spread of invasive plants

3. Water bodies (REGIONAL)

This land-cover type comprises the following habitats in the proposed Biosphere Reserve: permanent mesotrophic lakes, ponds and pools, permanent eutrophic lakes, ponds and pools, permanent inland saline and brackish lakes, ponds and pools, temporary lakes, ponds and pools

Characteristic species
Plants: *Utricularia vulgaris, Calitriche palustris, Ceratophilum submersum, Ceratophilum demersum, Miriophlum spicatum, Potamogeton crispus, Potamogeton lucens, Nymphaea alba, Nuphar luteum, Hymphoides peltata, Lemna minor, Scirpus maritimus, Suaeda pannonica, Chenopodium chenopodioides, Cyperus pannonicus, Potamogeton pusillus, Rannunculus trichophyllus*

Birds: *Haliaeetus albicilla, Ciconia nigra, Ciconia ciconia, Ardea cinerea, Ardea purpurea, Egretta alba, Egretta garzetta, Nycticorax nycticorax, Ardeola ralloides, Botaurus stellaris, Acrocephalus schoenobaenus, Anas platyrhynchos, Anas querquedula, Aythya ferina, Anser anser*

Mammals: *Lutra lutra, Arvicola terrestris*

Amphibians: *Rana lessonae, Rana ridibunda, Triturus cristatus*

Reptiles: *Emys orbicularis, Natrix natrix, Natrix tesselata*

Fish: *Cyprinus carpio, Perca fluviatilis, Alburnus alburnus, Rutilus rutilus, Scardinius erythrophtalmus, Pelecus cultratus*

Important natural processes: eutrophication, changes of water levels, consumption of native vegetation by invasive herbivorous fish species.

4. Water courses (REGIONAL)

This land-cover type comprises the following habitat in the proposed Biosphere Reserve: permanent non-tidal, smooth-flowing watercourses

Characteristic species
Plants: *Trapa natans, Nymphaea alba, Hydrocharis morsus-ranae, Potamogeton perfoliatus, Potamogeton luscens*

Birds: *Aythya nyroca, Aythya ferina, Anas clypeata, Gallinula chloropus, Fulica atra, Podiceps cristatus, Tachybaptus ruficollis, Chlidonias hybrid*

Mammals: *Lutra lutra*

Amphibians: *Rana ridibunda, Triturus cristatus*

Reptiles: *Emys orbicularis, Natrix natrix, Natrix tesselata*

Fish: *Silurus glanis, Esox lucius, Acipenser ruthenus, Aspius aspius, Abramis brama, Abramis ballerus, Leuciscus idus, Lota lota, Gymnocephalus cernuus, Stizostedion lucioperca*

Important natural processes: eutrophication, changes of water level, consumption of native vegetation by some invasive herbivorous fish species

5. Broad-leaved forests

This land-cover type comprises the following habitat in the proposed Biosphere Reserve: *Salix* carr and fen scrub, riparian and gallery woodland, with dominant *Alnus, Betula, Populus* or *Salix,* mixed riparian floodplain and gallery woodland, *Populus* plantations, other broad-leaf deciduous plantations.

Characteristic species:

Plants: *Salix purpurea, Salix triandra, Salix cinerea, Populus alba, Populus nigra, Salix alba, Salix fragilis, Crataegus nigra, Quercus robur, Fraxinus angustifolia ssp. oxycarpa, Ulmus effusa, Viburnum opulus, Cornus sanguinea, Ulmus campestris, Populus x euroamericana*

Birds: *Haliaeetus albicilla, Ciconia nigra, Dendrocopos medius, Dendrocopos minor, Dryocopus martius, Ficedula albicollis, Picus canus, Picus viridis, Troglodytes troglodytes, Oriolus oriolus*

Mammals: *Cervus elaphus, Sus scrofa, Apodemus sylvaticus, Glis glis, Sciurus vulgaris, Martes foina, Martes martes, Lutra lutra, Castor fiber*

Amphibians: *Rana dalmatina*

Reptiles: *Natrix natrix*

Important natural processes: grazing of wild animals, changes of water table levels, maturation of forests and forest succession, rejuvenation of forests on open clearings



Figure 2: Wetlands in Gornje Podunavlje Special Nature Reserve. By: Jaroslav Pap

12. ECOSYSTEM SERVICES:

12.1 If possible, identify the ecosystem services provided by each ecosystem of the biosphere reserve and the beneficiaries of these services.

(Please refer to the Millennium Ecosystem Assessment Framework and The Economics of Ecosystems and Biodiversity (TEEB) Framework (http://millenniumassessment.org/en/Framework.html and http://www.teebweb.org/publications/teeb-study-reports/foundations/)).

The proposed area is wetland area rich in biodiversity, especially interesting in terms of water and flood management. In the Danube plain, much of the former mosaic of wetlands and natural channels, reed beds and patches of natural floodplain forest have been lost, but some remain, especially in the proposed Biosphere Reserve and other parts of the planned Mura-Drava-Danube transboundary biosphere reserve.. Also, the fish ponds within the proposed Biosphere Reserve are among the most productive in the Serbian part of the central Danube floodplain. They are also valuable in biodiversity terms for birds and other species of fauna and flora, many of which are listed in the Bern Convention, EU Birds and Habitats Directives. In theBačko Podunavlje Biosphere reserve, the main conservation targets are wetlands and fish populations, as well as ecotourism and economic efficiency of use of biomass from wetlands. Freshwater ecosystems provide a range of services that underpin many development objectives, often for the most vulnerable communities in society. These include provisioning services such as inland fisheries, timber, medicinal plants; regulating services such as flood control, water purification, sediment transport, climate change mitigation and adaptation; cultural services such as tourism, sport fishing, research.

Ecosystem services identified in the proposed Biosphere Reserve include:

Ecosystem service	Ecosystem that provide ecosystem service (clustered into the main 5 types)	Beneficiaries
Provisioning services		
Food production (crop and vegetable products, domestic animals, fish from fish farms, game animals, wild edible animals, plants and mushrooms)	Agricultural ecosystems (cultivated crops), wetlands (both natural and man-made), forests, meadows (fish, honey bee products)	Trade companies, industry, very wide variety of individual consumers
Water supply	Wetlands (rivers and canals)	Private land owners, agricultural companies, households and public sector buildings in 26 settlements in the Biosphere Reserve, fish farms, industry and consumers of their products
Timber	Forests	Timber processing industry, some private households (fuel wood)
Reeds	Wetlands (natural and	Reed processing companies and

	manmade)	consumers of their products
Medicinal plants (herbs)	All ecosystems	Medicinal plants collectors and processing factories, consumers
Plants serving as pollen and nectar sources (bee-keeping)	All ecosystems	Bee keepers and honey processing factory, honey product consumers
Genetic resources (local races and breeds of domestic animals)	Settlements, rural and urban mosaics	Scientific institutions, cattle breeders
Cultural services		
Cultural diversity and cultural and heritage values	Settlements, rural and urban mosaics	Public institutions, visitors
Spiritual and religious values	Settlements, rural and urban mosaics	Congregations, spiritual and religious devotees, churches/religious communities, public institutions
Eco-tourism	All ecosystems	Visitors, tourism service providers, tourist boards
Sport and recreation	Wetlands, settlements, rural and urban mosaics	Athletes and sport organizations, wide range of recreation-oriented individuals, visitors
Regulating services		
Air quality regulations	Forests, wetlands, meadows agricultural ecosystems	All inhabitants
Climate regulations	Forests, wetlands, meadows agricultural ecosystems	All inhabitants
Erosion regulation	Forests, wind-breaking tree lines (within the agricultural ecosystems)	Private land owners and agricultural companies
Flood prevention	Wetlands (floodplains)	Water management companies, all sectors placed in the settlements potentially exposed to flood
Water purification	Wetlands (floodplains)	All inhabitants
Supporting services (selection)		
Habitats for biodiversity	All ecosystems	All inhabitants
Ground for scientific research	All ecosystems	Scientific organization and other academic communities

12.2 Specify whether indicators of ecosystem services are used to evaluate the three functions (conservation, development and logistic) of biosphere reserves. If yes, which ones and give details.

Following indicators of ecosystem services are used to evaluate the three functions of biosphere reserves:

Ecosystem service	Indicator of ecosystem service	Evaluation of BR function
Provisioning services		
Food production (crop and vegetable products, domestic animals, fish from fish farms, game animals, wild edible animals, plants and mushrooms)	Agricultural surface size; fishpond size; annual production of fish in fish farms (in tons), fish harvest from natural wetlands (in tomes), meadow size; number of game animals hunted; quantity of bee honey products	Development
Water supply	Quantity of water used in particular sectors (in m^3)	Development
Timber	Quantity of water used in particular sectors (in m^3)	Development
Reeds	Quantity of harvested reeds (in m^3); size of habitats where reed harvest is taking place	Development
Medicinal plants (herbs)	List of medicinal plants produced/allowed to be collected; Quantity of harvested plants (in kg)	Development
Plants serving as pollen and nectar sources (bee-keeping)	Number of bee-hives per year; production of bee products per year	Development, logistics
Genetic resources (local races and breeds of domestic animals)	List of domestic breeds; number of animals per species	Logistics
Cultural services		
Cultural diversity and cultural and heritage values	List of local festivals/events/celebrations; number of visitors at events	Logistics
Spiritual and religious values	List of religious events/attractions/festivities/pilgrimage sites; number of visitors per year	Logistics
Eco-tourism	List of tourist offer; number of visitors per year	Logistics
Sport and recreation	Number of athletes/organizations/recreation enthusiasts using the area per year; list of sport facilities/recreation sites/weekend settlements	Development, logistics
Regulating services		
Air quality regulations	Forests, wetlands, meadows agricultural ecosystems	Conservation, development, logistics
Climate regulations	Forests, wetlands, meadows agricultural ecosystems	Conservation, development, logistics
Erosion regulation	Forests, wind-breaking tree lines (within agricultural ecosystems)	Conservation, development, logistics
Flood prevention	Wetlands (floodplains)	Conservation, development
Water purification	Wetlands (floodplains)	Conservation, development
Supporting services (selection)		
Habitats for biodiversity	All ecosystems	Conservation
Ground for scientific research	All ecosystems	Development/logistics

12.3 Describe biodiversity involved in the provision of ecosystems services in the biosphere reserve (e.g. species or groups of species involved).

Biodiversity involved in the provision of ecosystems services is presented in table below:

Ecosystem service	Biodiversity groups	The most important species
Provisioning services		
Food production (crop and vegetable products, domestic animals, fish from fish farms, game animals, wild edible animals, plants and mushrooms)	Field crops Vegetable crops Domestic animals Edible fish Large game mammals Game birds Edible molluscs and amphibians Edible vascular plants (non-medicinal) Edible mushrooms	*Zea mays, Triticum cereale, Helianthus anuus, Betula vulgaris, Glicine hyspida, Medicago sativa, Solanum tuberosum, Vicia faba, Solanum lycopersicum, Capsicum annunum, Allium cepa, Daucus carotta, Brassica oleracea, Sus domestica, Bos primigenius, Ovis aries, Gallus domestica, Cyprinus carpio, Silurus glanis, Esox lucius, Stizostedion lucioperca, Cervus elaphus, Sus scrofa, Capreolus capreolus, anas platyrhynchos, Lepus europaeus, Helix pomatia, Rana lessonae, Urtica dioica, Sambucus nigra, Boletus edulis, Canthalerrus cimbalius, Agaricus campestris, Langermania gigantea*
Timber	Wood trees, trees in plantations	*Quercus robur, Quercus cerris, Fraxinus angustifolia, Populus alba, Salix alba, Robinia pseudoacacica, Populus x euramericana*
Reeds	Reeds	*Phragmites australis*
Medicinal plants (herbs)	Vascular plants	*Matricharia chamomilla, Mentha sp, Achillea millefolium*
Plants serving as pollen and nectar sources (bee-keeping)	Vascular plants	*Helianthus anuus, Robinia pseudoacacia, Stachys annua, Salix cinerea, Salix purpurea*
Genetic resources (local races and breeds of domestic animals)	Domestic animals	*Ovis aries* (Sombor Cigaja Sheep) *Anser domesticus* (Sombor Danube Goose) *Gallus domesticus* (Sombor Crested Chicken) *Columba domestica* (Sombor Blue Hearth Highflyer) *Allium cepa* (Kupusina Onion)

Cultural services		
Cultural diversity and cultural and heritage values	n/a	n/a
Spiritual and religious values	Some trees and bushes	*Quercus pedunculata, Quercus cerris, Salix alba, Salix cinerea, Salix purpurea*
Eco-tourism	Flagship, rare and endangered animals	*Haliaeetus albicilla, Ciconia nigra, Aythya nyroca, Emys orbicularis, Platalea leucorodia, Grus grus, Lutra lutra, Felix silvestris, Cervus elaphus*
Sport and recreation	n/a	n/a
Regulating services		
Air quality regulations	All vegetation in vegetation cycle	All vegetation in vegetation cycle
Climate regulations	Forest trees, wetland plants	*Quercus robur, Quercus cerris, Salix alba, Salix purpurea, Salix cinerea, Populus alba, Populus x euramericana, Fraxinus angustifolia, Phragmites australis, Typha latifolia, Typha angustifolia, Carex sp., Trapa natans*
Erosion regulation	Forest species of gallery woods	*Salix alba*
Flood prevention	n/a	n/a
Water purification	Wetlands vascular plants	*Ceratophylum emersum, Ceratophylum submersum, Myriophlyum spicatum, Nymphaea alba, Phragmites australis, Typha sp.*
Supporting services (selection)		
Habitats for biodiversity	All ecosystems	Species of national and international conservation importance
Ground for scientific research and monitoring	All ecosystems	Species of national and international conservation importance, indicator species

12.4 Specify whether any ecosystem services assessment has been done for the proposed biosphere reserve. If yes, is this assessment used to develop the management plan?

No ecosystem services assessment has been done in the area of the proposed Biosphere Reserve.

13. MAIN OBJECTIVES FOR THE BIOSPHERE RESERVE'S DESIGNATION:

13.1 Describe the main objectives of the proposed biosphere reserve, integrating the three functions (conservation, development and logistic), presented below (sections 14 to 16), including components of biological and cultural diversity. Please specify the indirect pressures and/or organizational issues.

The main objectives for the designation of Bačko Podunavlje Biosphere Reserve in Serbia are as follows:

- To give an additional and crucial contribution to the safeguarding of the biological diversity which is currently still under a range of pressures and to clearer recognition of the fundamental value of nature.
- To develop a demonstration area and learning site with the aim of maintaining and developing ecological and cultural diversity, and securing ecosystem services for local communities and for the well-being of the human population in the broader area.
- To take a step further towards the development and integration of local knowledge on nature (in particular on nature management), including science (in particular: natural, economic and social sciences), to advance the understanding of interactions between people and the rest of nature in the floodplain areas.
- To contribute to the World Network of Biosphere Reserves as a coherent part of the future pentalateral UNESCO Biosphere Reserves, as a representative, complex ecological system along the Mura, Drava and Danube Rivers.
- To provide a favourable platform for improvement of the connections between the local populations within the Biosphere Reserve, and the promotion of the Danube as the common heritage for all 26 settlements and all five city/municipal communities in the Biosphere Reserve, regardless of their differences.
- To create the possibility for introducing innovations into the system of management of nature through a collegial, professional, dedicated and well-directed joint approach of a range of individuals and groups from the scientific, development and local communities.
- To diversify and give new strength to Serbian UNESCO Biosphere Reserves (the only existing reserve until this nomination was Golija-Studenica, situated in a mountainous environment, with completely different roles and functions).
- To initiate and assist dialogue between the ranges of stakeholders dedicated to harmonized co-existence and the development of nature and culture and to bridge distant and often conflicting environmental, economic and social interests.



Figure 3: European Otter (Lutra lutra). By: Boris Erg

13.2 Describe the sustainable development objectives of the biosphere reserve.
(If appropriate, please refer to Agenda 21, Rio+20 and SDG post 2015).

Referring to the Section II of the Agenda 21 (Chapters 9–22), the proposed Biosphere Reserve should contribute to the sustainable development objectives as follows:

- Managing fragile ecosystems: promoting sustainable agriculture and rural development (Chapter 14)

The Biosphere Reserve is a rural area, comprising almost exclusively rural communities and with the majority of inhabitants working in the typical agricultural sector. A range of agricultural practices and traditional practices, as well as the way of rural life and agriculture with strong connections to natural values are preconditions for this designation to become successful. Many sites in the proposed Biosphere Reserve can act as representative learning and demonstration sites, and the local knowledge is expected to be inspirational for other similar areas in the region. This nomination should help to promote sustainability principles.

- Conservation of biological diversity (Chapter 15)

The proposed Biosphere Reserve area is already known as immensely important for biological diversity, in particular the habitats, ecosystems and sites which are related to the system of the river floodplains. Conservation measures and management techniques which will be promoted and introduced will have a better chance to be successfully implemented. It is expected that it will result in the increase of populations of key wild species, in particular of species that serve as indicators of the status of the area. This role is particularly important taking into account size and the site of core and buffer zones of thefuture transboundary Biosphere Reserve..

- Environmentally sound management of biotechnology (Chapter 16)

The Biosphere Reserve will be managed in a way to introduce the conditions for strengthening all the functions of the area, giving priority to species conservation. This implies that the specific management of selected species (White Stork, White-tailed Eagle, Saker Falcon) will contribute to

increasing the ecological value of the area and will create experience that can be transposed to other sites. The unique management techniques will be introduced whenever possible.

The Post-2015 Development Agenda refers to a process led by the United Nations that aims to help define the future global development framework that will succeed the UN Millennium Development Goals, a set of eight global development targets which come to an end in 2015. On 30 May 2013, the High Level Panel on the Post-2015 Development Agenda released "A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development". In the report, the Panel calls for the new post-2015 goals to drive five major transformative shifts. The most relevant here are:

Put Sustainable Development at the Core. The Biosphere Reserve, its designation and sound functioning, will to a great extent serve as a tool for supporting this international initiative. Integration of its three functions, not neglecting a single one of them, is planned to save species from extinction and improve the ecological framework of their existence, to increase the number of employees (especially form the communities living within it) and be a frame for the further investigation of how rich nature can exist in modern times in a relatively developed region in the heart of Europe.

Transform Economies for Jobs and Inclusive Growth. Economical practices that will not degrade nature, but rather will be based on the existing attractiveness of the area (which comes from the combination of nature and human presence) will be favoured in the area and empowered by the designation of the Biosphere Reserve. Even more, the transfer of knowledge within the planned pentalateral UNESCO Biosphere Reserve will be a motor for the promotion of an "alternative" economy.

Build Peace and Effective, Open and Accountable Institutions for all. Establishment of a Biosphere Reserve in the area where an armed conflict ended as late as just 20 years ago will show that nature admits no borders and how people want "their" nature, "their" Danube to be a medium for connecting people, regardless of their differences. This process has been initiated by the local population from the communities themselves (e.g. Trilateral Meetings in Bezdan each year with participants from Serbia, Croatia and Hungary). This designation will support them and be a frame for their clearer presentation.

13.3 Indicate the main stakeholders involved in the management of the biosphere reserve.

The main stakeholders involved in the preparation of this nomination, and for whom it is planned to be included in the management of the biosphere reserves are:

- Ministry of Agriculture and Environmental Protection;
- Provincial Secretariat for Urban Planning, Construction and Environmental Protection (provincial conservation authority);
- Institute for Nature Conservation of Vojvodina Province (provincial nature protection agency);

- Vode Vojvodine Public Enterprise for water management (provincial water management company);
- Vojvodinašume Public Enterprise (provincial forestry company), also the site manager of Gornje Podunavlje Special Nature Reserve and Junaković Forest Nature Park;
- City Administration of the City of Sombor (also responsible for public enterprises established in the City of Sombor and Local Communities in City of Sombor which are in the proposed Biosphere Reserve);
- Municipal Administration of the Municipality of Apatin (also responsible for public enterprises established in the Municipality of Apatin and Local Communities in the Municipality of Apatin which are in the proposed Biosphere Reserve;
- Municipal Administration of the Municipality of Odžaci (also responsible for public enterprises established in the Municipality of Odžaci and Local Communities in the Municipality of Odžaci which are in the proposed Biosphere Reserve);
- Municipal Administration of the Municipality of Bač (also responsible for public enterprises established in the Municipality of Bač and Local Communities in the Municipality of Bač which are in the proposed Biosphere Reserve);
- Municipal Administration of the Municipality of Bačka Palanka (also responsible for public enterprises established in the Municipality of Bačka Palanka and Local Communities in the Municipality of Bačka Palanka which are in the proposed Biosphere Reserve);
- Morović Military Institution (also the site manager for Karađorđevo Special Nature Reserve);
- Tikvara Sport and Recreational Centre (site manager for Tikvara Nature Park);
- Civil society organizations in the proposed Biosphere Reserve in the areas of environment, social engagement, tourism and rural development;
- International civil society organizations, in particular Worldwide Fund For Nature (WWF);
- Faculty of Sciences and Faculty of Agricultures of the University of Novi Sad.

13.4 What consultation procedure was used for designing the biosphere reserve?

Prior to the proposal of the area and internal zonation of the biosphere reserve, 10 major consultation meetings/educational workshops were held for local actors: representatives of local communities, major users of natural resources, civil society, managers of protected areas and municipality leaders. These meetings were a follow-up to the first initiative of WWF Danube-Carpathian Programme to prepare a nomination for the MAB Programme. The initial nomination dossier of Apatin Monostor wetlands (this name was used at that time) was submitted to MAB Programme in 2001. After examination, the Bureau of the MAB International Co-ordinating Council sent the following comments to the Yugoslav Commission for UNESCO (Ref.: SC/ECO/JR/5864/536):

Apatin Monostor, Yugoslavia
The Bureau noted that this site concerned a recently created Special Nature Reserve with a multitude of small core areas and dispersed buffer zones located along the Danube River, at the borders with Croatia and Hungary. The Bureau recommended that a decision on this proposal be deferred and recommended that the Yugoslav authorities:
- consider expanding the site to the East to include more villages and towns, and in particular to extend the core areas representing ecosystems of the Danube valley;
- encourage transboundary co-operation in view of creating a biosphere reserve across the Danube River in this region;

- develop a management plan and a science plan;
- encourage increased involvement of local communities in order to secure their support for the site as a biosphere reserve.

All recommendations from MAB Programme are highly appreciated, considered and included in this nomination dossier for Bačko Podunavlje Biosphere Reserve.

The first meeting, the workshop entitled "Gornje Podunavlje as part of the Mura-Drava-Danube Biosphere Reserve" was held in Bački Monoštor on 26 July 2011. In total 37 participants had a chance to hear and discuss the plans for the nomination of the Pentalateral Mura-Drava-Danube Biosphere Reserve, as well as the provisions of the internal zonation. The lecturers were from the Institute for Nature Conservation of Vojvodina Province (Dr. Biljana Panjković, director, and Marko Tucakov, coordinator of the nomination process), WWF Danube-Carpathian Programme (Duška Dimović, head of the programme in Serbia) and Christian Diry (Wienerwald Biosphere Park, Austria). This workshop was intended for stakeholders from the northern part of the future Biosphere Reserve (City of Sombor, Municipality of Apatin). The event received good coverage in the local and regional media. The transfer of experience of the Austrian Biosphere Reserve was very valuable.

The second meeting was held in the premises of the Institute for Nature Conservation of Vojvodina Province on 3 July 2013 and was prepared for city mayors/municipality heads (or other representatives of local authorities responsible for environmental and local development issues) from the five cities/municipalities where the Biosphere Reserve is proposed. Representatives of the City of Sombor and Municipalities of Apatin, Odžaci, Bačka Palanka and Bač (head of the Municipality of Bač) participated on the meeting and discussed the functions and roles of biosphere reserves, as well as possible benefits for the local communities in these five areas.

The third meeting, a workshop entitled "The Danube Area in Bačka as part of Mura-Drava-Danube Transboundary Biosphere Reserve" was held at Odžaci on 17 July 2012 for stakeholders from the Municipalities of Odžaci, Bačka Palanka and Bač. Almost 50 participants took part in the workshop, discussing for the first time the proposed boundaries and zonation of the Biosphere Reserve, with speakers from WWF and the Institute for Nature Conservation of Vojvodina Province.

The fourth meeting of WWF and the Institute for Nature Conservation of Vojvodina Province with the top management of Vojvodinašume Public Enterprise was held on 28 May 2013. This company manages all the forests in the Biosphere Reserve (except the forests in the Karađorđevo Special Nature Reserve), and is a manager of two protected areas in it. The meeting was organized after this company was informed about the proposed boundaries and internal zonation of the Biosphere Reserve, as well as the proposed means of its functioning (official letter from the Institute for Nature Conservation of Vojvodina Province was sent on 6 April 2012). The main discussion concerned the internal zonation, boundaries of core and buffer zones and provisions regarded to these zones.

The fifth meeting was organized at the Institute for Nature Conservation of Vojvodina Province on 28 May 2013 with the representatives of Serbian Armed Forces, the Ministry of Defence of the Republic of Serbia and the Morović Military Institution, which is also the conservation manager and land owner in Karađorđevo Special Nature Reserve, after these institutions have received and

considered the official information on the Biosphere Reserve nomination from the Institute for Nature Conservation of Vojvodina Province. The main topic of the discussion was further management of forests and game animals in the Karađorđevo Reserve, as well as the Hrastik Residential Complex, also managed by the Serbian military authorities. The meeting was concluded with the approval of support of this institution to the nomination process.

The sixth meeting was organized with Dr. Živorad Smiljanić, Head of the Municipality of Apatin on 10 June 2013, after the municipality administration in Apatin received and considered the official information on the nomination from the Institute for Nature Conservation of Vojvodina Province. Issues of management of natural resources in the proposed buffer zone (the land under municipality ownership) were topics of discussion. The meeting was concluded with the approval of the support of this municipality to the nomination process.

The seventh meeting was organized with Mr. Nemanja Delić, Mayor of the City of Sombor on 25 May 2013, after the city administration in Sombor received and considered the official information on the nomination from the Institute for Nature Conservation of Vojvodina Province. Other meeting attendees included managers of the Urbanizam Sombor Public Enterprise for spatial planning and the Office for Local Economic Development. The main issues discussed were provisions for the resource use and economic activities in buffer and transitional areas. The meeting was concluded with the approval of the support of this municipality to the nomination process.

The eight meeting was organized with Ms. Izabela Šerić, Head of the Municipality of Odžaci on 3 July 2013, after the municipality administration in Odžaci received and considered the official information on the nomination from the Institute for Nature Conservation of Vojvodina Province. Representatives of the Municipality of Odžaci had no major complaints and concerns regarding the nomination. The meeting was concluded with the approval of the support of this municipality to the nomination process.

The ninth meeting was held at the premises of the City of Sombor in Sombor on 23 July 2013 and was prepared for the city majors/municipality heads (or other representatives of local authorities responsible for environmental and local development issues) from the five cities/municipalities where the Biosphere Reserve is proposed. Participants at the meeting discussed the role and structure of the future Biosphere Reserve Forums, as the proposed management coordination body of this Biosphere Reserve.

The tenth meeting was held at the premises of the Vode Vojvodine Public Enterprise in Novi Sad on 9 August 2013. The representatives of the Institute for Nature Conservation of Vojvodina Province met the top management of this water management enterprise, which is responsible for the overall water management issues in the entire nominated Biosphere Reserve (a separate meeting was held on 5 August with Mr. Vladislav Milošev, head of the Zapadna Bačka public water management enterprise, who is locally responsible for water management in the City of Sombor and Municipality of Apatin). The outcome was positive; the boundaries and internal zonation were both accepted.

13.5 How will stakeholder involvement in implementing and managing the biosphere reserve be fostered?

Stakeholder involvement will be most directly fostered through their inclusion in the work of the Council of Stakeholders and direct participation in the whole set of issues relevant to the every-day management of the Biosphere Reserve.

13.6 What are the expected main sources of resources (financial, material and human) to implement the objectives of the biosphere reserve and projects within it?
(Please provide formal commitments and engagements.)

Sources of financing of the Biosphere Reserve will remain as they are in the cases of protected areas, scientific research within it and in the case of the projects of civil society organizations.

Financing system for protected areas is a topic regulated under Article 69 of the Act on Nature Conservation, which states that the financing of protected areas is provided from the funds of:

- State Budget of the Republic of Serbia;
- Environmental Protection Fund;
- fees for the commercial use of the protected area;
- income generated in conducting the management of the protected area;
- budgets provided for the implementation of programmes, plans and projects related to nature conservation;
- donations, gifts and assistance.

However, significant contributions are also expected from the Government of the Autonomous Province of Vojvodina, as the Biosphere Reserve is situated within it.

Financing systems for civil society organizations include a wide variety of options, commonly managed, promoted and assisted by the Office for the Cooperation with the Civil Sector of the Government of Serbia.

The financing system for scientific research also includes wide variety of options, commonly managed, promoted and assisted by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

The financial system for the operation of the Council of Stakeholders will in particular be based on international donations, which will be a result of intensive project work. Support from municipalities, Vojvodina Province and the Government of the Republic of Serbia are also expected.

14. CONSERVATION FUNCTION:

14.1. At the level of landscapes and ecosystems (including soils, water and climate):

14.1.1 Describe and give the location of ecosystems and/or land cover types of the biosphere reserve.

In total, 15 land cover types are recognized in the Biosphere Reserve (according to the CORINE land cover classification: http://www.eea.europa.eu/publications/COR0-landcover):

1. Discontinuous urban fabric
2. Industrial or commercial units
3. Inland marshes
4. Non-irrigated arable land
5. Pastures
6. Land principally occupied by agriculture with significant areas of natural vegetation
7. Transitional woodland-scrub
8. Natural grasslands
9. Complex cultivation patterns
10. Sport and leisure facilities
11. Vineyards
12. Fruit trees and berry plantations
13. Water bodies
14. Water courses
15. Broad-leaved forests

A map of habitats is enclosed in the supporting documents (see 19.2.).

14.1.2 Describe the state and trends of the ecosystems and/or land cover types described above and the natural and human drivers of the trends.

The identified land cover (can be considered as habitats) is described using the official CORINE classification, as follows:

1. Discontinuous urban fabric

Most of the land is covered by artificial structures. Buildings, roads and artificially surfaced areas are associated with vegetated areas and bare soils, which occupy discontinuous but significant surfaces.
State: mostly settlements, both urban and rural. Driven by formed and existing architectural practices, as well as the main economic branches.
Trend: the total surface area is considered to be stable.

2. Industrial or commercial units

Artificially surfaced areas (cement, asphalt, or stabilized e.g. beaten earth) without vegetation occupy most of the area, which also contains buildings and/or vegetation.
State: clustered around the settlements, often in industrial zones. Decreased in productivity and function in the period 1990-2000. Slow recovery since then. Source of pollution, however not significant.
Trend: very slow increase in occupied land, tendency towards forming of new industrial zones in state owned land (often on natural habitats).

3. Inland wetlands

Low-lying land usually flooded in winter and more or less saturated by water year round.
State: influenced by climatic conditions and by the hydrological regime of rivers. Very rich in biodiversity, many are strictly protected, almost all are in the core zone.
Trend: worsening of ecological conditions (drying out and prone to natural succession).

4. Non-irrigated arable land

Cereals, legumes, fodder crops, root crops and fallow land. Includes flowers, trees (nursery cultivation) and vegetables, whether open field or under plastic or glass (includes market gardening). Also includes aromatic, medicinal and culinary plants. Does not include permanent pasture.
State: main land cover includes extensive monocultures of main crops for commercial agriculture. Relatively poor in biodiversity. Parcels from very small to very large, clustering process was completed in the 1980s. One of the most profitable land structures at the moment.
Trend: surface increasing, production of agricultural goods depending on the climate. Abandoned parcels in the process of restoration and functionalization.

5. Pastures

Dense grass cover of floral composition, dominated by Graminaceae, not under a rotation system. Mainly for grazing, but the fodder may be harvested mechanically. Includes areas with hedges (bocage).
State: fragmented, but locally extremely important for biodiversity. Dominated by soil types with a high proportion of minerals: solonchak, solonyets and solody.
Trend: sharp decrease in size due to uncontrolled ploughing.

6. Land principally occupied by agriculture with significant areas of natural vegetation

Areas principally occupied by agriculture, interspersed with significant natural areas.
State: relatively large areas with hedges and small forests, but sensitive to illegal logging. Very important for biodiversity.
Trend: unknown.

7. Transitional woodland-scrub

Bushy or herbaceous vegetation with scattered trees. Can represent either woodland degradation or forest regeneration / colonization stages.
State: includes the areas of bush within the forest and forest clearings, as well as structures at the forest edges which are ecologically unstable. Usually quickly replaced by other land cover, such as forest or agriculture. Berry bushes important for wildlife. Includes stands of invasive bushes.
Trend: in some sites spreading to abandoned agricultural land, in others removed as aggressive and invasive vegetation.

8. Natural grasslands

Low productivity grassland. Often situated in areas of rough, uneven ground. Frequently includes rocky areas, briars and heathland.
State: in reality this category is present at the fish farms.
Trend: fish farms with semi-extensive production are of increasing importance for wildlife, especially water birds.

9. Complex cultivation patterns

Juxtaposition of small parcels of diverse annual crops, pasture and/or permanent crops.
State: depending on the particular production scheme. Small areas, on the periphery of settlements, locally important for synanthropic species (mainly mammals and birds). Includes *salaši* agricultural farms and their clusters.
Trend: stable in size, *salaši* farms are very important for the development of the Biosphere Reserve.

10. Sport and leisure facilities

Camping grounds, sport grounds, leisure parks, golf courses, race courses, etc. Includes formal parks not surrounded by urban areas.
State: usually built-up sport fields with no significance for biodiversity but important for the identity and development of the region.
Trend: no clear trend.

11. Vineyards

Areas planted with grapevines.
State: small areas, level of production from once extensive turned toward more intensive.
Trend: low importance for biodiversity and for the Biosphere Reserve.

12. Fruit trees and berry plantations

Parcels planted with fruit trees or shrubs: single or mixed fruit species, fruit trees associated with permanently grassed surfaces. Includes chestnut and walnut groves.
State: small areas, level of production from once extensive turned toward more intensive.
Trend: low importance for biodiversity and for the biosphere reserve.

13. Water bodies

Natural or artificial stretches of water.
State: very important for biodiversity but dependent upon the water regime and climate.
Trend: stable size, importance is increasing as the number of hydrological wet years increases.

14. Water courses

Natural or artificial water courses serving as water drainage channels. Includes canals. Minimum width for inclusion: 100 m.
Status: stable in size, used for many purposes, important for landscape quality and biodiversity, but also pose a threat to the stability of wetlands.
Trend: importance increases.

15. Broad-leaved forests

Vegetation formation composed principally of trees, including shrub and bush understory, broad-leaved species predominate.
State: in general unfavourable for the reason of inadequate management and vulnerability to climate changes. However, extremely important for all functions of the Biosphere Reserve and one of key habitat types.
Trend: decreasing coverage of old stands, spreading of plantations of fast growing trees.

14.1.3 What kind of protection regimes (including customary and traditional) exist for the core area(s) and the buffer zone(s)?

The core areas and buffer areas are officially protected by four already existing protected areas: Gornje Podunavlje and Karađorđevo Special Nature Reserves, Tikvara Nature Park and Junaković Forest Natural Monument, and as part of the National Ecological Network.

Some sites (such as fish farms) are protected from intruders and fish-stealers by protection systems than include patrols and ditches around them. Regions on the immediate borders and secondary areas are conserved as a result of the work of the Border Police.

Sites of cultural importance are conserved upon the establishment of cultural monuments.

14.1.4 Which indicators or data are used to assess the efficiency of the actions/strategy used?

Permanent monitoring of the status and trends of ecosystems is planned and will include the following indicators of their status:

1. Size of habitats/ecosystems;
2. Floristic and socio-botanic characteristics;
3. Human interventions;
4. State of wildlife populations.

14.2 At the level of species and ecosystem diversity:

14.2.1 Identify main groups of species or species of particular interest for the conservation objectives, especially those that are endemic to this biosphere reserve, and provide a brief description of the communities in which they occur.

Vascular plants. A unique mosaic of wetlands, marshes and terrestrial habitats in the proposed Biosphere Reserve is an important centre of vascular plant diversity. A large number of species of national and international importance, and sensitive habitats representing an international priority for

conservation are found here. The most important wetland plants are: Yellow Wort *Blackstonia acuminata*, Black Fruited Hawthorn *Crataegus nigra*, Early Marsh Orchid *Dactylorhiza incarnata* subsp. *incarnata*, Marsh Helleborine *Epipactis palustris*, Mare's-tail *Hippuris vulgaris*, Water Violet *Hottonia palustris*, Water Mudwort *Limosella aquatica*, Loose Flowered Orchid *Orchis laxiflora* subsp. *palustris*, Lady Orchid *Orchis purpurea*, Grater Spearwort *Ranunculus lingua*, Marsh Fern *Thelypteris palustris*, Kiev Nettle *Urtica kioviensis*, Fen Violet *Viola persicifolia*. Salt steppes and salt marshes are habitat for many specialized Pannonic halophytic species, in particular Pannonian endemics: *Aster tripolium* subsp. *pannonicus*, *Cirsium brachycephalum*, *Lepidium cartilagineum* subsp. *crassifolium*, *Limonium gmelinii* subsp. *hungaricum*, *Plantago schwarzenbergiana*. There are two Pannonian endemic species: *Cirsium brachycephalum* and Sadler's Centaurea *Centaurea sadleriana*, as well as Pannonian sub-endemics: Black Hawthorn *Crataegus nigra* (following the Danube in its distribution) and Alkali Grass *Puccinelia limosa* (typical halophytic plant). An important Pannonian floristic element is also *Doronicum hungaricum*. Pontic floral elements are: Camphor Grass *Camphorosma annua* and Yellow Pheasant's Eye *Adonis vernalis* (typical steppe continental species). Sub-Atlantic floral elements are Lady Orchid *Orchis purpurea* and Loose-Flowered Orchid *Orchis laxiflora*, as well as Badgeworth Buttercup *Rannunculus ophioglossifolius* (the only conserved habitat of this species is in the Štrbac area of the Gornje Podunavlje Reserve). Sub-Mediterranean floral elements include *Iris spuria*. Several species which are central European and European floral elements are threatened: White Water Lily *Nymphaea alba*, Yellow Water-lily *Nuphar luteum*, Early Marsh Orchid *Dactylorhiza incarnata* and Winter Aconite *Eranthis hyemalis*. Plant diversity comprises approximately 1000 species, with 80 important taxa at the species (74) and subspecies (6) levels.

Fish. In total, 57 fish species are registered, including the regularly present Sterlet *Acipenser ruthenus* (IUCN Red List: VU) and European Mudminnow *Umbra krameri* (IUCN Red List: VU), which has its national stronghold here. Of outstanding importance are the floodplains (inundation areas) which are serving as good spawning sites.

Amphibians. In total, 11 species are recorded, including the Danube endemic Danube Crested Newt *Triturus dobrogicus* (IUCN Red List: NT) which inhabits stagnant water, canals and marshes.

Reptiles. In total, 9 species are recorded. The area includes very strong populations of the European Pond Turtle *Emys orbicularis* (IUCN Red List: NT), inhabiting disconnected backwaters and shallow ponds with rich vegetation and open mirrors.

Birds. Having in mind the size of the proposed Biosphere reserve, complexity of habitats and existence of four protected and two important bird areas (IBAs Gornje Podunavlje and Karađorđevo), the Biosphere Reserve is one of the key sites for the conservation of bird fauna at the national level. It supports strong populations of indicators of quality of alluvial habitats at the regional and international level. It is estimated that this area hosts approx. 270 bird species, of which 160 are breeders. Species of international importance are the colonial waterbirds. The area hosts 7 large colonies of: Great Egret *Casmerodius albus*, Night Heron *Nycticorax nycticorax*, Little Egret *Egretta garzetta*, Purple Heron *Ardea purpurea* and Squaco Heron *Ardeola ralloides*. White Stork *Ciconia ciconia* (population exceeds 100 pairs), Black Stork *Ciconia nigra* (breeding pairs: 30-40, on migration per day: 300-600), White-tailed Eagle *Haliaeetus albicilla* (breeding pairs: 35-40, wintering: 150-200) and Black Kite *Milvus migrans* (breeding pairs: 6-10) have their national

strongholds in the Biosphere Reserve and all are good indicators of the status of undisturbed old forest stands or forest fragments (breeding sites) and dynamic waters rich in aquatic animals (feeding sites). Ferruginous Duck *Aythya nyroca* (IUCN Red List: NT) breeds almost exclusively on fish farms rich in aquatic vegetation, while important breeding sites of Redshank *Tringa totanus* are found on the flooded alkaline meadows.

Mammals. In the Biosphere Reserve, 60 species of mammals are recorded, which is 62 % of the mammal fauna of Serbia. Species of particular importance are Bechstein's Bat *Myotis bechsteinii (*IUCN Red List: NT), Barbastelle *Barbastella barbastellus* (IUCN Red List: NT) and Otter *Lutra lutra* (IUCN Red List: NT).

The lists of species are enclosed in the supporting documents (see 19.5.)



Figure 4: Various birds on the Danube floodplains. By: Szilard Kovacs

14.2.2 What are the pressures on key species? In other words: what are the threats (example unsustainable management of forest), their immediate causes (drivers of change like forest change or habitat change), their underlying causes (example overgrazing, fire, pollution), and the main driving forces (example: economic, political, social, external, etc.) and the area(s) concerned?

The following pressures and threats to key species are registered in the proposed Biosphere Reserve:

Melioration and inadequate management of the canal network, as well as the infrastructure for flood control. The area outside the current inundation zone is intersected by a network of melioration canals, which primarily serve to direct water into the recipients and prevent possible damages of high groundwater levels to agricultural production. This issue emerged particularly after the construction of the main flood control embankment along the Danube (early 1960's) and after the

melioration network became fully functional (in 1977). Since then, the regime of appearance of groundwater, its occurrence outside in the flood protected zones and the quality of habitats for plants and animals has been completely altered. Large areas (once regularly flooded) are progressively drying, which influences species that are ecological specialists and which results in the decrease of populations, local extinctions and intrusion of generalist species.

The spread of invasive species and intrusion of aggressive (autochthonous) species into open areas. The altered hydrological regime (described above), lack of grazing and mowing, as well as naturally occurring fires damage the fragments of open habitats, especially sensitive meadows and shallow water bodies. The consequence of this is loss of favourable habitats for specialist species, and even economic losses in the forests. Some invasive species, like Tree of Heaven *Ailanthus alltissima*, Pennsylvanian Ash *Fraxinus pensylvanica* and Maple Ash *Acer negundo* are managed as commercial forest species.

Intentional burning of vegetation. This occurs most often in the stands of emergent vegetation: beds of reed *Phragmites australis*, reedmace *Typha* sp. and rush *Carex* sp. are burned in spring, before the vegetation season for plants and the reproduction season for animals, but in some cases up to late April. Burning of the colony sites of colonial water birds has happened several times, as has the spread of fire to forests.

Hunting and fishing. Hunting and game management, as important activities in the area, also brought with it the threat of overexploitation of game populations and intentional bird crime (illegal shooting of protected species by tourist-hunters, disturbance of migratory sites and wintering grounds of birds, use of illegal devices in hunting organized for tourist-hunters, spread of the remnants of lead ammunition in natural habitats). Hunting game management systems in fenced hunting grounds (almost the entire Gornje Podunavlje Reserve) prohibits the keeping and grazing of domestic animals inside the fences in order to prevent the spreading of zoonoses; this is the reason for the lack of grazing at these sites. Lack of proper control of nature conservation and even the abidance of hunting legislation is the main cause for this unfavourable situation.

Forest monoculture spread and management, favouring very short harvesting cycles (for poplar clones max 25 years) as well as regular interventions inside plantations (spraying with pesticides, cultivation of the land between tree lines, human presence), and clear cutting on large areas (sometimes even up to 30 ha) are among the most serious threats in Gornje Podunavlje Special Nature Reserve, where almost 60% of the protected area is under this forestry practice. Furthermore, the planting of poplar clones is also planned also on meadows and pastures, which threatens the stability of these habitats. Poplar cultivation is currently very profitable in Serbia and the cellulose industry is the main client of poplar producers.

Inadequate management of old forest stands of native species (White and Black Poplars, Common Oak, Narrow-leaved Ash), with the “sanitary” cutting of dying, broken or semi-dry trees and considering old stands of native species as commercial forests in both the Gornje Podunavlje and Karađorđevo Reserves will eventually lead to a huge decrease of natural forests and their extirpation. This system, favoured by the current forestry legislation in Serbia, may cause very negative changes in the composition of animal communities that depend exclusively on old stands.

Spontaneous tourism (uncontrolled) with the spread of zones where weekend cottages are situated (usually along the shores of water bodies) is a very serious threat caused by inadequate spatial planning. Establishing of a new sites for weekend cottages causes habitat changes around them: cutting of trees/bushes, establishing of infrastructure typical for settlements (roads, water supply, electricity), problems connected with fire use, problems with unleached domestic animals and usurpation of water bodies by recreational fishing (cutting of vegetation on banks, establishing fishing sites, fish feeding).

The illegal use of pesticides, especially carbofouran, is omnipresent especially in late winter and early spring. Intentional, but inadequate use of this poison for rodent control causes secondary death of raptors feeding on carrion (in particular White-tailed Eagles).

The loss of meadows on state-owned land is occurring as a result of the agricultural policy of renting agricultural land to private owners and establishing a system of agricultural subsidies which supporting a conversion of meadows and pastures into the arable land for crop cultivation.

14.2.3 What kind of measures and indicators are currently used, or planned to be used to assess both species groups and the pressures on them? Who undertakes this work, or will do so in the future?

The current legislation on the use of the indicators in the environment (Rulebook of the National List of Indicators of Environment; Official Gazette of the Republic of Serbia no. 37/2011), defines three indicators which would be relevant for the proposed Biosphere Reserve. This is, and will continue to be, in use also in the Biosphere Reserve according to the following methodology:

Indicator: Threatened and protected species

Definition and the description of an indicator	Indicator describes the intensity of pressures to the biodiversity. Sub-indicators: IUCN Red Book category of endangered species; conservation status according to the Bern Convention; conservation status according to the Birds Directive; conservation status according to the Habitats Directive Additional description for the proposed Biosphere Reserve would include: population size in the Biosphere Reserve; number of sites of occurrence, number of pressures.
Methodology of the calculation and data gathering	IUCN Red List; lists in the national legislation and international agreements
Measuring	Number and list of species. Percent of species in particular categories

Indicator: Species diversity

Definition and the description of an indicator	Indicator of the trend of the change in numbers of the population of a species. Changes of a population explaining a loss, and the change of the structure of land due to fragmentation and isolation, as well as the other changes in the environment that influence changes of the population structures. Sub-indicators: Trend of numbers related to habitat types; trend of changes in the most important habitat types according to the CORINE Land Cover and EUNIS classifications; time frame of the data series. Additional description for the proposed Biosphere Reserve would include: application of this indicator to the species of birds and halophytic and aquatic vascular plants
Methodology of the calculation and data gathering	Trend of a change according to the expert and administrative lists and the relevant census methodology. Use of the mentioned land use categories.
Measuring	Number of individuals per surface unit. Number of breeding pairs. Size in ha

Indicator: Dead wood

Definition and the description of an indicator	The volume of erect and lying dead wood in forests, indicating complex diversity of forest habitats, as this is an important component of the habitat for many species. Sub-indicators: volume of dead wood (erected and lying) per hectare
Methodology of the calculation and data gathering	Analysis and assessment of the number and volume of erect and lying wood in forests (minimum 2 m long and 10 cm in radius) and is expressed in cubic meters per hectare of forests and tonnes per hectare of forests in a five-year period.
Measuring	Size of forests per stand in hectares, numbers and volume of erect dead trees in cubic meters, total weight and volume of dead trees in cubic meters per hectare or tons per hectare.

At the institutional level, the Institute for Nature Conservation of Vojvodina Province, and the site managers in protected areas will continue to assess the pressures and threats to the species.

14.2.4 What actions are currently undertaken to reduce these pressures?

At the legislative level, the national nature conservation and resource use legislation, as well as the legislation on spatial planning are claimed to be aligned with the legislation of the European Union. In the case of nature conservation, the new Act on Nature Conservation was adopted in 2009, amended in 2009, 2010 and 2016, and with it all the envisaged subordinate legislation, including the Strategy of Biological Diversity of the Republic of Serbia for the Period 2011–2018 (Official Gazette of the Republic of Serbia no. 13/2011).

Habitat restoration measures have, to date, been initiated on the sites of temporary or permanent wetlands in the Gornje Podunavlje Special Nature Reserve and implemented on approx. 120 ha. This has resulted in an increase of populations of species on the restored wetlands (Garganey *Anas qerquedula*, Greylag Goose *Anser anser*, Black Stork *Ciconia nigra*, Lapwing *Vanellus vanellus*). There are ca 30 additional sites planned for habitat restoration in the forthcoming period (mainly wetlands in the Gornje Podunavlje Special Nature Reserve). Meanwhile, training opportunities for site managers have been increased to increase the capacity for the implementation of restoration work.

Legal inspection controls of the following authorities: nature conservation, hunting, forestry, agriculture and veterinary are still inadequate but have improved, particularly since public pressures to authorities in the case of obvious and detectable disobeying of the legislation.

Continuous work of protected area guards/rangers is crucial for the prevention of pressures to biodiversity. In some cases, the work of the guards of the agricultural fields also contributes to the proper alarming of authorities in the case of threats to wildlife. Having in mind the extensive areas of the proposed Biosphere Reserve along the national borders, the Serbian Border Police also plays a very important role in preventing some of the threats to wildlife as described above.

14.2.5 What actions do you intend to take to reduce these pressures?

More intensive and directed education, as well as motivation for the engagement of the civil sector to assist in alarming the authorities in the case of threats to wildlife is needed. This is of importance, in particular, in areas which are not protected and in commercially used sites important for biodiversity (e.g. fish farms).

More information signs are needed throughout the entire Biosphere Reserve outlining the codes of conduct for visitors. These are needed not only in protected areas but also in other areas and should, in terms of the Biosphere Reserves, warn of the provisions of the buffer zones.

Strong engagement of the local authorities is needed to reduce threats to species. It is also necessary to prevent the neglecting of species conservation in the local self-government structures.

Due to an increase in the number of visitors, a clear and innovative visitor management strategy is needed to reduce and prevent threats to species caused by visitors (often intentionally).

Species management plans and innovative species management actions are needed, especially in cases when it is possible to improve the living conditions of some species through technical interventions. Good examples of planned actions include: installation of breeding boxes for hole-

dwelling animals (birds, bats, rodents), installation of breeding platforms on high trees/poles as a support for the breeding of large birds (Saker Falcon, White-tailed Eagle, White Stork), re-colonization of animals to suitable habitats from which they have disappeared (i.e. Suslik), and construction of corridors in agricultural land. Species management plans are needed for the entire Biosphere Reserve.

14.3. At the level of genetic diversity:

14.3.1 Indicate species or varieties that are of importance (e.g. for conservation, medicine, food production, agro-biodiversity, cultural practices etc).

There are several varieties of domestic animals which have been created or developed in the areas of the proposed Biosphere Reserve and which are of economic importance.

There are many completely autochthonous domestic pigeons originating from Sombor, which was once considered an important centre for the breeding of hobby pigeons (mainly for pigeon racing). The most famous is the Sombor Blue-heart Flyer, created in 1928. This variety flies in large flocks at mid or high heights, making very fast circles. The maximum length of flight is 2 hours. Other breeds include: Sombor Long-billed Flyer, Stapar Flyer, Sombor Underpants Flyer and Sombor Yellow-eye Flyer.

The Sombor Crested Chicken is a breed of chicken created in Sombor in the early 20th century. It has a typical rich crest on the head and gentle shape of the body, with clear preference for free-range breeding and strong resistance to poultry diseases and the changes in weather conditions. It is used for both egg and meat production, but always in extensive yard breeding systems.

The domesticated Sombor Goose is an autochthonous breed with very modest demands, raised primarily in lowlands along the wetlands for the production of meat, eggs and down. It is very similar to the wild Greylag Goose, according to the phenotype.

The Sombor Cigaja sheep (Pannonian sheep) is one of the oldest sheep breeds, created in Asia and later brought to the Balkans. It is relatively large, solid and strong, with no antlers in females and typical black short hairs of the face. The Sombor variety is one of three varieties in Serbia, but there are no exact data as to its numbers. It serves almost exclusively for milk production.

There are several vegetable varieties that have been created in the Biosphere Reserve area. The most famous is the Kupusina onion, with high production, especially around the village Kupusina.

14.3.2 What ecological, economic or social pressures or changes may threaten these species or varieties?

As for domesticated and traditional breeds in other regions and countries, the main pressures come from intensive agriculture and breeding of newly selected and highly productive breeds. Due to very low prices of mass produced agricultural products, it is extremely difficult to find markets for

traditional agriculture products. This is especially the case in economically depressed regions and regions without a developed market for traditional or organic agricultural products.

Other threats are low stocks of certain old breeds, lack of a systematic approach for breeding programmes, depopulation of rural areas, decreasing capacities of local farmers (both educational and financial), and fast developing capacities for traditional/organic agricultural products in neighbouring countries (as competing markets).

14.3.3 What indicators, at the level of the species, are used, or will be used, to assess the evolution of population status and associated use?

The following indicators will be used to assess the status of traditional breeds and varieties in the Biosphere Reserve area:

1. Number of species/varieties bred
2. Distribution of the species/varieties in the Biosphere Reserve
3. Total number of individuals/hectares
4. Number of households raising particular species
5. List of motives of keepers of traditional breeds to continue with their activities (economic/traditional/ornamental/sport/hobby/competitions)
6. Income generated by rising of these breeds.

14.3.4 What measures will be used to conserve genetic diversity and practices associated with their conservation?

Following measures will be used for conservation of genetic diversity and related practices:

a. promotion of old breeds and their breeding methods as turistic brand of the area,

b. promotion of product of old breeds on the market, with particular emphasis to establishments a solid connection with extensive produst providers on the market (small-scale shops, open markets, festivals and celebrations countrywide),

c. establishing of transboundary connections with other countries in transnational biosphere reserve for the purpose of joint promotion of these products on market,

d. lobbying at national/regional authorities for institutional support to old breed keepers and producers,

e. establishing a cluster of old race breeders and producers within the Biosphere Reserve.

15. DEVELOPMENT FUNCTION:

15.1. Potential for fostering economic and human development which is socio-culturally and ecologically sustainable:

15.1.1 Describe how and why the area has potential to serve as a site of excellence/model region for promoting sustainable development.

The promotion of sustainability principles is of essential importance for the future economic and socio-cultural development of the proposed Biosphere Reserve. A good foundation for this is seen in the intensive project-based activities already organised and on-going by a range of groups.

At the moment, forestry is the leading economic activity in the Biosphere Reserve, along the entire Danube stretch. At the same time, it is of great importance for the status of natural values, and has to be firmly connected with the concept of sustainability. The economic rationale of modern commercial forestry is based on sustainability, as timber production and exploitation cycles are usually very long. The Vojvodinašume Public Enterprise, by far the most important forestry company in the region, holds an FSC certificate (SGS-FM/COC-005064), as of 8 August 2008. The FSC Standard contains 10 principles and 56 criteria. Two principles are of particular importance for development of the proposed Biosphere Reserve: principle 6: environmental impact (to maintain or restore the ecosystem, its biodiversity, resources and landscapes) and principle 9: maintenance of high conservation value forests (to maintain or enhance the attributes which define such forests).

The long tradition of forest use, coupled with modern research in forestry and biodiversity conservation, can create a sound environment for the development of new solutions and approaches in sustainable use of all forest values. The proposed Biosphere Reserve would provide a basis for better and easier cooperation of science/conservation and commercial sector together with local stakeholders.

On the other hand, opportunities should be given to the other activities that can promote sustainability, such as tourism. Despite the relatively large number of tourism promotion and development projects and other initiatives underway in the Biosphere Reserve, the potential for direct investments is still very high. This is based on following facts:

1. The natural values in the core zone, buffer zone and parts of the transition area are characteristic for its hydrography, micro-relief and the wildlife, which depicts the alluvial floodplain as it was before extensive regulations. In comparison with the prevailing agricultural land in the surroundings (transitional area), it is clear why these sites have outstanding importance in the tourism context. Currently, it is mainly a recreational ground for inhabitants (not only from the proposed Biosphere Reserve), and there is also good potential for the development of new tourism offers and for attracting new visitors. Natural characteristics of the rivers, floodplains and alluvial hydrography, including features of the traditional heritage, attract visitors and represent an opportunity for sustainable tourism development.
2. Biosphere reserves attract visitors for their high quality of environment, nature and cultural features. They can have positive impacts on other destinations (protected areas and

other similar destinations), and it is expected that the proposed reserve will have a multiplier effect for other Serbian regions.

3. Sustainable tourism is largely dependent on agriculture. Having in mind the immense importance of agriculture for the local inhabitants in the area, this creates a great opportunity for the development of sustainable agriculture based on agro-environmental schemes. Some local brands are produced in the Biosphere Reserve and their production is dependent on the natural values. For example, Sombor cheese is traditionally made from the milk of cows that graze on the biodiversity rich alkaline meadows in the surroundings of Sombor.

4. The local population in the villages in the proposed Biosphere Reserve have not had a clear economic benefit from the protected areas and natural values in their immediate surroundings thus far. The development of tourism, sustainable agriculture and nature conservation will create new opportunities for people faced with the challenges of economic transition. This will contribute to the improved understanding of the value of nature and increase the local pride.

5. An international concept of the Biosphere Reserve opens new possibilities in cooperation between nations and ethnic groups which have often been in conflict during history, in particularly in the area where the borders of Croatia, Hungary and Serbia meet. All three countries are inhabited by all three ethnic communities which are minorities in the remaining two countries (i.e. Croats in Serbia and Hungary, Serbs in Croatia and Hungary, Hungarians in Croatia and Serbia), and they will now have a new perspective for joint cooperation.

15.1.2 How do you assess changes and successes (which objectives and by which indicator)?

This assessment will be thoroughly defined in the Management Plan of the Biosphere Reserve. However, the set of methods for selection of sustainable development indicators will be applied according to UN guidelines (United Nations (2007): Indicators of Sustainable Development – Guidelines and Methodologies. Third Edition. United Nations, New York).

15.2. If tourism is a major activity:

15.2.1 Describe the type(s) of tourism and the touristic facilities available. Summarize the main touristic attractions in the proposed biosphere reserve and their location(s).

Despite the feeling that the Biosphere Reserve is still a destination in development, it already now offers a range of activities and contents for tourists.

Eco-tourism is based on the visits of groups and individuals interested in learning about and the study of nature, as well as for the simple enjoyment of nature. Important parts of the offer are thematic paths offering information on the natural values. In Gornje Podunavlje Special Nature Reserve there are three equipped paths: Karapandža (3 km), Bestrement (3 km) and Štrbac (2 km). The manager of this site offers the following services for visitors: boat rentals, Danube sailing for organized groups, guides, photographing rare species, 4-wheel vehicle and carriage tours. At certain location in the Gornje Podunavlje and Karađorđevo Reserves it is possible to perform floral studies, bird-watching, photo-safaris and geo-tourism.

Rural tourism has good preconditions and it is already well developed in part in the villages situated along Gornje Podunavlje: Bački Monoštor, Kupusina and Sonta. Bački Monoštor offers accommodation in registered households, while the main Kupusina feature is an ethno-house, one of the best preserved in Vojvodina. Bački Monoštor is very popular as the site of the Bodrog Festival of Food, Beverage and Crafts (10,000+ visitors per year for this one day event), while Sonta is visited during the Grožđebal Grape Festival. Small local museums of traditional life have been opened in Bezdan, Kupusina, Prigrevica, Sonta, Deronje and Bač. Deronje was the host village for the World Music Festival of Tambura (traditional string instrument of the region). Tourism in *salaši* – isolated farm-houses and their households is a kind of agro-tourism, developed particularly on farms surrounding Sombor. This is an activity that bridges agriculture and tourism, particularly through gastronomy and numerous delicious traditional national dishes. One of the most famous is Salaš of Dida Hornjak (Gradina, to the south of Sombor). There is also the Sombor Salaši Cluster, as a joint initiative that provides economic assistance for the set of such farms and promotes it as a single destination.

Nautical tourism is organized on the Danube River. The Apatin Marina has a capacity of 400 vessels and is fully equipped. Very near is a port for cruise ships. Solid perspectives for nautical tourism are present along the entire Danube stretch and in the DTD canals. The traditional nautical event Tour International Danubian regularly stops in Apatin.

Horseback riding and other horse-based activities are developed at the Karađorđevo Stud Farm founded in 1880. There is a horse-racing track and a Museum of Horse Breeding.

Sport and recreational fishing is a common activity at numerous locations in the wetlands, and is very popular in nearby settlements.

Hunting: there is a long tradition of organized hunting tourism in the area. Hunting grounds in the Gornje Podunavlje area are internationally known, especially for red deer hunting. The main providers of hunting tourism in the region are Vojvodinašume Public Enterprise and Karađorđevo Military Institution, as well as local hunting associations.

Free bathing takes place on the beaches on the Danube, on the canals and branches as well as on the fluvial lakes: Štrand (Bogojevo) Provala (Vajska) and Tikvara (Bačka Palanka).

Spa tourism has been developed since the mid 1980s at the Junaković Spa near Apatin, in the immediate vicinity of the Junaković Forest Nature Monument. Thermal mineral springs also exist in Bezdan.

Cycling tourism offers the possibility for the bicycle fans to ride along the managed cycling path along the Danube and to combine this activity with the numerous natural and cultural features in its surroundings. This type of tourism is growing fast and becoming very popular.

Cultural tourism is based on the cultural heritage of this part of Vojvodina and comprises a rich archaeological heritage (Donja Branjevina), historical heritage of Sombor, Bač, Apatin and Bačka Palanka, numerous rural mosaics and baroque sacral buildings, festivities and industrial heritage.

Tourism facilities in the Biosphere Reserve in the core zone: trails/paths in Gornje Podunavlje Special Nature Reserve.

Tourism facilities in the Biosphere Reserve in the buffer zone: educational trails/paths: Bogojevo (Toporniča canal); hunting estates and hunting lodges (Gornje Podunavlje Special Nature Reserve: Štrbac - 8 beds and two apartments and Mesarske Livade - 13 beds, as well as Kamarište - 16 beds and Plavna - 25 beds; fishing sites (a large number of sites, the most popular of them are in Gornje Podunavlje); *čarda* restaurants (with special cuisine based on the freshwater fish from the Danube - the most famous are around Bezdan, Kupusina and Apatin, often in the weekend cottage zones); bicycle routes (also in the transition area);

Tourism facilities in the Biosphere Reserve in the transition area: camps (to the north-west of Apatin there is the Budžak camp with 22 camping places); marina and port (capacity 400 vessels) in Apatin (with a restaurant, market, 8 apartments, 10 bathrooms and 140 cabins); private tourism accommodation facilities (mainly in Bački Monoštor and *salaši* farms surrounding Sombor); spa and wellness (the most important is Junaković Spa and its hotel with 270 beds, large restaurant and conference halls); hotels and restaurants in cities, museums and galleries (mostly concentrated in Sombor and Bačka Palanka).

Distribution of the tourism facilities by zones

Tourist facility	Core zone	Buffer zone	Transition area
Trails/paths	+	+	
Hunting estates and lodges		+	
Fishing sites		+	+
Restaurants		+	
Weekend cottages		+	+
Cycle routes		+	+
Camps			+
Marina and vessel port			+
Accommodation – private entrepreneurs			+
Spa and wellness			+
Hotels and restaurants in towns			+
Museums and galleries			+
Tourist info-centres			+

15.2.2 How many visitors come to the proposed biosphere reserve each year? (Distinguish between single-day visitors and overnight guests, visitors only visiting the proposed biosphere reserve or only passing on the way to another place). Is there an upward or downward trend, or a particular target?

The possibilities for the development of tourism have been analysed more thoroughly in the last decade (2000–2010). The number of visitors is shown in the figure below (for the period 2005–2010).

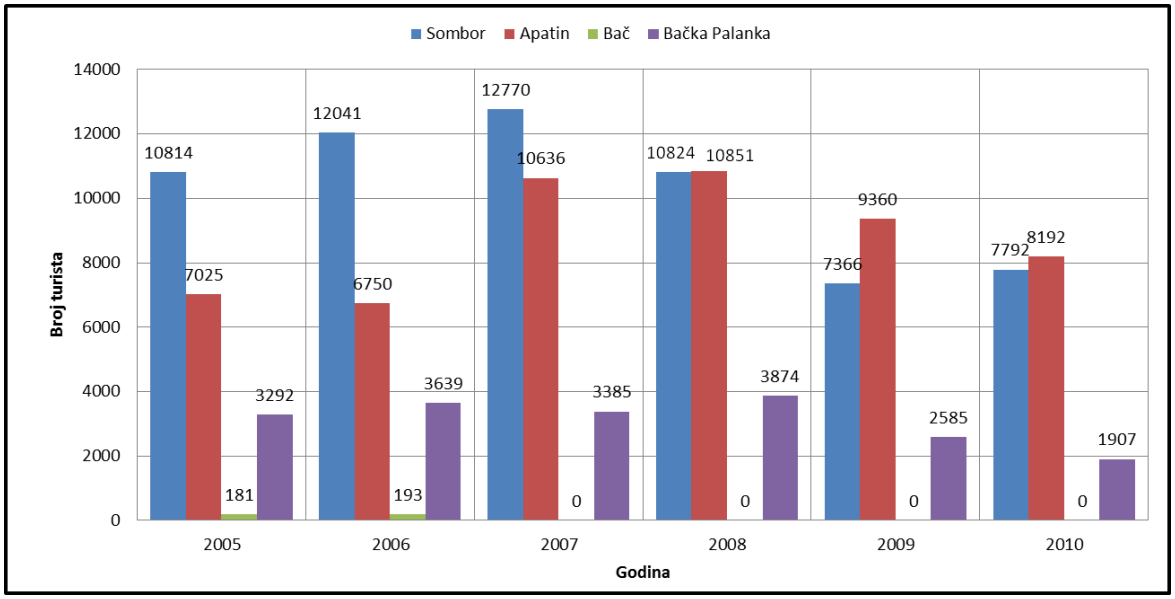


Figure 5: Number of visitors in four municipalities for the period 2005-2010.

Tourist circulation (number of tourists) and number of spent nights are fluctuating. The Municipality of Odžaci has no accommodation facilities registered. The largest tourism centres are Sombor and Apatin.

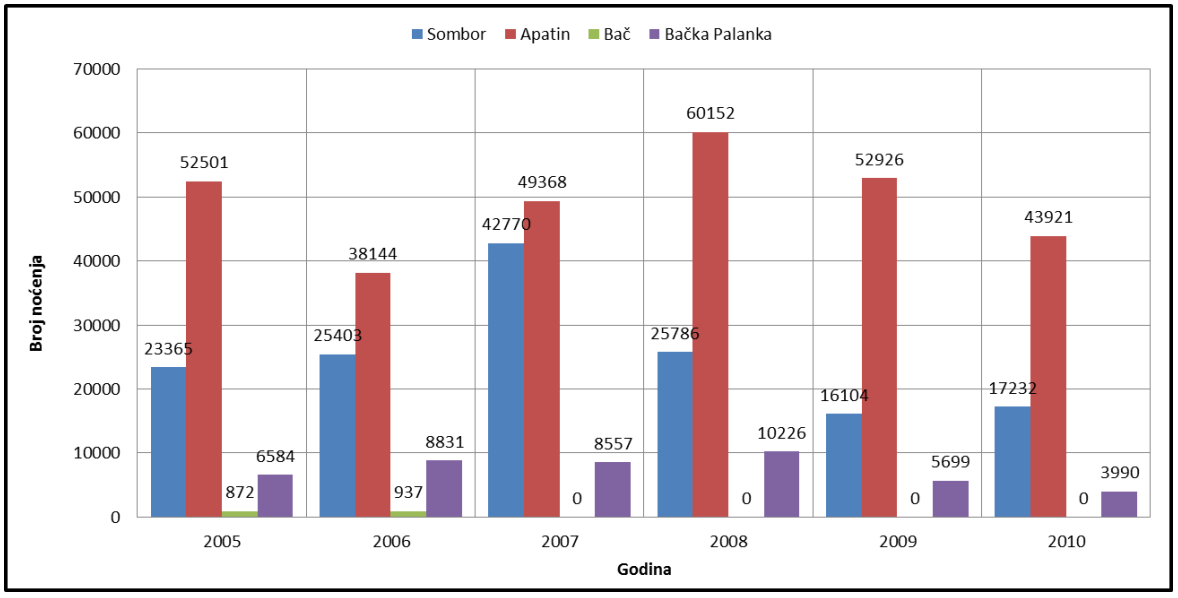


Figure 6: Number of nights spent in tourism facilities in four municipalities for the period 2005-2010.

15.2.3 How are tourism activities currently managed?

All five municipalities/cities have their city/municipality tourist boards, as the central administrative local authority for the tourism branch. The function of these organizations is to record, promote,

manage and assist in the development of the tourism, facilities and attractions, tourism providers and activities in other branches connected with tourism. They serve the regional (Provincial) and state ministries responsible for tourism as providers of statistical analyses and trends of tourism development. They are coordinated by the provincial Vojvodina Tourist Board.

Gornje Podunavlje Special Nature Reserve was granted with The European Charter for Sustainable Tourism in Protected Areas (ECSTPA) on 11 december 2014. This protected area is the first one that received this charter in Serbia, after fulfilling very strict set of criteria defined by EUROPARC Federation, an umbrella organization of protected areas across 37 European countries. ECSTPA is a practical management tool for ensuring that tourism development in Europe's protected areas is sustainable. The underlying aims of the Charter are:

- to increase awareness of, and support for, Europe's protected areas as a fundamental part of our heritage that should be preserved for, and enjoyed by, current and future generations;
- to improve the sustainable development and management of tourism in protected areas, which takes account of the needs of the environment, local residents, local businesses and visitors.

These aims are elaborated in a set of ten principles, which are to:

- involve all those implicated by tourism in and around the protected area in its development and management;
- prepare and implement a sustainable tourism strategy and action plan for the protected area;
- protect and enhance the area's natural and cultural heritage, for and through tourism, and protect it from excessive tourism development;
- provide all visitors with a high-quality experience in all aspects of their visit;
- communicate effectively to visitors about the special qualities of the area;
- encourage specific tourism products which enable discovery and understanding of the area;
- increase knowledge of the protected area and sustainability issues amongst all those involved in tourism;
- ensure that tourism supports and does not reduce the quality of life of local residents;
- increase benefits from tourism to the local economy;
- monitor and influence visitor flows to reduce negative impacts.

Fulfillment of these criteria is controlled once in 5-year period, after which ECSTPA can be reissued or abolished.

ECSTPA is superb tool for development of tourism in specific destinations as protected areaa on principles that will not harm the nature and that will grant local population with set of belefits. In order to receive this grant, Gornje Piodunavlje manager has compiled "Strategy for Sustinable Tourism in the Special Nature Reserve Gornje Podunavlje" in 2016 (authors: Dr. Vladimir Stojanović of Department for Geography, Tourism and Hotel Management, Faculty of Sciences,

University of Novi Sad; Miljan Velojić, PE Vojvodinašume, Petrovaradin and Radmila Šakić-Peurača, PE Vojvodinašume, Sombor Forest Service) which serves as strategic document for all the aspects of functioning of tourism in this area (see 19.8.).

15.2.4 Indicate possible positive and/or negative impacts of tourism at present or foreseen and how they will be assessed (linked to section 14)?

The proposed Biosphere Reserve, as a destination in development, is still not very exposed to tourism influences and this was not the subject of specific analysis related to tourism influences. Thus, the influence of tourism, whether positive or negative has not yet been expressed.

However, the major expected positive influences are as follows:

1. Eco-tourism contributes to nature conservation, its popularization and develops ecological awareness raising.
2. Eco-tourism is often considered as an alternative for non-sustainable activities (based on the irreversible exploitation of natural resources).
3. Eco-tourism provides new sites for education and recreation, which can be used also by local communities.
4. The presence of visitors supports site managers to develop the ethical codices intended for tourists.

Negative influences:

1. Increased concentrations of tourists can contribute to degradation and disturbance of the protected areas;
2. Tourism revenues are sometimes lower than the expectations of the local people, which can lessen their motivation;
3. Larger tourist companies, if attracted to the region, can pose serious competition for small businesses of local people and therefore harm the social function of the biosphere reserve.

15.2.5 How will these impacts be managed, and by whom?

These impacts will be managed by careful cooperation of the Biosphere Reserve Forums and the municipal/city tourism boards, according to the limitations of the conservation regimes in protected areas, as well as limitations connected with the internal zonation of the Biosphere Reserve and future Biosphere Reserve Management Plan.

15.3. Agricultural (including grazing) and other activities (including traditional and customary):

15.3.1 Describe the type of agricultural (including grazing) and other activities, area concerned and people involved (including men and women).

Traditional agricultural activities, i.e. with low pressure on nature, are present on alkaline meadows along the Mostonga River, mostly around Stanišić, Bilić, Rančevo and Svetozar Miletić. Traditionaly used breeds include the Banat *Cigaja* sheep and other, mostly milk-producing breeds of sheep, as well as cows and goats (to a lesser extent). The grazing system includes daily movements (stables-pasture-stables). Water is provided from traditional wells and herds are kept by old *Puli* breed (small shepherd dog). This kind of grazing is the predominant source of milk used for the production of Sombor cheese. More modern systems include stable-breeding of cattle. Traditional races of domestic animals include also *Sombor Kaporka Chicken* and *Sombor High-flying Pigeon*. There is no grazing in Gornje Podunavlje Special Nature Reserve, although formerly it was known as an excellent grazing site and site for pig breeding (on the basis of fattening with oak acorns). Goose, ducks, turkey and domestic guineafowl are common, attractive poultry species raised very extensively in the yards around the *salaši* farms. While other types of caring for domesticated animals in the proposed Biosphere Reserve is traditionally reserved for the men, the care of domesticated poultry is typically considered a task for women.

Fish production: the low intensity production of (mainly) carp *Cyprinus carpio*, is of huge significance for biodiversity. There are the following semi-extensive fish farms in the area: Kolut (200 ha), Svilojevo (460 ha), Bač (700 ha) and Deronje (60 ha). Carp is commonly used in fish restaurants for the preparation of the traditional Danube spicy fish stew. On the other hand, commercial fish harvesting is still present on the Danube, with fisherman and their families living on the Danube banks and selling the harvested fish in their own markets. A total of 12 commercial fishing licences were issued in the proposed Biosphere Reserve area in 2012. This activity in some cases still includes traditional fishing gear (e.g. the gear *bućka* for catching catfish).

Bee-keeping in trailers with hives is a family-based activity all around the proposed Biosphere Reserve and very often in the protected areas (for Locust honey) and in extensive fields (for Sunflower honey). Bee-keepers are organized in civil society organizations, the best known of which is the Bački Monoštor Bee-keepers Club.

Vineyards and orchards are mainly concentrated around the villages Riđica and Kupusina, where there are large deposits of the light sandy type of soil, which is very favourable for grape/fruit production. Extensive vineyards are omnipresent around all villages and often include solitary trees of old domestic varieties of apple, pear, plum, apricot, walnut and peach. Domesticated fruit varieties are used for the traditional production of *rakija* brandy and various sweets. Selling of fruits, vegetables and fruit and vegetable products is traditionally performed in the larger settlements and towns, and almost exclusively by women. Production of watermelon on relatively large areas is performed traditionally in Deronje and these watermelons are considered to be among the most delicious. Besides modern varieties, traditional watermelon varieties are also produced.

In the fenced hunting estates, wild game is bred and managed, mainly for trophy hunting.

Other types of agricultural production are typically very intensive and include crop and vegetable monocultures, and the production of high-profit pig, cattle and poultry breeds.

Organic farming is underrepresented in the proposed Biosphere Reserve.

15.3.2 Indicate the possible positive and/or negative impacts of these activities on biosphere reserve objectives (section 14).

Negative pressures of agriculture can occur if illegal overexploitation of resources occurs. Exploitation of natural reserves is legally regulated, and in protected areas is designed according to the protection regime zones.

There are many positive impacts, in particular of the traditional practices performed in the area. The most important, in addition to the revenues these activities generate through the immediate sale of agriculture products, are tourist values of the practices and the products and the nature-friendly techniques of management of agricultural land.

15.3.3 Which indicators are, or will be used to assess the state and its trends?

The following indicators are planned to be used:

1. Economic indicators (showing the economic effects of the agricultural economy in the location or the area).
2. Environmental indicators (the degree of the influence of tourism to the environment and nature).
3. Pleasure of traditional food producers (the degree of pleasure of targeted population and their quality of life).
4. Social indicators (the degree of social integrity of the local communities in the Biosphere Reserve).
5. Cultural indicators (the degree of preservation of cultural identity of local communities).

15.3.4 What actions are currently undertaken, and which measures will be applied to strengthen positive impacts or reduce negative impacts on the biosphere reserve objectives?

The most important actions undertaken in recent times to improve the tourism offer and tourist production, as well as to connect agriculture and tourism, were implemented by local actors through project-based activities.

The reduction of negative effects to exploitation activities in the protected area is a permanent obligation of the Inspection Service for the Environment in the Provincial Secretary of Spatial Planning, Civil Engineering and Environment. Regular inspection controls are performed in all protected areas. Inspections of hunting management and planning are performed by the Inspectorate for Hunting of the Provincial Secretariat for Agriculture, Forestry and Water Management.

15.4 Other types of activities positively or negatively contributing to local sustainable development, including impact/influence of the biosphere reserve outside its boundaries.

15.4.1 Describe the type of activities, area concerned and people involved (including men and women).

Habitat restoration actions, which have been regularly performed in the protected areas in the proposed Biosphere Reserve since 2005 have positively influenced both the stability of ecosystems and the local economy, providing opportunities for the site managers to learn about restoration techniques and for local companies to enable the engagement of their workers. In some cases (2005/6, Štrbac area, Gornje Podunavlje Reserve), habitat restoration projects involved participants of a youth work camp in Bački Monoštor and thus participants could spread the message on its success to their communities.

The media attention which was given to the area after the first local festivals (especially Bodrog Fest in Bački Monoštor, the first one was held in 2003) and international project activities (2004 in Gornje Podunavlje; 2005 in Karađorđevo), which were significantly increased following the interministerial agreement on the establishment of the pentalateral UNESCO Biosphere Reserve (March 2011) is essential for empowerment of the local communities and their leaders to initiate new possible sustainable revenue generators for the local economy. On the other hand, Karađorđevo Reserve and the nearby Hrastik Residential Complex of the Serbian Armed Forces are in public focus as a historical site, and as frequently used residential sites for high-ranking state officials, and proclaimed as a place of special importance as early as in 1924. Since 1973 it was used as hunting and resting estate, as well as diplomatic reception venue of then Yugoslav President Josip Broz Tito, and after him all the presidents of Yugoslavia and Serbia. The site has sought to acquire the image of a peace-making site, particularly after April 2011, when the state leaders of Serbia, Bosnia and Herzegovina and Turkey met there. The local media attention is very often focused on this area, and the establishment of the Biosphere Reserve will be a good medium for the continuation of these activities.

Sport fields for kayak racing that are held on Tikvara Lake are expected to become important in international kayak racing competitions, in addition to several of the canals near Bezdan. Important promoters of this sport are the internationally famous kayak athletes Nataša Dušev Janić from Bačka Palanka, multiple Olympic medallists (born in Bačka Palanka, she trains on Tikvara Lake), Antonija Horvat-Panda and Antonija Nađ, state champions, both from Bezdan, who train on the DTD and Baja canals.

15.4.2 Indicate the possible positive and/or negative impacts of these activities on biosphere reserve objectives (section 14). Have some results already been achieved?

All the described activities contribute positively to the Biosphere Reserve, promoting its parts and bringing it public attention. Sport activities could have a negative influence in the case of large infrastructure building in buffer zones.

15.4.3 What indicators are, or will be used to assess the state and its trends?

Indicators that will be used are as follows:

1. Habitat restoration: number of restored sites, size of restored sites in hectares, number and structure of species colonizing (recolonizing) restored sites, number of people included in the restoration.
2. Media attention: number of the reports in media on the Biosphere Reserve and the activities within it.
3. Sport: level of understanding concerning the Biosphere Reserve among athletes and their associations.

15.4.4 What actions are currently undertaken, and which measures will be applied to strengthen positive impacts or reducing negative ones on the biosphere reserve objectives?

As regards restoration, there is a regular financing line for habitat restoration in the Provincial Secretariat of Urban Planning, Civil Engineering and Environment, with a relatively simple tendering procedure. Managers of protected areas can apply for this fund annually. There are also international donors who could be attracted to the area and who could finance restoration projects. The efforts of WWF to attract such donors are of particular importance. Positive impacts of habitat restoration could significantly be increased by attracting media attention, and by using restored sites as learning grounds and visitor's places of interest, which has been carried out in part in Gornje Podunavlje. Strict abidance of the official licences issued for each particular restoration activity is a way to reduce the negative impacts of habitat restoration.

As regards the media focus, a journalist tour was organized as a part of international projects occurring in the area. There is already professional media management (proper announcing and spreading the announcements through electronic, printed and social media) conducted by the organization teams of each festival and public events in the proposed Biosphere Reserve, which has resulted in good media attention. No negative impacts of this activity are noted.

15.5 Benefits of economic activities to local people:

Restoration activities which involve the local people and local companies (for example: mowing, clearing of invasive stands of bushes and other plants, transportation of biomass from restoration sites) have clear benefits for both the local people and the local economy. Local farmers can also benefit from grazing if it is used as a management measure. They can have easier access to meadows and use them for free or for low fees.

15.5.1 For the activities described above, what income or benefits do local communities (including men and women) derive directly from the site proposed as a biosphere reserve and how?

There are currently no data on the level of income derived to the local communities.

15.5.2 What indicators are used to measure such income or other benefits?

The income was not measured.

15.6 Spiritual and cultural values and customary practices:
(Provide an overview of values and practices, including cultural diversity).

15.6.1 Describe any cultural and spiritual values and customary practices including languages, rituals, and traditional livelihoods. Are any of these endangered or declining?

Spiritual values of the proposed Biosphere Reserve include, in particular, places or customs practiced in the spiritual life of religious individuals or communities which are in connection with the space and its values. There are several sites and practices of importance here, especially for their historical value and great importance for the local population. Four of these are the "holy wells", i.e. sites where groundwater is considered to have miraculous effects and where religious practices are developed in honour of the patron saint of the church/chapel (sometimes very small) erected there. This practice is known in both the Serbian Orthodox and Roman Catholic traditions in the proposed Biosphere Reserve.

Holy Water of the Assumption of Mary, Stapar
Next to the Mostonga River, in a former Roman trench, near the forest which used to be called Gaj (grove), is the oldest Serbian Orthodox holy well in Vojvodina. Services have been held twice a year here since 1784: on the second day of Pentecost, and on the feast day of the Assumption of the Virgin Mary, August 28.

Holy Well of St. Elijah near Sombor
The historical significance of this cultural monument is present in the cultural trends of building holy wells in the 19th century, as well as in the historical development of the farm settlement Bukovac.

Holy Well, Doroslovo
This site has been known since 1382 and is connected with claims of the apparition of the Holy Virgin Mary near the well that was used by the local population. The two-tower chapel was built in 1796, while the sculpture of the Doroslovo Madonna was erected in 1861. This is a pilgrimage site for Roman and Byzantine Catholics in the wider region. The festivity is celebrated on the feast day of the Birth of the Blessed Virgin Mary (8 September).

Holy Well near Bački Monoštor
This well is located at the confluence of the small Plazović River into the Veliki Bački Canal, near Bački Monoštor. It is a Roman Catholic pilgrimage site for the community of Bački Monoštor. There is a building, a well and three small chapels.

There are also two additional pilgrimages sites: The Lady of Snow Chapel in Čičovi (with the feast day and pilgrimage taking place on 5 August) and the Chapel of St. Anthony the Abbot in the

Vranjak forest near Bač, built likely in the early 16th century (with its feast day on 17 January). Both are Roman Catholic chapels.

There are several religious practices performed using plant material in the villages in the Biosphere Reserve. In the Serb Orthodox tradition, young specimens, or branches of oaks (here most often Common Oak *Quercus robur* and Turkish Oak *Quercus cerris*) are used to celebrate and announce Christmas Day. Oak trunks or their parts are burned in public on Christmas Eve, after dark, and the fire is consecrated. The symbol of burning oaks and the fire it produces is in connection with the birth of new life (symbolized in Christmas), while the sparks flying into the air announce a good harvest in the agricultural production in coming year. Several species of willows are used in religious practices. A Serbian Orthodox traditional custom is to make a wreath of thin White Willow *Salix alba* branches for small children on the feast day of the Saturday before Palm Sunday (Lazar's Saturday), while the Roman Catholic tradition on Palm Sunday includes carrying branches of Goat Willow *Salix capraea* and Grey Willow *Salix cinerea* with soft hairy buds in public, to announce the awakening of new life in early spring. Rich stands of all these plants are found in the proposed Biosphere Reserve.

Another spiritual value of the area is also the "slow" traditional rural life, with particularly rich Vojvodina cuisine and *tambura* music, often reflected in a number of social events, festivities and practices which are sometimes characteristic and known only within the village and only to the inhabitants of particular villages. These practices are often related to particular ethnic groups and performed in the settlements with the ethnic majorities of some groups. The most important events celebrating spiritual values are: *Dužionica* in Sombor (August): the celebration of new bread and thanksgiving to God for the annual harvest (characteristic to Croats), Feast day of St. Steven the Hungarian King, which includes thanksgiving for new bread (characteristic for Hungarians) and a range of festivities celebrating domestic Serbian culture. The Biosphere Reserve is also home to several art colonies, including traditional art colony sites.

Looking at the languages, the local specificity in the autochthonous Croatian language is the Ikavian dialect of the Croat population (Šokac sub-ethnic group) in Bački Monoštor, Bački Breg and Sonta, which is well preserved even in the younger population. Hungarians here speak their special South Great Plain dialect (characteristic for the Danube area in Hungary and Serbia).

Traditional celebrations of agricultural heritage of the region and rural lifestyle, if not commercialized and brought to the level of the festivals are in severe decline in the area. The reason for that is also the increased number of elderly people, who best remember the traditional practices.

15.6.2 Indicate activities aimed at identifying, safeguarding, promoting and/or revitalising such values and practices.

Traditional practices and spiritual values are well described in Serbian literature (in some instances also in the Croatian and Hungarian literature). Safeguarding the local dialects is performed in cultural and artistic societies (sometimes also called cultural centres or cultural, historic and educational clubs), a form of a civil society organization whose mission is to conserve the local

traditional cultural and spiritual values and practices. Expert assistance for such clubs is provided by the Institute for Culture of Vojvodina, a provincial expert authority for culture.

15.6.3 How should cultural values be integrated in the development process: elements of identity, traditional knowledge, social organizations, etc.?

Elements of the traditional spiritual heritage are a constitutional part of the inhabitants of the Biosphere Reserve, and the activities promoting their values are essential for the promotion of the concept of the Biosphere Reserve in the area. The constant exchange between nature and the people in the area through history is an element that has significantly influenced the local traditional values and spiritual practices, and without them the Biosphere Reserve would lose its key qualities.

15.6.4 Specify whether any indicators are used to evaluate these activities. If yes, which ones and give details.
(Examples of indicators: presence and number of formal and non-formal education programmes that transmit these values and practices, number of revitalisation programmes in place, number of speakers of an endangered or minority language).

No indicators (in the context of the Biosphere Reserve establishment) are used to evaluate these activities.

16. LOGISTIC SUPPORT FUNCTION:

16.1 Research and monitoring:

16.1.1 Describe existing and planned research programmes and projects as well as monitoring activities and the area(s) in which they are (will be) undertaken in order to address specific questions related to biosphere reserve management and for the implementation of the management plan (please refer to variables in Annex I).

Existing projects and programmes in the area of the proposed Biosphere Reserve are:

- Monitoring of Populations of White-tailed Eagle, Black Stork, Tawny Owl. Implementation: Vojvodinašume Public Enterprise and Bird Protection and Study Society of Serbia;
- Facing challenges of depopulation in Vojvodina. Implementation: Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad;
- Centuries of Bač. Implementation: University of Novi Sad, Government of the AP of Vojvodina;
- SY_CULTour: Synergy of Culture and Tourism – Use of Cultural Potential in Less Developed Rural Areas. Implementation: Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad;
- Settlements and the Populations in Vojvodina. Implementation: Matica Srpska
- Anchoring the Danube River Network of Protected Areas as a Platform for Preservation of Danube Natural Heritage – DANUBEPARKS STEP 2.0. Implementation: Vojvodinašume Public Enterprise;
- Wildlife Health and Conservation of Selected NATURA 2000 Species within the Danube Cross-border Region in Serbia and Hungary. Implementation: Vojvodinašume Public Enterprise;
- CHAIN-Agriculture in Cooperation with Nature. Implementation: Institute for Field and Vegetable Crops, Novi Sad.

A large number of projects is implemented by the Department of Water Management of the Faculty of Agriculture, University of Novi Sad and all are related to the sustainable concept of melioration, pollution of the canal network, droughts and irrigations.

On the one hand, planned projects in the proposed Biosphere Reserve have to be applicable, and their results should reflect the need for the improvement of the co-existence of man and nature in the area, in particular in terms of improvement of nature management. On the other hand, more intensive fundamental research of the distribution, numbers and ecology of key species (especially indicators) are needed and are necessary to promote the values of the area. Mid-term proposed topics include:

- Mapping and census of populations of birds, amphibians and reptiles in the Biosphere Reserve and publication of Red Data books and distribution atlases;

- Quality of surface water;
- Hydrological regimes;
- Research of geo-diversity, identification of geo-heritage structures, and linking these with wildlife research;
- Research of the measures that will mitigate the demographic decline of the area and provide local communities with new opportunities in sustainable agriculture and tourism;
- Studies of origin, customs and non-material heritage of the local communities.

16.1.2 Summarize past research and monitoring activities related to biosphere reserve management (please refer to variables in Annex I).

Studies of wild species ecology. Strong emphasis was given in previous research to the improvement of species and habitat management, and many studies and monitoring activities were initiated with this aim. White-tailed Eagle research and monitoring was aimed at finding the best sustainable solutions for breeding pairs in stands of fast-growing species under commercial management. These studies were also aimed at providing details on the life cycle of this species, and the differences occurring between adults and various categories of juveniles, in order to improve site management. On the basis of the research, the two best locations were selected and equipped as raptor feeding sites. Food is regularly provided for White-tailed Eagle and other raptor species. Black Stork research was aimed at finding the best way to safeguard breeding sites, while the Tawny Owl study produced information on the most suitable places for the installation of breeding boxes. Mapping breeding sites and colonies of Little Ringed Plover and Sand Martin was essential in seeking the most favourable locations for the restoration of dynamic river morphology. On top of bird population monitoring, the Biosphere Reserve is very traditional bird ringing site, with long tradition of bird ringing, dating back in late 19th century. The first ever bird in nowadays Serbia was ringed in Biosphere Reserve, in the village of Bođani in 1899, and in recent times there are approx. 15 regular ringing sites and ringing camps in the Biosphere Reserve. There are also several studies that support the designation of new protected areas. On the other hand, applied studies of aquatic plants carried out in the area of the proposed Biosphere Reserve have resulted in identified active substances that can be used for medicinal purposes.

Socioeconomic studies

The main topics and results in these studies concern the areas of sustainability in local tourism and its better promotion. The results of studies pointed out the potential of the area and provided clear guidelines on the direction in which these potentials should develop. Population studies are underlying and warning that the consequence of demographic changes (progressively older inhabitants, decreased natality, and migration from rural to urban areas) must not be underestimated in terms of supporting the local economy. The results are of importance for the management of human resources and particularly for visitor management.

Forestry studies

There is vast experience in the studies of forest ecosystems in the proposed Biosphere Reserve, which resulted in an assessment of the health status of forests stands, methods for adaptations to climate changes, and instructions for sustainable solutions and supporting innovation in using cultivated stands as a resource for energy production.

Cultural feature studies

The cultural heritage in the area of the proposed Biosphere Reserve is well recorded and documented. According to this scientific documentation, it can be claimed that the area hosts a very rich cultural heritage. Documents include evaluations and proposals for the permanent conservation of cultural goods in the area.

16.1.3 Indicate what research infrastructure is available in the proposed biosphere reserve, and what role the biosphere reserve will play in supporting such infrastructure.

There is an equipped meteorological station in the periphery of Sombor and that is the only research station in the proposed Biosphere Reserve. However, the Special Purpose Spatial Plan of the Gornje Podunavlje Special Nature Reserve envisages the establishment of two research stations in this reserve. The proposed Biosphere Reserve status can support this idea. At the transboundary level, the entire Mura-Drava-Danube UNESCO Biosphere Reserve idea should support the foundation of at least one international research station per country.

16.2 Education for sustainable development and public awareness:

16.2.1 Describe existing and planned activities, indicating the target group(s) and numbers of people involved (as “teachers” and “students”) and the area concerned.

Ecological education of children is planned as one of the primary tasks in the proposed Biosphere Reserve. *Let the Every Child see Gornje Podunavlje* was the first project carried out by the site manager of Gornje Podunavlje Reserve, in conjunction with the City of Sombor and Municipality of Apatin. Its aim was to illustrate and demonstrate the basic ecological values of the reserve. Annually 1,700 children visited the reserve. Similar activities of informal education were carried out also by the Baračka Ecological Classroom (at Bezdan) starting from 1998.

There have been many small-scale, informal environmental and ecological awareness raising projects, carried out by a range of institutions. The target groups are the local population, visitors and tourists. The local population is by far the most important target group in the process of ecological education. The Department of Geography, Tourism and Hotel Management of the Faculty of Sciences, University of Novi Sad organized training in rural tourism for local employees in Bački Monoštor. Ecological education is also a popular project activity for a range of NGOs. Three projects are good examples of that. The first was “Ecological Education and Active Conservation of Natural Values of the Landscapes around the Mostonga River”, which focused on informing the

local communities in the Municipality of Odžaci about the natural heritage and its sustainable use (implemented by Ecological Movement of Odžaci). The second example are the activities of the Branislav Bukurov Student Club of the Faculty of Science, University of Novi Sad which has organized an educational programme entitled "Sustainable Use and Presentation of Protected and Potentially Protected Natural Values along the Danube in Vojvodina" intended for municipality officials, employers in protected areas and local tourist boards. The third example was the project of the Podunavsko civil society from Bački Monoštor called "Our UNESCO Biosphere Reserve" aimed at educating children, creating and ecological tourism offer and publishing promotion materials.

Informing visitors is also an important task and is is carried out in various ways. All four protected areas are marked and equipped with information boards, giving basic information on the values, conservation regime and rules of conduct. Information is more detailed in sites which were subject to ecological restoration. Information boards have also been installed at tourist attractions in other sites, like Bogojevski Rit and the natural assets in Bačka Palanka Municipality.

16.2.2 What facilities and financial resources are (or will be) available for these activities?

There are three ecological-educational walking paths in Gornje Podunavlje Reserve:

1. Karapandža educational trail, comprising the area of Karapandža, it is 3 km long and equipped with educational panels and resting places.
2. Bestrement educational trail, 3 km long, equipped with information panels, benches and resting places.
3. Štrbac educational trail, 2 km long, fully equipped, including two observation towers and a number of information panels.

There is one ecological walking path (with two information panels) and also a boat path at the Karađorđevo Reserve.

Protected area managers have employed guides (speaking Serbian and English) to serve as educators for group visits. Information centres have also been installed in the headquarters of the city/municipality tourist boards in five municipalities, providing information on tourist attractions to visitors.

The Special Purpose Spatial Plan of Gornje Podunavlje Special Nature Reserve foresees a completely new information centre, whose location has already been defined. Equipping of this location would give a new tourist perspective for the entire area, as was proven in the case of information centres functioning in other protected areas and Biosphere Reserves in Europe. For regular operations of the information centre, significant financial resources are needed. It is estimated that this could be secured through intensive project-based activities and that budgets could be provided by international donors, with the European Union as the leader. However, the support of the Ministry of Agriculture and Environmental Protection, as well as Provincial Secretariat for Urban Planning, Civil Engineering and Environmental Protection of Autonomous Province of Vojvodina and five cities/municipalities will also be sought.

16.3 Contribution to the World Network of Biosphere Reserves:

16.3.1 How will the proposed biosphere reserve contribute to the World Network of Biosphere Reserves, its Regional and Thematic Networks?

The Bačko Podunavlje UNESCO Biosphere Reserve will comprise a part of the future pentalateral and transboundary UNESCO Biosphere Reserve in five countries: Austria, Slovenia, Croatia, Hungary and Serbia, which will combine several protected areas along these rivers and jointly manage the shared river ecosystem in a sustainable way to motivate economic development of the region. It will include already designated UNESCO Biosphere Reserve between Croatia and Hungary.

The Biosphere Reserve concept defines about 260,000 hectares of core and buffer zones and another roughly 540,000 hectares of transition areas. It primarily covers the river and floodplain areas.

In order to politically support the process of nomination, the ministers responsible for environment and nature conservation of Austria, Croatia, Hungary, Serbia and Slovenia signed a Joint Declaration to establish the reserve in March 2011. The Joint Declaration was founded on the preliminary bilateral agreement between Croatia and Hungary from 2009.

In addition to being part of the only pentalateral biosphere reserve ever established, the Bačko Podunavlje UNESCO Biosphere Reserve will intensively cooperate with other biosphere reserves, first of all in Europe and in areas where similar ecosystems are represented in already established biosphere reserves. Initial institutional and field-based research are important for this Biosphere Reserve to become a functional member of the global network of biosphere reserves.

16.3.2 What are the expected benefits of international cooperation for the biosphere reserve?

The position of the Biosphere Reserve along two state borders opens excellent possibilities for cooperation and joint work, above all within the pentalateral UNESCO Mura-Drava-Danube Biosphere Reserve. However, the benefits of international designation and its prestigious status are much wider. The design of the international cooperation model, based on the experiences of other biosphere reserves, will be entrusted to the Biosphere Reserve Forums. Urgent issues that would be parts of this model are: joint research, education of site managers, exchange of students, experts and scientists, formation of a unique tourism offer and joint programmes to present culture by establishing and strengthening ties between the local communities living in the reserve (in different countries).

During the consultation procedure (prior to the completion of this application), municipality leaders uniformly expressed the need to form a unique identity of the Biosphere Reserve, which can serve to attract economic investments that will be aligned with the postulates of the Biosphere Reserve. Indeed, the branding of products from the Biosphere Reserve on the basis of the experiences from other Biosphere Reserves in Europe would be very significant and would encourage the positive result of this designation.

Certain changes are also needed in terms of nature management in the Biosphere Reserve. International experiences in using this designation as a tool for improving nature management are needed and welcome.

16.4 Internal and external communication channels and media used by the biosphere reserve:

16.4.1 Is (will) there (be) a biosphere reserve website? If yes, what is its URL?

There is no a website of the proposed Biosphere Reserve, but there is a website promoting the pentalateral Mura-Drava-Danube Biosphere Reserve: http://www.amazon-of-europe.com. There will also be a website of the Serbian part.

16.4.2 Is (will) there (be) an electronic newsletter? If yes, how often will it be published?

There is no electronic newsletter, but this is planned to be a part of a Biosphere Reserve website.

16.4.3 Does (will) the biosphere reserve belong to a social network (Facebook, Twitter, etc.)?

At the moment, the Biosphere Reserve does not belong to social networks. It will become a member after the designation.

17. GOVERNANCE, BIOSPHERE RESERVE MANAGEMENT AND COORDINATION:

[Describe the following characteristics in the prospective that the site is being designated.]

17.1 Management and coordination structure:

17.1.1 What is the legal status of the biosphere reserve?

The proposed Biosphere Reserve has no legal status. Management and governance structures will be formed and possibly legally registered following acceptance of this application.

The Institute for Nature Conservation of Vojvodina Province (that will act as coordinating institution for the Council of Biosphere Reserve) has a legal entity status – public institution.

17.1.2 What is the legal status of the core area(s) and the buffer zone(s)?

Legal statuses of core areas:

- Gornje Podunavlje Special Nature Reserve, a protected area established by the Act on Nature Conservation and legally managed by Vojvodinašume Public Enterprise;
- Karađorđevo Special Nature Reserve, a protected area established by Act on Nature Conservation and legally managed by the Morović Military Institution (under the Ministry of Defence);
- Alkaline Meadows of North Bačka are part of the ecological network established by the Decree on Ecological Network and legally managed by the Ministry of Agriculture and Environmental Protection;
- Canal system between Bački Monoštor and Kupusina is part of the ecological network established by the Decree on Ecological Network and legally managed by the Ministry of Agriculture and Environmental Protection.

Legal status of buffer zones:

- Gornje Podunavlje Special Nature Reserve and Junaković Forest Natural Monument, protected areas established by the Act on Nature Conservation and legally managed by Vojvodinašume Public Enterprise;
- Karađorđevo Special Nature Reserve, a protected area established by the Act on Nature Conservation and legally managed by the Morović Military Institution (under the Ministry of Defence);
- Tikvara Nature Park, a protected area established by the Act on Nature Conservation and legally managed by the Tikvara Sport and Recreation Centre;
- Other land in the proposed Biosphere Reserve is state owned or private owned land, managed for various purposes as defined in the relevant spatial plans.

17.1.3 Which administrative authorities have competence for each zone of the biosphere reserve (core area(s), buffer zone(s), transition area(s))?

Competence of the administrative authorities for each zone is presented in the table below:

Zone	Competent administrative authority/ies
Core zone	Vojvodinašume Public Enterprise Morović Military Institution Tikvara Sport and Recreation Centre Ministry of Agriculture and Environmental Protection Provincial Secretariat for Urban Planning, Construction and Environmental Protection
Buffer zone	Provincial Secretariat for Urban Planning, Construction and Environmental Protection Vojvodinašume Public Enterprise Vode Vojvodine Public Water Management Company City of Sombor Municipality of Apatin Municipality of Odžaci Municipality of Bač Municipality of Bačka Palanka
Transition area	Ministry of Agriculture and Environmental Protection Provincial Secretariat for Urban Planning, Construction and Environmental Protection Vode Vojvodine public water management company City of Sombor Municipality of Apatin Municipality of Odžaci Municipality of Bač Municipality of Bačka Palanka Private land owners Hunting associations

17.1.4. Clarify the respective competence of each of these authorities. Make a distinction between each zone if necessary and mention any decentralized authority.

The competence of each authority (as indicated in 17.1.3) is explained in the table below:

Zone	Competent administrative authority/ies	Competence
Core zone	Vojvodinašume Public Enterprise	Management of forest, forest land and associated resources; management of protected area
	Morović Military Institution	Management of forest, forest land and associated resources; management of protected area
	Tikvara Sport and Recreation Centre	Management of protected area; organization of various sport activities and maintenance of sport infrastructure on Tikvara Lake
	Ministry of Agriculture and Environmental Protection	Management of natural resources and protected areas
	Ministry of Agriculture and Environmental Protection	Management of the ecological network
	Provincial Secretariat for Urban Planning, Construction and Environmental Protection	Provincial Administration in the field of spatial and urban planning, construction of buildings environmental protection
Buffer zone	Provincial Secretariat for Urban Planning, Construction and Environmental Protection	Provincial Administration in the field of spatial and urban planning, construction of buildings environmental protection
	Vojvodinašume Public Enterprise	Management of forest, forest land and associated resources; management of protected area
	Vode Vojvodine Public Water Management Company	Managemet of water supply, irrigation and industrial water supply, navigation, fisheries, wastewater treatment plants, flood control.
	City of Sombor	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws
	Municipality of Apatin	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws

Zone	Competent administrative authority/ies	Competence
	Municipality of Odžaci	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws
	Municipality of Bač	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws
	Municipality of Bačka Palanka	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws of Republic of Serbia
Transition area	Ministry of Agriculture and Environmental Protection	Ownership of agricultural land
	Provincial Secretariat for Urban Planning, Construction and Environmental Protection	Provincial Administration in the field of spatial and urban planning, construction of buildings environmental protection
	Vode Vojvodine Public Water Management Company	Managemet of water supply, irrigation and industrial water supply, navigation, fisheries, wastewater treatment plants, flood control.
	City of Sombor	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws
	Municipality of Apatin	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws
	Municipality of Odžaci	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws
	Municipality of Bač	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws
	Municipality of Bačka Palanka	Administration of municipality and state resources in various sectors, as defined by the Constitution and laws of the Republic of Serbia
	Private land owners	Management of private owned land and facilities
	Hunting associations	Management of hunting grounds and game animals

17.1.5 Indicate the main land tenure (ownership) for each zone.

Most of the land in the Biosphere Reserve is state-owned.

17.1.6 Is there a single manager/coordinator of the biosphere reserve or are several people in charge of managing it? If one manager/coordinator, who designates and employs him/her (national authorities, environmental administrative agency, local authorities)?

The coordination scheme for management of the Biosphere Reserve is based on the work of the Coordinative Council which will be in charge of management. The Institute for Nature Conservation of Vojvodina Province (provincial public expert institution responsible for nature conservation) will preside over the Coordinative Council (see details in 17.1.7).
Morović Military Institution is site manager of Karađorđevo Special Nature Reserve which is part of Biosphere Reserve. Site manager is defined by Decree on Protection of Karađorđevo Special Nature Reserve (Official Gazzette of Republic of Serbia no. 37/1997) and has all duties and reponsibilities of protected area manager, as defined by Nature Conservation Act (Official Gazette of Republic of Serbia no.36/2009, 88/2010 and 91/2010). In line with abovementioned facts Morović Military Institution is participating as member in Coordination Council in the same manner as other members of the Council, especially protected areas managers.

17.1.7 Are there consultative advisory or decision-making bodies (e.g., scientific council, general assembly of inhabitants of the reserve) for each zone or for the whole biosphere reserve?

- If yes, describe their composition, role and competence, and the frequency of their meetings.

The Coordinating Council (hereinafter: Council) is established to engage stakeholders in the planning and management of the proposed Biosphere Reserve. It is an executive, decision-making body that is responsible for the overall planning and management of the proposed Biosphere Reserve. Its membership should include the Chairperson and no more than 12-15 persons if it is to be efficient and effective in its decision making. Members should be representatives of the main interest groups and values for which the Biosphere Reserve is established. Key government and NGO bodies, at the regional and local levels, local communities and the private sector would be represented. The Council will be chaired by person who is appointed by the Institute for Nature Conservation of Vojvodina Province. The initial tasks of the Council will be as follows:

a) Develop a long-term vision for the proposed Biosphere Reserve that is shared by the majority of stakeholders.

b) Review the existing management plan for Gornje Podunavlje Special Nature Reserve and either expand it or provide a supplement to address at least the following biosphere

reserve requirements: zonation map showing core area(s), buffer area(s) and transition area(s); management objectives and activities for research, training and education; and management objectives and activities for demonstration of sustainable development.

c) Develop an Action Plan for the proposed Biosphere Reserve that is based on the expanded Management Plan.

d) Contribute to defining an appropriate governance model for the proposed Biosphere Reserve and identifying the key stakeholder groups to be represented on the Council.

Terms of references with indicated roles and responsibilities, membership details, financial procedures and general terms of reference for working groups are enclosed in the supporting documents (see 19.8.).

17.1.8 Has a coordination structure been established specifically for the biosphere reserve?

- If yes, describe in detail its functioning, composition and the relative proportion of each group in this structure, its role and competence.
- Is this coordination structure autonomous or is it under the authority of local or central government, or of the manager/coordinator of the biosphere reserve?

In order to engage key partners and other stakeholders in the planning and management of the proposed Biosphere Reserve, a governance model has been developed in consultation with government agencies, local authorities, NGOs, local communities and private interests. The model comprises a two-tier structure for engaging stakeholders (Figure 7). The two tiers comprise: a Council, which is the decision-making body that is responsible for overall coordination of planning and management of the Biosphere Reserve, and Stakeholder Forums, which comprise a wider range of local stakeholders who are consulted on all matters subject to decision-making. The protected areas management authorities are responsible for the management of Gornje Podunavlje Special Nature Reserve, Karađorđevo Special Nature Reserve, Junaković Forest Natural Monument and Tikvara Nature Park.

- The Council is in the process of establishment. It comprises representatives of each municipality, relevant government bodies (forestry, agriculture, nature conservation, cultural heritage, and tourism), local communities, NGOs and the private sector.
- Several stakeholder meetings were carried out between 2011 and 2013 and the formal structure of Stakeholder Forums in five municipalities (Sombor, Apatin, Odžaci, Bač and Bačka Palanka) will be established once the Biosphere Reserve is designated. Their role will be to provide a mechanism for as wide a range of local stakeholders as practicable to contribute to the deliberations of the Council by informing it of the local interests. This Forum comprises representatives from each of the municipalities.
- The Stakeholder Forums will meet before the Council and have a similar agenda. Chairpersons of the Stakeholder Forums will be responsible for presenting those views to the Council and reporting back to the Stakeholder Forums. It is expected that the Council will reflect the views of the Stakeholder Forums in its decisions. If this is not the case, then the

Chairpersons of the Stakeholder Forums must be given clear reasons as to why the views of the Forums have been ignored or overruled.

- Further details of this governance model can be found in Chapter 19.8, including Terms of Reference for both the Council and Stakeholder Forums. Both of these Terms of References were agreed with the local authorities and protected area management authorities, and are ready for adoption by the Biosphere Reserve Partnership once established.

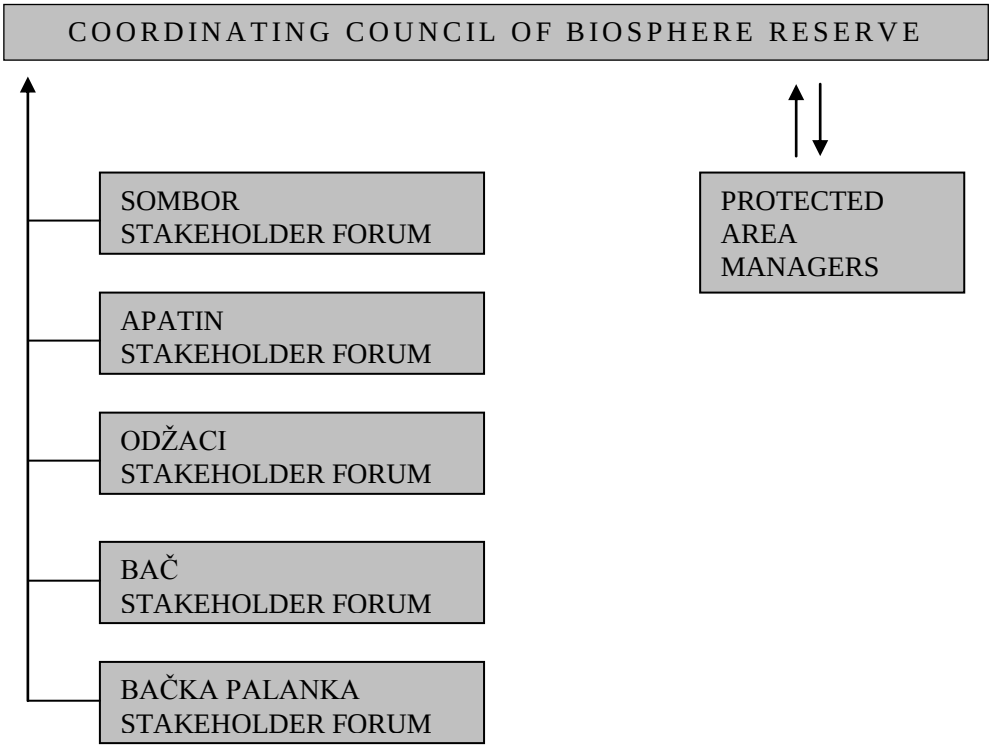


Figure 7: Proposed Biosphere management model

The membership of the Stakeholder Forums will comprise representatives of the following sectors and respective organizations/bodies:

Sector	Organization
Municipality administration	Municipality administration Hunting grounds manager Guarding service for agriculture Fish farm owners

Local communities	Local communities in all settlements
Agriculture	Farmers' associations Agricultural companies Agricultural field guard service Fish farm owners
Recreation	Organizations of dwellers in weekend settlements and cottages owners Angling clubs
Business clusters	Private entrepreneurs associations Tourist agencies
Civil sector	Environmental NGOs Beekeeper NGOs Community development NGOs Rural development NGOs Women NGOs
Hunting	Hunting grounds managers

17.1.9 How is the management/coordination adapted to the local situation?

Specificity of the local situation is a relatively large number of stakeholders, as well as their interests, which can be conflicting in some cases. For the purpose of harmonization these interests and ensuring balanced expression of all three functions of the proposed Biosphere Reserve, the governance system to be put in place will take into account a range of organizations, different interests, management systems and procedures. The work of both the Coordination Council and Stakeholder Forums will be fully democratic and will take into consideration every single participant and the backgrounds they represent. Other management options for this Biosphere Reserve would likely be ineffective.

17.1.10 Is there a procedure for evaluating and monitoring the effectiveness of the management?

The procedure for evaluation and monitoring of the effectiveness of management will be envisaged in a management plan, a document which will be developed by the Coordinating Council.

17.2 Conflicts within the biosphere reserve:

17.2.1 Describe any important conflicts regarding the access or the use of natural resources in the area considered (and precise period if accurate). If the biosphere reserve has contributed to preventing or resolving some of these conflicts, explain what has been resolved or prevented, and how this was achieved for each zone.

The following main conflicts (conflict areas) are identified in the proposed Biosphere Reserve, on the basis of existing knowledge regarding the use of natural resources:

- Intensive management of fast-growing clones vs. sustainable forestry with indigenous species;
- Intensive fish production vs. nature friendly traditional fish farm management;
- No knowledge on nature conservation and promotion of natural and cultural values among the majority of local populations vs. small number of proactive knowledgeable local communities;
- Conservative and strictly-technical water management (flood prevention by construction of flood control dams, canalization of streams, lack of multi-functional flood control water bodies and their surrounding habitats, etc.) vs. modern use and engagement of water retention areas as flood control assets and restoration of floodplains;
- Depopulation of villages (abandoning of rural areas by migration to urban ones and abandoning of rural life style) vs. challenges in development of rural tourism.

Conflicts related to the differences between the local communities in their understanding of the use of local resources and the challenges of facing the consequences of depopulation are expected to be overcome with the promotion of sustainable economic development, especially the development of local products.

17.2.2 If there are any conflicts in competence among the different administrative authorities in the management of the biosphere reserve, describe these.

There are several conflicts among the competences in proposed Biosphere Reserve, mainly regarding the different management goals and methods on exactly the same land. In all cases, both conflicted authorities have juridical competence to use the resources and, in the field, that poses relatively large problems.

- Management of land for agricultural parcels vs. management of game species on the same parcels by different authorities;
- Management and exploitation of forest resources by forest companies vs. conservation of forest habitats by the same authorities;
- Management of water resources vs. construction along the canals permitted by the spatial planning sector;
- Ownership over the meadows (public) that allows the ploughing of meadows vs. biodiversity conservation sector (manager of strictly protected species) which promotes conservation of extensive grazing and preservation of meadows.

17.2.3 Explain the means used to resolve these conflicts, and their effectiveness.

The only mean for resolving these conflicts is well balanced cooperation between the opposite parties and regular controls of resource use by government inspectors. In terms of inspection controls, competences are clear with no misunderstandings and conflicts. It is expected that the Coordinating Council will be a body where the resolution of conflicts will be possible.

17.3 Representation, participation and consultation of local communities:

17.3.1 At what stages in the existence of a biosphere reserve have local people been involved: design of the biosphere reserve, drawing up of the management/cooperation plan, implementation of the plan, day to day management of the biosphere reserve? Give some specific examples.

The local population and their communities were involved in the design of Biosphere Reserve through their participation in preparation workshops. Two workshops were held for local communities in the preparation period: for local communities in settlements in the City of Sombor and Municipality of Apatin (in Bački Monoštor on 26 July 2011) and for local communities in settlements in the Municipalities of Odžaci, Bač and Bačka Palanka (in Odžaci on 17 July 2012). In the workshops, representatives of local communities had the opportunity to influence the shaping of the Biosphere Reserve and participate in its functioning.

17.3.2 Describe how the local people (including women and indigenous communities) have been, and/or are represented in the planning and management of the biosphere reserve (e.g., assembly of representatives, consultative groups).

Local communities will be involved in management of the Biosphere Reserve through their participation in city/municipality Stakeholder Forums (one will be established in each city/municipality). The Terms of Reference on roles and responsibilities, principles, membership, secretariat and possible amendments to the work of Stakeholder Forums are presented in the Annex (chapter 19.8.).

17.3.3 Describe the specific situation of young people in the proposed biosphere reserve (e.g., potential impacts of the biosphere reserve on youth, consideration of their interests and needs, incentives to encourage them to participate actively in the governance system of the biosphere reserve).

The role of young people in the functioning of the proposed Biosphere Reserve is important, as they are important drivers of positive changes in the way of functioning of this area. Young people are already particularly active now in organizing village festivals and in attracting the attention of possible visitors.

17.3.4 What form does this representation take (e.g., companies, associations, environmental associations, trade unions)?

Stakeholder Forums are excellent places for the expression of activity of youth organizations (and individuals). See details on the organization and work of Stakeholder Forums in Chapter 19.8.

17.3.5 Are there procedures for integrating the representative body of local communities (e.g., financial, election of representatives, traditional authorities)?

Each Local Community Council (in Serbia, the local community is the lowest level of self-government and is the representative body of inhabitants of one village/part of town) in the proposed Biosphere Reserve will have the opportunity to nominate representatives in their respective city/municipality Stakeholder Forums. It is expected that these representatives will articulate the interests of the whole community in the most direct way.

17.3.6 How long-lived are consultation mechanisms (permanent assembly, consultation on specific projects)? Make a complete description of this consultation. What are the roles of involved stakeholders compared to the role of the biosphere reserve?

Both Coordination Council and Stakeholder Forums will act permanently and their mission and responsibilities are permanent. Involved stakeholders are decisive in the functioning of the Biosphere Reserve. See details on the organization and work of Stakeholder Forums in Chapter 19.8.

17.3.7 What consultation mechanisms have been used, and who has been involved? Are they for specific purposes or long-term? What impacts have they had on decision-making processes (decisional, consultative or merely to inform the population)?

Prior to completing the nomination, an extensive consultation process took place and all representatives of the local communities were invited. After this, each city/municipality major was personally consulted regarding the nomination process and the associated provisions of the Biosphere Reserve (see the list in 4.6.1). Their role in the functioning of the Biosphere Reserve will be expressed via the Stakeholder Forums (see details in 19.8).

17.3.8 Do women participate in community organizations and decision-making processes? Are their interests and needs given equal consideration? What incentives or programmes are in place to encourage their representation and participation (e.g.: was(were) a “gender impact assessment(s)” carried out)?

The role of woman in the life of rural communities, as well as their role as leaders in community-based NGOs, is fully considered in this nomination. Therefore, mechanisms for gender equity that will be used in the functioning of the Biosphere Reserve are those recommended by the Institute for a Gender Equity of Vojvodina Province. An association of rural women will also participate in the Stakeholder Forums (see 17.1.8).

17.4. The management/cooperation plan/policy:

17.4.1 Is there a management/cooperation plan/policy for the biosphere reserve as a whole?

There is currently no management plan; this will be prepared after the acceptance of the nomination as a result of the work of the Coordination Council (see 19.8).

17.4.2 Which actors are involved in preparing the management/cooperation plan? How are they involved?

The Management Plan will be prepared and adopted by the Coordination Council, in consultation with Stakeholder Forums and according to the principles of functioning of these two bodies. See details on the organization and work of the two bodies in the Annex (chapter 19.8).

17.4.3 Do local authorities formally adopt the management/cooperation plan? Are local authorities making reference to it in other policies and/or plans? If so, please provide details.

Adoption of the management plan by local authorities is not planned.

17.4.4 What is the duration of the management/cooperation plan? How often is it revised or renegotiated?

The duration of the Management Plan will be 10 years, in order to be compatible with the management planning systems in all sectors in the Biosphere Reserve, which are all based on a 10-year cycle.

17.4.5 Describe the contents of the management/cooperation plan. Does it consist of detailed measures or detailed guidelines? Give some examples of measures or guidelines advocated by the plan? (Enclose a copy).

It is planned that the Management Plan will contain in particular following chapters:

1) description of the main natural and cultural values and natural resources of the area with their current status;
2) overview of threats (activities, interests and processes);
3) long-term goals regarding the three functions of the Biosphere Reserve;
4) analysis and assessment of conditions for fulfilling these goals;
5) priority activities and measures regarding the fulfilling of the three functions of the Biosphere Reserve;
6) means of cooperation within the pentalateral UNESCO Mura-Drava-Danube Biosphere Reserve;
7) spatial identification of planned zones, purposes and regimes within the Biosphere Reserve;
8) activities related to the promotion of the Biosphere Reserve;
9) relevant documentation needed for the implementation of goals and activities;
10) methods and means of cooperation and partnership with local stakeholders;
11) activities and measures aimed at the implementation of the Plan, and the dynamics and subjects of the implementation;
12) method of evaluation of the success of implementation of the Plan;
13) budget needed for the implementation of the Plan and fundraising methods.

17.4.6 Indicate how this management/cooperation addresses the objectives of the proposed biosphere reserve (as described in section 13.1).

The proposed Management Plan structure responds very well to the objectives of the proposed Biosphere Reserve, which are structured to reaffirm and better connect all existing nature conservation and sustainable economy initiatives in this region. On the other hand, the Management Plan is designed to serve as a basic document only for the first 10 years of existence of the Biosphere Reserve, when all the structures and procedures will be initiated and when local actors are expected to build up not only the planned governance structures, but also strong commitments towards their strengthening.

The Management Plan is also focused on achieving the transboundary vision of the pentalateral Mura-Drava-Danube Biosphere Reserve, which is one of the fundamental aims of the entire nomination procedure for this Biosphere Reserve.

Local interests and various local visions contributing to all three functions of the Biosphere Reserve will be well presented in the Management Plan, as these are crucial in the successful implementation of the Biosphere Reserve provisions.

Finally, the management planning process and the Management plan, once adopted, will be an effective tool to minimize existing conflicts and tensions within the Biosphere Reserve, especially regarding land management and ownership.

17.4.7 Is the plan binding? Is it based on a consensus?

The plan will be completely based on consensus within the Coordination Council and the Stakeholder Forum. However, it will not be legally binding.

17.4.8 Which authorities are in charge of the implementation of the plan, especially in the buffer zone(s) and the transition area(s)? Please provide evidence of the role of these authorities.

The member organizations of the Coordination Council will be fully responsible for the implementation of a management plan. See Chapter 18.8 for an overview of the membership of the Coordination Council.

17.4.9 Which factors impede or help its implementation (e.g.: reluctance of local people, conflicts between different levels of decision-making).

It is expected that the existing management plans, spatial plans and nature conservation strategies functioning in the area will facilitate the implementation of this management plan due to similarities in their goals. Also, since both the Spatial Plan of the Republic of Serbia for the period 2010–2020 and the Regional Spatial Plan of the Autonomous Province of Vojvodina for the period 2010–2020 recognize the value and foresee the establishment of the proposed Biosphere Reserve, it is expected that both plans will strongly contribute to effective implementation of this Management Plan.

Possible obstacles that can occur in the implementation of the Management Plan include financial constraints and intersectoral conflicts between major nature resource users in the area. However, it is not expected that these will occur in the first planning period (10 years starting from the year of adoption of the Plan).

17.4.10 Is the biosphere reserve integrated in regional/national strategies? Vice versa, how are the local/municipal plans integrated in the planning of the biosphere reserve?

The Biosphere Reserve is fully integrated into the existing management planning. Its establishment is foreseen in the existing spatial (physical) plans, as follows:

- Spatial Plan of the Republic of Serbia (Act on the Spatial Plan of the Republic of Serbia for 2010–2020, Official Gazette of the Republic of Serbia no. 88/2010)
- Regional Spatial Plan of the Autonomous Province of Vojvodina (Official Gazette of Autonomous Province of Vojvodina no. 22/2011)
- Special Purpose Spatial Plan of Gornje Podunavlje Special Nature Reserve (Official Gazette of Autonomous Province of Vojvodina no. 13/2012)

All the relevant provisions regarding the three functions of the Biosphere Reserve envisaged in these plans will be integrated into the Biosphere Reserve Management Plan.

17.4.11 Indicate the main source of the funding and the estimated yearly budget.

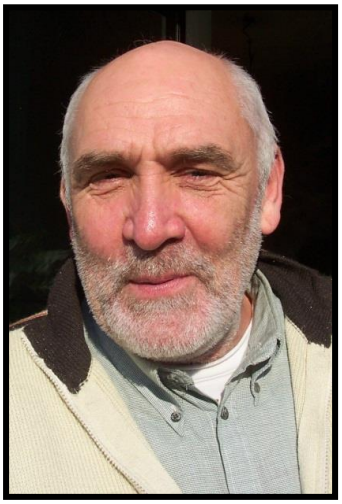
The main source of funding will be internationally funded projects granted as a result of the work of the Coordination Council, as well as contributions expected from the local self-governments, the Government of Autonomous Province of Vojvodina and the Government of the Republic of Serbia.

17.5 Conclusions:

17.5.1 In your opinion, what will ensure that both the functioning of the biosphere reserve and the structures in place will be satisfactory? Explain why and how, especially regarding the fulfilment of the three functions of biosphere reserves (conservation, development, logistic) and the participation of local communities.

The main driving force of the Biosphere Reserve will be a positive image of the creators of this idea, the set of commitments achieved during the consultation procedure that lasted for several years and the dedicated joint efforts of an international organization (WWF) and a Serbian conservation institution (Institute for Nature Conservation of Vojvodina Province).

Finally, it should be noted that three remarkable persons gave decisive and very important contributions to shaping the whole idea of the establishment of the Biosphere Reserve.



David Reeder (1945–2006)

David Reeder, serving as Senior Technical Advisor for the WWF Danube-Carpathian Programme, was passionate about the Drava and Danube since he came to Central Europe, where he was focused on developing ecotourism and other sustainable opportunities for local development. David was a very special person, a man who loved life, nature and people. The people of Bački Monoštor have special memories of David, the first non-native person who opened the eyes of the international public to the beauties and possibilities of Gornje Podunavlje and associated regions. Joining the similar alluvial floodplains spread across several Central European countries was his life's mission.

Dr. Martin Schneider-Jacoby (1956–2012)



Dr. Schneider worked for decades as a project manager in Euronatur – the private German Foundation of European Natural Heritage, and he dedicated most of his career to the area of the pentalateral Biosphere Reserve, the rich natural heritage it comprises and nature management which is aligned with the needs of wildlife. His professional and personal approach towards conservation of floodplain areas and the arguments he presented are already milestones for conservation practice in what will soon become a pentalateral Biosphere Reserve.

Their joint vision of non-bordered nature joined in a single unit along the Mura, Drava and Danube Rivers is what obliges us to implement this Biosphere Reserve.

Dragan Čalakić (1965-2016)



Dragan was geodetic technician who worked for the Institute for Nature Conservation of Vojvodina Province from 1986. He was famous among his colleagues as dedicated, precise, fast and reliable map-maker, working thru the years on various assignments in spatial planning, GIS, habitat mapping and various other mapping challenges. One of his brilliant works has been done in Gornje Podunavlje Reserve, where he participated in first ever EUNIS habitat mapping in Serbia (in 2006). Although very silent, his work in creation of maps, calculating surfaces and other otherwise time-consuming issues for his colleagues in the period of completing nomination form for part of 5-country Mura-Drava-Danube biosphere reserve, and Bačko Podunavlje proposed biosphere reserve within it was crucial.

18. SPECIAL DESIGNATIONS:

[Special designations recognize the importance of particular sites in carrying out the functions important in a biosphere reserve, such as conservation, monitoring, experimental research, and environmental education. These designations can help strengthen these functions where they exist or provide opportunities for developing them. Special designations may apply to an entire proposed biosphere reserve or to a site included within. They are therefore complementary and reinforcing of the designation as a biosphere reserve. Check each designation that applies to the proposed biosphere reserve and indicate its name]

Name:

( ) UNESCO World Heritage Site

(+) RAMSAR Wetland Convention Site Gornje Podunavlje

(+) Other international/regional conservation conventions/directives (specify)
Important Bird Area Gornje Podunavlje
Important Bird Area Karađorđevo
Important Plant Area Gornje Podubnavlje
Important Plant Area North Bačka I
Prime Butterfly Area Gornje Podunavlje
Ecologically Important Area Gornje Podunavlje
Ecologically Important Area Alkaline Meadows of North Bačka
Ecologically Important Area Karađorđevo
Emerald Network Site Gornje Podunavlje
Emerald Network Site Karađorđevo

( ) Long term monitoring site (specify)

() Long Term Ecological Research (LTER site)

( ) Other (specify)

19. SUPPORTING DOCUMENTS (to be submitted with nomination form):

(1) Location and zonation map with coordinates
[Provide the biosphere reserve's standard geographical coordinates (all projected under WGS 84).
Provide a map on a topographic layer of the precise location and delimitation of the three zones of the biosphere reserve (Map(s) shall be provided in both paper and electronic copies). Shapefiles (also in WGS 84 projection system) used to produce the map must also be attached to the electronic copy of the form. If applicable, also provide a link to access this map on the internet (e.g. Google map, website).]

Annex 1 Location and zonation map
Annex 1a Shape files

(2) Vegetation map or land cover map
[A vegetation map or land cover map showing the principal habitats and land cover types of the proposed biosphere reserve should be provided, if available].

Annex 2 Vegetation map or land cover map

(3) List of legal documents (if possible with English, French or Spanish synthesis of its contents and a translation of its most relevant provisions)
[List the principal legal documents authorizing the establishment and governing use and management of the proposed biosphere reserve and any administrative area(s) they contain. Provide a copy of these documents.

Annex 3. Ministerial Declaration on the Preparation of the Establishment of the Transboundary Biosphere Reserve Mura Drava Danube

Annex 4. Law on Nature Protection (Official Gazette 36/2009, 88/2010, 91/2010 and 14/2016)

Annex 5. Regulation on Ecological Network (Official Gazette 102/2010)

Annex 6. Regulation on the protection of Special Nature Reserve Gornje Podnavlje (Official Gazette 45/2001)
Annex 6a Regulation on amendments to the Regulation on protection of the Special Nature Reserve "Gornje Podunavlje" (Official Gazette 81/2008)
Annex 6b Regulation on amendments to the Regulation on protection of the Special Nature Reserve "Gornje Podunavlje" (Official Gazette 107/2009)

Annex 7. Decision on protection of the Nature park "Tikvara" (Official Gazette of the Municipality of Bačka palanka, no 4/2015,)

Annex 8. Decision on protection of the Natural monument "Šuma Junaković" (Official Gazette 11/2005)

Annex 9. Regulation on Protection of the Special Nature Reserve "Karadjordjevo" (Official Gazette 37/1997)

(4) List of land use and management/cooperation plans

[List existing land use and management/cooperation plans (with dates and reference numbers) for the administrative area(s) included within the proposed biosphere reserve. Provide a copy of these documents. It is recommended to produce English, French or Spanish synthesis of its contents and a translation of its most relevant provisions]

Annex 10. Summary Management Plan of Gornje Podunavlje Special Nature Reserve for the period 2010 to 2021

Annex 11. Management program of the angling area of Gornje Podunavljee Special Nature Reserve for the period 2012 to 2020

Annex 12. Summary Management Plan of Tikvara Nature Park

Annex 13. General Plan for the Management of Forests in north Bačka Forestry Division

(5) Species list (to be annexed)

[Provide a list of important species occurring within the proposed biosphere reserve, including common names, wherever possible.]

Annex 14. Species list

(6) List of main bibliographic references (to be annexed)

[Provide a list of the main publications and articles of relevance to the proposed biosphere reserve over the past 5-10 years].

Annex 15. List of main bibliographic references

(7) Original Endorsement letters according to paragraph 5

Annex 16. Endorsement letter Vojvodinašume Public Enterprise

Annex 17. Endorsement letter Morović Military Institution

Annex 18. Endorsement letter Tikvara Sport and Recreation Centre

Annex 19. Endorsement letter Ministry of Agriculture and Environmental Protection

Annex 20. Endorsement letter Provincial Secretariat for Urban planning, Construction and Environmental Protection

Annex 21. Endorsement letter City of Sombor

Annex 22. Endorsement letter Municipality of Apatin

Annex 23. Endorsement letter Municipality of Odžaci

Annex 24. Endorsement letter Municipality of Bač

Annex 25. Endorsement letter Municipality of Bačka Palanka

Annex 26. Endorsement letter Vode Vojvodine Public Water Management Company

(8) Further supporting documents.

Annex 27. Photo and video material

Annex 28. Tourist offers leaflets

Annex 29. Biosphere reserve coordinating council and stakeholder forum Terms of References

Annex 30. European Charter for Sustainable Tourism Certificate for the Special Nature Reserve Gornje Podunavlje

Annex 31. Strategy for Sustainable Tourism in the Special Nature Reserve Gornje Podunavlje

20. ADDRESSES:

20.1 Contact address of the proposed biosphere reserve:
[Government agency, organization, or other entity (entities) to serve as the main contact and to whom all correspondence within the World Network of Biosphere Reserves should be addressed.]

Name: **Institute for Nature Conservation of Vojvodina Province**
Street or P.O. Box: Radnička 20a, Fah 50
City with postal code: 21121 Novi Sad
Country: Serbia
Telephone: +381 21 4896-301
Fax: +381 (0)21 6616-252
E-mail: novi.sad@pzzp.rs
Web site: www.pzzp.rs

20.2. Administering entity of the core area(s):

Name: **Vojvodinašume Public Enterprise**
Street or P.O. Box: Preradovićeva 2
City with postal code: 21131 Petrovaradin
Country: Serbia
Telephone: +381 (0)21-431-144
Fax: +381 (0)21-6433-139
E-mail: info@vojvodinasume.rs
Web site: www.vojvodinasume.rs

Name: **Morović Military Institution**
Street or P.O. Box: Bosutska 8
City with postal code: 22245 Morović
Country: Serbia
Telephone: +381 (0)22-736-033
Fax: +381 (0)22-736-123
E-mail: office@vumorovic.rs
Web site: www.vumorovic.rs

Name: **Tikvara Sport and Recreation Centre**
Street or P.O. Box: Veselina Masleše bb
City with postal code: 21400 Bačka Palanka
Country: Serbia
Telephone: +381 (0)21-6041-333; +381 (0) 21-6043-083
Fax: +381 (0)21-751-789

E-mail: tikvarasrc@mts.rs
Web site: /

Name: **Ministry of Agriculture and Environmental Protection**
Street or P.O. Box: Omladinskih brigada 1
City with postal code: 11000 Belgrade
Country: Serbia
Telephone: +381 (0)11-3617-722
Fax: +381 (0)11-3617-588
E-mail: info@eko.minpolj.gov.rs
Web site: www.eko.minpolj.gov.rs

Name: **Provincial Secretariat for Urban Planning, Construction and Environmental Protection**
Street or P.O. Box: Bulevar Mihajla Pupina 16
City with postal code: 21000 Novi Sad
Country: Serbia
Telephone: +381(0)21-4874-590 ; +381(0)21- 4874-719
Fax: +381 (0)21-457-737; +381(0)21- 456-238
E-mail: ekolog@vojvodina.gov.rs
Web site: www.vojvodina.gov.rs

20.3. Administering entity of the buffer zone(s):

Name: **Vojvodinašume Public Enterprise**
Street or P.O. Box: Preradovićeva 2
City with postal code: 21131 Petrovaradin
Country: Serbia
Telephone: +381 (0)21-431-144
Fax: +381 (0)21-6433-139
E-mail: info@vojvodinasume.rs
Web site: www.vojvodinasume.rs
Name: **Vode Vojvodine Public Water Management Company**
Street or P.O. Box: Bulevar Mihajla Pupina 25
City with postal code: 21000 Novi Sad
Country: Serbia
Telephone: +381(0)21- 4881-888
Fax: +381 (0)21-557-353
E-mail: office@vodevojvodine.rs
Web site: www.vodevojvodine.com

Name: **Provincial Secretariat for Urban Planning, Construction and Environmental Protection**
Street or P.O. Box: Bulevar Mihajla Pupina 16
City with postal code: 21000 Novi Sad
Country: Serbia
Telephone: +381(0)21-4874-590 ; +381(0)21- 4874-719
Fax: +381 (0)21-457-737; +381(0)21- 456-238
E-mail: ekolog@vojvodina.gov.rs
Web site: www.vojvodina.gov.rs

Name: **City of Sombor** (Mayor's Office)
Street or P.O. Box: Trg cara Uroša 1
City with postal code: 25000 Sombor
Country: Serbia
Telephone: +381 (0)25-468-111
Fax: +381 (0)25-466-000
E-mail: gradonacelnik@sombor.rs; info@sombor.rs
Web site: www.sombor.rs

Name: **Municipality of Apatin** (Municipal Head's Office)
Street or P.O. Box: Srpskih vladara 29
City with postal code: 25260 Apatin
Country: Serbia
Telephone: +381 (0)25-773-131
Fax: +381 (0)25-773-212
E-mail: kabinet@soapatin.org
Web site: www.soapatin.org

Name: **Municipality of Odžaci** (Municipal Head's Office)
Street or P.O. Box: Knez Mihajlova 24
City with postal code: 25250 Odžaci
Country: Serbia
Telephone: +381 (0)25 466-000
Fax: +381 (0)25-5742-396
E-mail: protokol025@gmail.com
Web site: www.odzaci.rs

Name: **Municipality of Bač** (Municipal Head's Office)
Street or P.O. Box: Trg dr Zorana Đinđića 3
City with postal code: 21420 Bač
Country: Serbia

Telephone: +381 (0) 21 770-075
Fax: +381 (0)21-770-330
E-mail: info@bac.rs, predsednik@bac.rs
Web site: www.bac.rs

Name: **Municipality of Bačka Palanka** (Municipal Head's Office)
Street or P.O. Box: Kralja Petra I 16
City with postal code: 21400 Bačka Palanka
Country: Serbia
Telephone: +381 (0)21-2101-192
Fax: +381 (0)21-6045-587
E-mail: info@backapalanka.org.rs
Web site: www.backapalanka.rs

20.4. Administering entity of the transition area(s):

Name: **Ministry of Agriculture and Environmental Protection**
Street or P.O. Box: Omladinskih brigada 1
City with postal code: 11000 Belgrade
Country: Serbia
Telephone: +381(0)11-3131-357, Fax: +381(0)11-3131-394
E-mail: info@eko.minpolj.gov.rs
Web site: www.eko.minpolj.gov.rs

Name: **Provincial Secretariat for Urban Planning, Construction and Environmental Protection**
Street or P.O. Box: Bulevar Mihajla Pupina 16
City with postal code: 21000 Novi Sad
Country: Serbia
Telephone: +381(0)21-4874-590 ; +381(0)21- 4874-719
Fax: +381 (0)21-457-737; +381(0)21- 456-238
E-mail: ekolog@vojvodina.gov.rs
Web site: www.vojvodina.gov.rs

Name: **Vode Vojvodine Public Water Management Company**
Street or P.O. Box: Bulevar Mihajla Pupina 25
City with postal code: 21000 Novi Sad
Country: Serbia
Telephone: +381(0)21- 4881-888
Fax: +381 (0)21-557-353
E-mail: office@vodevojvodine.rs

Web site: www.vodevojvodine.com

Name: **City of Sombor** (Mayor's Office)
Street or P.O. Box: Trg cara Uroša 1
City with postal code: 25000 Sombor
Country: Serbia
Telephone: +381 (0)25-468-111
Fax: +381 (0)25-468-116
E-mail: gradonacelnik@sombor.rs; info@sombor.rs
Web site: www.sombor.rs

Name: **Municipality of Apatin** (Municipal Head's Office)
Street or P.O. Box: Srpskih vladara 29
City with postal code: 25260 Apatin
Country: Serbia
Telephone: +381 (0)25-772-122
Fax: +381 (0)25-773-212
E-mail: kabinet@soapatin.org
Web site: www.soapatin.org

Name: **Municipality of Odžaci** (Municipal Head's Office)
Street or P.O. Box: Knez Mihajlova 24
City with postal code: 25250 Odžaci
Country: Serbia
Telephone: +381 (0)25 466-000
Fax: +381 (0)25-5742-396
E-mail: protokol025@gmail.com
Web site: www.odzaci.rs

Name: **Municipality of Bač** (Municipal Head's Office)
Street or P.O. Box: Trg dr Zorana Đinđića 3
City with postal code: 21420 Bač
Country: Serbia
Telephone: +381 (0) 21 770-075
Fax: +381 (0)21-770-330
E-mail: info@bac.rs, predsednik@bac.rs
Web site: www.bac.rs

Name: **Municipality of Bačka Palanka** (Municipal Head's Office)
Street or P.O. Box: Kralja Petra I 16

City with postal code: 21400 Bačka Palanka
Country: Serbia
Telephone: +381 (0)21-2101-192
Fax: +381 (0)21-6045-587
E-mail: sekretarica@backapalanka.org.rs
Web site: www.backapalanka.rs

Annex I to the Biosphere Reserve Nomination Form, January 2013
MABnet Directory of Biosphere Reserves
Biosphere Reserve Description[1]

Administrative details

Country: Serbia
Name of BR: Bačko PodunavljeMura-Drava-Danube
Year designated: (*to be completed by MAB Secretariat)*
Administrative authorities: (17.1.3)

Zone	Competent administrative authority/ies
Core zone	Vojvodinašume Public Enterprise Morović Military Institution Tikvara Sport and Recreation Centre Ministry of Agriculture and Environmental Protection Provincial Secretariat for Urban Planning, Construction and Environmental Protection
Buffer zone	Provincial Secretariat for Urban Planning, Construction and Environmental Protection Vojvodinašume Public Enterprise Vode Vojvodine Public Water Management Company City of Sombor Municipality of Apatin Municipality of Odžaci Municipality of Bač Municipality of Bačka Palanka
Transition area	Ministry of Agriculture and Environmental Protection Provincial Secretariat for Urban Planning, Construction and Environmental Protection Vode Vojvodine Public Water Management Company City of Sombor Municipality of Apatin Municipality of Odžaci Municipality of Bač Municipality of Bačka Palanka Private land owners Hunting associations

[1] To be posted on the MABnet once the nomination has been approved. The numbers refer to the relevant sections of the nomination form.

Name Contact: (20.1) Institute for Nature Conservation of Vojvodina Province

Contact address: *(Including phone number, postal and email adresses)* (20.1)

Street or P.O. Box: Radnička 20a, Fah 50
City with postal code: 21121 Novi Sad
Country: Serbia
Telephone: +381 21 4896-301
Fax: +381 (0)21 6616-252
E-mail: novi.sad@pzzp.rs
Web site: www.pzzp.rs

Related links: *(web sites)*

Social networks**:** (16.4.3)

www.amazon-of-europe.com
www.pzzp.rs
www.wwf.rs

Description

General description: *(Site characteristics in 11.1; human population in 10)*

Approximately 25 lines
The proposed Biosphere Reserve is situated in the northwestern part of the Republic of Serbia and its Autonomous Province of Vojvodina. It lies within two administrative counties: West Bačka (City of Sombor, Municipalities of Apatin and Odžaci) and South Bačka (Municipalities of Bač and Bačka Palanka). It partly follows the state borders of Serbia with Croatia and Hungary.

Situated mainly in recent and historical alluvial zones of the central Danube plain (on the left bank), and influenced primarily in its natural development by the Danube waters (frequent floods) and later by intensive human activities, the proposed Biosphere Reserve today is a mosaic composed mainly of remnants of historic floodplains and man-made landscapes influenced by agriculture and human settlements. The floodplain includes alluvial forests (partly regularly flooded), marshes, reed beds, freshwater habitats, alluvial wetlands, as well as flood-protected forests with significantly changed hydrology dynamics. Agricultural complexes also include fragments of natural habitats, including courses of the small Plazović River (total: 192 km, mostly in Hungary, in Serbia 37 terminal kilometers) and Mostonga River (length: 70 km, but mostly canalized), but also melioration canals and, finally, settlements.

The area of the proposed Biosphere Reserve has 147,405 inhabitants in 26 settlements (all of which lie in the transitional area).The largest concentration of inhabitants is in the City of Sombor (northern part of the proposed Biosphere Reserve) and in the Municipality of Bačka Palanka (southern part of the proposed Biosphere Reserve). The size of the urban population is 98,672 people, while 48,733 people live in villages.

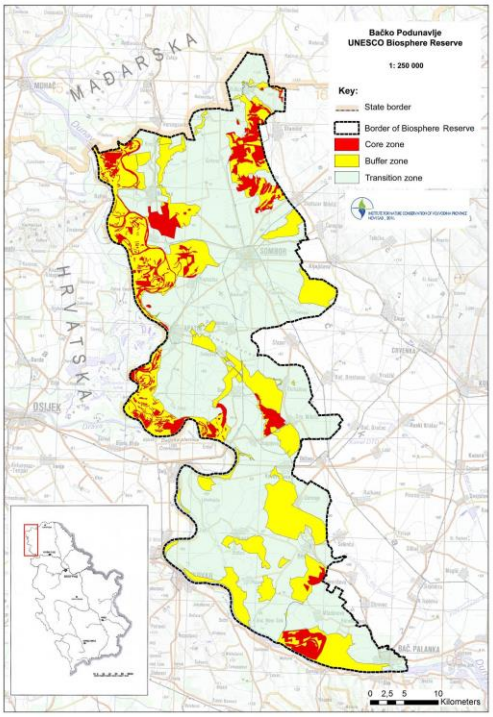
The ethnic structure of the inhabitants is very complex, making this one of the main demographic and

cultural features of the whole region. Around 20 different ethnic groups live in the Biosphere Reserve, with Serbs, Hungarians and Croats prevailing. Alongside them, other ethnic groups include Slovaks, Ruthenians, Ukrainians, Bunjevci, Roma and others. The ethnic spectrum is the result of numerous colonisations (which have occurred in this area over the past centuries), political systems and countries. The dominant economic activities are agriculture, forestry and industry, which employ the largest number of people.

Major ecosystem type: Broad-leaved floodplain forests with inland marshes
Major habitats & land cover types: Inland wetlands, Pastures, Water bodies, Water courses, Broad-leaved forest
Bioclimatic zone: semi-arid bio-climatic zone
Location (latitude & longitude):

Cardinal points:	**Latitude**	**Longitude**
Most central point:	45.811824	18.960779
Northernmost point:	46.040225	19.109762
Southernmost point:	45.234232	19.435681
Westernmost point:	45.908748	18.821004
Easternmost point:	45.239374	19.435540

Total Area (ha): 176,636 ha
Core area*(s):* 11,242 ha
Buffer zone*(s):* 45,744 ha
Transition area*(s)* 119,649 ha
Different existing zonation: (7.4)
Altitudinal range *(*metres above sea level): 81-107 m
Zonation map(s): (6.2)



Main objectives of the biosphere reserve
Brief description (13.1)

The proposed Biosphere Reserve primarily aims to: contribute to the safeguarding of biological diversity, maintain and develop high cultural diversity of the area, integrate local knowledge on nature, create ties between the local populations and promote the Danube as their common heritage, secure ecosystem services for the local communities, contribute to innovation in the management of areas with high natural and cultural values, and to initiate dialogue among the range of stakeholders.

Research
Brief description (16.1.1)

Approximately 5 lines
A range of research projects implemented in the proposed Biosphere Reserve have focused on wildlife ecology (flagship species such as White-tailed Eagle or Black Stork), socio-economic studies (development of local tourism), forestry (health status of forest stands, climatic adaptations) and cultural features (cultural heritage). These projects were implemented by public institutions (i.e. Institute for Nature Conservation of Vojvodina Province), universities and NGOs, with the support of regional and national governments, and of international donors.

Monitoring
Brief description (16.1.1)

Permanent stations that exist in the area monitor meteorological parameters and ambiental air quality (both in Sombor). Other monitoring activities are devoted to charismatic and key species of vertebrates, serving as indicators of the sustainability of forest management and which are of international conservation importance.

Specific variables (fill in the table below and tick the relevant parameters)

Abiotic		Biodiversity	
Abiotic factors	X	Afforestation/Reforestation	
Acidic deposition/Atmospheric factors	X	Algae	
Air quality	X	Alien and/or invasive species	X
Air temperature	X	Amphibians	X
Climate, climatology	X	Arid and semi-arid systems	X
Contaminants	X	Autoecology	X
Drought	X	Beach/soft bottom systems	
Erosion	X	Benthos	
Geology	X	Biodiversity aspects	X
Geomorphology	X	Biogeography	

Abiotic		Biodiversity	
Geophysics		Biology	X
Glaciology		Biotechnology	
Global change		Birds	X
Groundwater	X	Boreal forest systems	
Habitat issues	X	Breeding	X
Heavy metals		Coastal/marine systems	
Hydrology	X	Community studies	X
Indicators	X	Conservation	X
Meteorology	X	Coral reefs	
Modeling		Degraded areas	
Monitoring/methodologies	X	Desertification	
Nutrients	X	Dune systems	X
Physical oceanography		Ecology	X
Pollution, pollutants	X	Ecosystem assessment	X
Siltation/sedimentation	X	Ecosystem functioning/structure	X
Soil	X	Ecosystem services	X
Speleology		Ecotones	
Topography		Endemic species	
Toxicology		Ethology	
UV radiation		Evapotranspiration	
		Evolutionary studies/Palaeoecology	
		Fauna	X
		Fires/fire ecology	
		Fishes	X
		Flora	X
		Forest systems	X
		Freshwater systems	X
		Fungi	
		Genetic resources	X
		Genetically modified organisms	
		Home gardens	
		Indicators	X
		Invertebrates	X
		Island systems/studies	X
		Lagoon systems	
		Lichens	
		Mammals	X
		Mangrove systems	
		Mediterranean type systems	
		Microorganisms	
		Migrating populations	X
		Modeling	
		Monitoring/methodologies	X
		Mountain and highland systems	
		Natural and other resources	X
		Natural medicinal products	
		Perturbations and resilience	

Abiotic		Biodiversity	
		Pests/Diseases	
		Phenology	
		Phytosociology/Succession	X
		Plankton	
		Plants	X
		Polar systems	
		Pollination	X
		Population genetics/dynamics	
		Productivity	
		Rare/Endangered species	X
		Reptiles	X
		Restoration/Rehabilitation	X
		Species (re) introduction	X
		Species inventorying	X
		Sub-tropical and temperate rainforest systems	
		Taxonomy	
		Temperate forest systems	X
		Temperate grassland systems	X
		Tropical dry forest systems	
		Tropical grassland and savannah systems	
		Tropical humid forest systems	
		Tundra systems	
		Vegetation studies	X
		Volcanic/Geothermal systems	
		Wetland systems	X
		Wildlife	X

Socio-economic		Integrated monitoring	
Agriculture/Other production systems	X	Biogeochemical studies	
Agroforestry	X	Carrying capacity	
Anthropological studies	X	Climate change	X
Aquaculture	X	Conflict analysis/resolution	X
Archaeology	X	Ecosystem approach	X
Bioprospecting		Education and public awareness	X
Capacity building	X	Environmental changes	X
Cottage (home-based) industry		Geographic Information System (GIS)	X
Cultural aspects	X	Impact and risk studies	
Demography	X	Indicators	X
Economic studies	X	Indicators of environmental quality	
Economically important species		Infrastructure development	
Energy production systems	X	Institutional and legal aspects	X
Ethnology/traditional practices/knowledge	X	Integrated studies	
Firewood cutting	X	Interdisciplinary studies	
Fishery	X	Land tenure	X
Forestry	X	Land use/Land cover	X

Socio-economic		Integrated monitoring	
Human health		Landscape inventorying/monitoring	
Human migration		Management issues	X
Hunting	X	Mapping	X
Indicators	X	Modelling	
Indicators of sustainability	X	Monitoring/methodologies	X
Indigenous people's issues		Planning and zoning measures	
Industry	X	Policy issues	X
Livelihood measures		Remote sensing	
Livestock and related impacts	X	Rural systems	X
Local participation	X	Sustainable development/use	X
Micro-credits		Transboundary issues/measures	X
Mining		Urban systems	
Modelling		Watershed studies/monitoring	X
Monitoring/methodologies	X		
Natural hazards			
Non-timber forest products			
Pastoralism	X		
People-Nature relations	X		
Poverty			
Quality economies/marketing	X		
Recreation	X		
Resource use	X		
Role of women	X		
Sacred sites	X		
Small business initiatives	X		
Social/Socio-economic aspects	X		
Stakeholders' interests	X		
Tourism	X		
Transports			

Annex II to the Biosphere Reserve Nomination Form, January 2013
Promotion and Communication Materials
For the Proposed Biosphere Reserve

Provide some promotional material regarding the proposed site, notably high quality photos, and/or short videos on the site so as to allow the Secretariat to prepare appropriate files for press events. To this end, a selection of photographs in high resolution (300 dpi), with photo credits and captions and video footage (rushes), without any comments or sub-titles, of professional quality – DV CAM or BETA only, will be needed.

In addition, return a signed copy of the following Agreement on Non-Exclusive Rights. A maximum of ten (10) minutes on each biosphere reserve will then be assembled in the audiovisual section of UNESCO and the final product, called a B-roll, will be sent to the press.

ANNEX 1

Location and zonation map

Bačko Podunavlje
UNESCO Biosphere Reserve

1: 250 000

Key:

- State border
- Border of Biosphere Reserve
- Core zone
- Buffer zone
- Transition zone

INSTITUTE FOR NATURE CONSERVATION OF VOJVODINA PROVINCE
NOVI SAD , 2016.

MAĐARSKA

HRVATSKA

SOMBOR

APATIN

OSIJEK

CRVENKA

BAČ. PALANKA

Odžaci

Kijajićevo

Bač. Brestovac

Stanišić

Svetozar Miletić

Čonoplja

Ruski Krstur

Kucura

Sivac

Stapar

Doroslovo

Srp. Miletić

Bač. Gračac

Kanal DTD

Gakovo

Bogojevo

Hercegsanto

Bačsentđerđ

Ridica

Davod

Mohač

Batina

Bilje

Darda

Beli Manastir

Bijelo Brdo

Erdut

Daljska planina

Kupusina

Lugumerci

Žarkovac

Ratkovo

Pivnice

Despotovo

Parage

Silbaš

Selenča

Bačko Petrovo Selo

Bač. Novo Selo

Obrovac

Mladenovo

Gajdobra

Maglić

Sotin

Bačko Gradište

Deronje

Šidski Banovci

Bapska

Šarengrad

Ilok

Neštin

Susek

Celarevo

Petrovci

Negoslavci

Opatovac

Miklušević

Tompojevci

Čakovci

Berak

Slakovci

Lovas

Bokšić

Beletovci

Tenja

Antunovac

Ernestinovo

Vera

Drava

Dunav

Kamenjak

Zmajevac

Branjina

Batina

Čeminac

Kelked

Dunasekče

Dunafalva

Bočboršod

Madaraš

Kačmar

Gara

Čataja

Načbaračka

Hercegsanto

Hoduna

Erdefi

Dubošević

Topolje

Gajić

Draž

Kamenjak

Kotlina

Suza

Kamenac

Karanac

Knežev Vinogradi

Mirkovac

Zlatna Greda

Sokolovac

Grabovo

Tikveš

Lug

Čeminac

Darda

Bilje

Kopačevo

Vardarac

Sarvaš

Aljmaš

Ćvorkovac

Brijest

Antunovac-Tenjski

Klisa

Vera

Labudnjača

Živa

Bodani

Plavna

Jakobovac

Čvčara

Petrovci

Negoslavci

Grabovo

Miklušević

Tompojevci

Čakovci

Berak

Slakovci

Urolik

Bokšić

Šidski Banovci

Beletovci

Bapska

Šarengrad

Lovas

Ilok

Neštin

Susek

Celarevo

Mohovo

Opatovac

Bač. Novo Selo

Mladenovo

Obrovac

Gajdobra

N. Gajdobra

Maglić

Silbaš

Parage

St. Pustara

Selenča

Bač. Petrovo Selo

Ratkovo

Pivnice

Despotovo

Sivac

N. Crvenka

Lipar

Duboka

Sr. Salaši

Kijajićevo

Žarkovac

Kupusina

Bukovac

Lugumerci

Deronje

Gakovo

Nenadić

Telečka

G. Rogatica

Kačmar

Madaraš

Ridica

Bačsentđerđ

Davod

Hercegsanto

Hoduna

Stanišić

Bač. Brestovac

Kruščić

Doroslovo

Srp. Miletić

Bač. Gračac

Ruski Krstur

Kucura

Odžaci

Lalić

Stapar

CRVENKA

Svilojevo

Rimski šanac

Mali kanal

Kanal Karavukovo–Bač. Petrovac

Kanal Karavukovo–Bač

Mostonga

Žarkovac

Ratkovo

Pivnice

Despotovo

Parage

Selenča

Silbaš

St. Pustara

Maglić

Gajdobra

N. Gajdobra

Obrovac

Mladenovo

Bač. Novo Selo

Bač. Petrovo Selo

Kovačevo

Jakobovac

Čvčara

Sotin

Petrovci

Negoslavci

Grabovo

Miklušević

Tompojevci

Čakovci

Berak

Slakovci

Urolik

Bokšić

Šidski Banovci

Beletovci

Bapska

Šarengrad

Lovas

Ilok

Neštin

Susek

Celarevo

Mohovo

Opatovac

Bač. Palanka

Bač. Gračac

Ruski Krstur

Kucura

Odžaci

Lalić

Srp. Miletić

Bogojevo

Doroslovo

Bač. Brestovac

Kruščić

Stanišić

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Čonoplja

Telečka

Kijajićevo

Žarkovac

Kupusina

Bukovac

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Draž

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Karanac

Knežev Vinogradi

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Lug

Čeminac

Darda

Bilje

Kopačevo

Vardarac

Sarvaš

Aljmaš

Ćvorkovac

Brijest

Antunovac-Tenjski

Klisa

Vera

Labudnjača

Živa

Bodani

Plavna

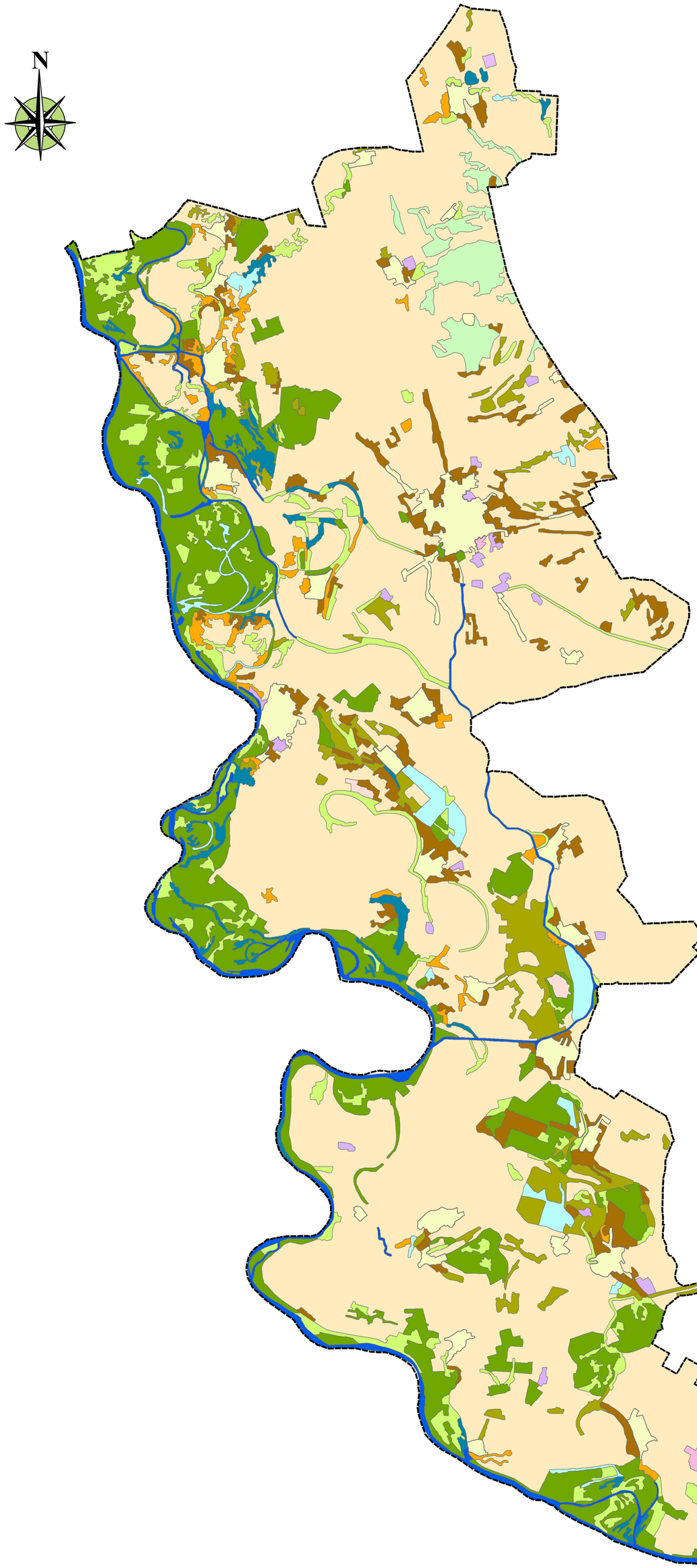
Jakobovac

Čvčara

ANNEX 2

Vegetation map or land cover map

Bačko Podunavlje
UNESCO Biosphere Reserve



CORINE Habitat Types
Code and Description

0 2,5 5 10 15 20 Km

1: 150 000

Key:

- Discontinuous urban fabric
- Industrial or commercial units
- Inland marshes
- Non-irrigated arable land
- Pastures
- Land principally occupied by agriculture, with signicifant areas of natural vegetation
- Transtional woodland - scrub
- Natural grasslands
- Complex cultivation patterns
- Sport and leisure facilities
- Vineyards
- Fruit trees and berry plantations
- Water bodies
- Water courses
- Broad-leaved forests

INSTITUTE FOR NATURE CONSERVATION OF VOJVODINA PROVINCE
NOVI SAD , 2016.

ANNEX 3

Ministerial Declaration on the Preparation of the Establishment of TBR MDD_2011

Ministerial Declaration

on the preparation of the establishment of the

"Mura-Drava-Danube Transboundary Biosphere Reserve" (MDD-TBR)

The Federal Minister of Agriculture, Forestry, Environment and Water Management of the Republic of Austria,

The Minister of Culture of the Republic of Croatia,

The Minister of Rural Development of the Republic of Hungary,

The Minister of Environment, Mining and Spatial Planning of the Republic of Serbia,

The Minister of the Environment and Spatial Planning of the Republic of Slovenia,

Reaffirming their commitment to the objectives of the Convention on Biological Diversity, especially to CBD COP 7, Decision VII/28 and its annexed Programme of Work on Protected Areas, and to CBD COP 9, Decision IX/19 on Protected Areas, paragraph 6, inviting parties to the CBD to establish, in accordance with their national legislation, transboundary protected areas and, as appropriate, ecological networks,

Recalling the Seville Strategy and the Statutory Framework of the World Network of Biosphere Reserves, both adopted at the general conference of UNESCO in 1995,

Recalling the Madrid Action Plan agreed on the Third World Congress of the Biosphere Reserves which builds on the Seville Strategy and aims to raise biosphere reserves to be the principal internationally designated areas dedicated to sustainable development in the 21st century,

Recalling the adoption of the Ramsar Convention´s Strategic Plan 2009-2015 in Resolution X.1 of Ramsar COP 10 in Changwon, Korea, suggesting to enhance the conservation and wise use of wetlands using effective international cooperation for transboundary wetlands, and proposing additional partnerships between parties and UNEP, UNDP, UNECE (the Water Convention), UNESCO, the World Tourism Organization (WTO) and others, especially in the implementation of Ramsar Resolution VII.19 on Guidelines for international cooperation,

Regarding the "Changwon Declaration on human well-being and wetlands", adopted by the 10th Conference of the Parties to the Convention on Wetlands (Ramsar, Iran 1971) in Changwon, Republic of Korea (28.Oct.-4.Nov.2008) as Resolution X.3, which states that the degradation and loss of wetlands is more rapid than that of other ecosystems and that there is an urgent need to improve water governance and integrated water management at the scale of river basins and that interrelationships between wetlands and human health should be a key component of national and international policies, plans and strategies,

Recalling the Declaration concerning common approaches to water management, flood protection, hydropower utilization and nature and biodiversity conservation in the Drava River Basin ("Drava River Declaration"), signed as a full support to the Drava River Vision Symposium, Maribor, 24 September 2008, by the Danube River Basin States Austria, Croatia, Hungary and Slovenia, and adopted by the Participants of the Drava River Vision Symposium,

Recalling the Danube Declaration adopted at the Ministerial meeting of the International Commission for the Protection of the Danube River (ICPDR) on February 16, 2010 on shared waters and joint responsibilities in the Danube River Basin,

Recalling with appreciation the results of the Croatian-Hungarian cooperation in the field of environment and nature conservation, particularly the Joint Declaration on the establishment of the Croatian-Hungarian Transboundary Biosphere Reserve, signed on 17 September 2009 in Barcs,

Noting with appreciation the support from the UNESCO and from the international, such as WWF and EuroNatur as well as national and local non-governmental organizations, for the establishment of a Transboundary Biosphere Reserve along the Mura-Drava-Danube river system,

Noting further that certain areas of the Mura-Drava-Danube region have already been included into the Ramsar Convention´s list of wetlands of international importance, as well as into the Natura 2000 network of the European Union and the Emerald network of Europe,

Recognizing the EU legal requirements on water, nature protection and the challenges of climate change as provided among others by the EU Water Framework Directive, Floods Directive, Habitats and Birds Directives,

Desiring to enhance communication and exchange of information relevant to the conservation and sustainable use of the area concerned,

Stressing the importance of implementing joint strategies for conservation and sustainable use of the protected areas, the Natura 2000 network, Ramsar sites and other wetlands in the Mura-Drava-Danube region,

Recognizing that the MDD-TBR has a strong potential for promoting the sustainable development such as eco-tourism on the basis of awareness raising and environmental education in the concerned regions, and that the life of people living in this river system will benefit directly and indirectly by the establishment of this reserve,

1. Building on the existing internationally and nationally designated protected areas and networks, endeavour to establish the Mura-Drava-Danube Transboundary Biosphere Reserve (MDD-TBR) along the 5 countries (Austria, Croatia, Hungary, Serbia, Slovenia), aiming at the conservation and restoration of the natural and semi-natural status of their habitats and ecosystems in the cross-border area.

2. Decide, for this purpose, to cooperate both bilaterally and multilaterally, building on all relevant, existing or future framework of cooperation such as the existing Croatian –Hungarian intergovernmental sub-committee for nature conservation and other bilateral and multilateral commissions on water management and nature conservation in order to improve, harmonize and sustain their management of a shared ecosystem.

3. Decide, in order to prepare the establishment of the MDD-TBR and enhance the exchange of information, to set up a Coordination Board of 15 members. Each Minister will nominate three members for the Coordination Board and one contact person for national coordination and communication. The Coordination Board will be convened as required, but at least once every year, and chaired by a member representing a Minister, on the basis of a rotation principle. Non-governmental organisations and other observers will be invited to the Coordination Board meetings.

The Coordination Board, deciding by consent, will

- coordinate the next steps to achieve the Biosphere Reserve status for the Mura-Drava-Danube River system,

- coordinate the cooperation aiming at the declaration of a pentalateral MDD-TBR according to the criteria of the „Man and Biosphere MAB-Programme" of UNESCO, and promote joint measures for the conservation, restoration and sustainable use of that site,

- promote measures to make the MDD-TBR function effectively in accordance with UNESCO recommendations,

- promote common activities to increase support and common understanding for the MDD-TBR, support the development of common conservation and restoration projects, and investigate funding sources for their implementation,

- identify key issues for the cooperation in the conservation and sustainable use of the Mura-Drava-Danube river system,

- elaborate and approve the rules of procedure for the Coordination Board,

- once the MDD-TBR is established, work out the proposal for framework of future cooperation.

4. Affirm their intention to make available, in accordance with their national legislation, all relevant documents and information that may be necessary for the designation of the pentalateral MDD-TBR and for the development of common principles and guidelines for a harmonized management.

5. Endeavour to make all effort to enhance and facilitate research, monitoring, communication and exchange of information relevant to the conservation and sustainable use of the area concerned.

6. Endeavour to promote the co-operation of the MDD-TBR national management units with local communities for the benefit of sustainable development, taking into account the UNESCO Seville Strategy, thereby offering an opportunity to improve the ecosystem-based management of the floodplain area adapted to the local conditions, supporting the livelihood and the availability of ecosystem services for the local communities, and at the same time ensuring the conservation of natural values of the alluvial area.

7. Note that nothing in this Declaration or its subsequent document shall prejudice in any manner the delimitation between the State Signatories.

Done on 25 March 2011 in Budapest in five originals in the English language.

.....
Nikolaus Berlakovich
Minister for Agriculture, Forestry, Environment
and Water Management
Republic of Austria

.....
Jasen Mesić
Minister of Culture
Republic of Croatia

.....
Sándor Fazekas
Minister of Rural Development
Republic of Hungary

.....
Oliver Dulić
Minister of Environment, Mining and Spatial Planning
Republic of Serbia

.....
Roko Žarnić
Minister of the Environment and Spatial Planning
Republic of Slovenia

ANNEX 4

Law on Nature Protection

LAW ON

NATURE PROTECTION

("Official Gazette of RS", no. 36/2009, 88/2010 and 91/2010 – corr. and 14/2016)

I. BASIC PROVISIONS

Subject of the Law

Article 1

This Law shall govern protection and conservation of nature and biological, geological and landscape diversity as part of the environment.

The nature, as an asset of general interest for the Republic of Serbia shall enjoy special protection in accordance with this Law and special laws.

Objectives of the Law

Article 2

The following objectives shall be achieved by this Law:

1) protection, conservation and improvement of biological (genetic, species and ecosystems), geological and landscape diversity;

2) harmonization of human activities, economic and social development plans, programmes, bases and projects with a sustainable use of renewable and non-renewable natural resources and long-term conservation of natural ecosystems and natural equilibrium;

3) sustainable use and/or management of natural resources and goods, securing their function along with the conservation of natural values and the equilibrium of natural ecosystems;

4) timely prevention of human activities and operations that can lead to permanent impoverishment of biological, geological and landscape diversity, as well as disturbances with negative consequences in the nature;

5) establishment and monitoring of the nature state;

6) improvement of the state of disturbed parts of nature and landscapes.

Application of the Law

Article 3

Provisions of this Law shall not apply in case of supressing or preventing an immediate threat to human life or health or property, rescuing people and property, and this only in the duration of the said circumstances established by a special legal document by the competent authority.

Meaning of Expressions

Article 4

Certain expressions used in this Law have the following meaning:

1) *activity in the nature* is any temporary or permanent human impact on the nature which can disturb the natural equilibrium, unless that action has the purpose of protecting and conserving the nature;

2) *an allochthonous species* is a species that came into ecosystems on the territory of the Republic of Serbia by intentional or accidental introduction;

3) *an autochthonous species* is a species that is naturally present in ecosystems within the territory of the Republic of Serbia;

4) *biological diversity (biodiversity)* is the total amount of genes, species and ecosystems on the Earth or within a clearly defined area;

5) *a species* is a basic taxonomic category representing a group of reproductively isolated organisms (microorganisms, algae, fungi, lichen, plants and animals), i.e. populations that freely interbreed and produce fertile offspring, and, within the meaning of this Law, it also relates to lower systematic categories, unless stated otherwise.

6) *geological diversity (geodiversity)* is the presence or distribution of diverse geological elements and formations, geological structures and processes, geochronological units, rocks and minerals of different composition and origin and various paleoecosystems changed within an area under the impact of internal and external geodynamical factors during geological time;

7) *a geopark* is a geographical area with clearly established boundaries and covering sufficiently large area, which contains a great number of geological localities of special scientific, aesthetic and educational interest, where geological heritage is protected and promoted through sustainable development and exploitation;

7a) geoprotection (geoconservation) is a collection of measures and activities implemented with the aim of protection, conservation, presentation and promotion of geodiversity and geoheritage;

7b) geoheritage objects are rare, geologically representative, pedological and geomorphological formations, events and processes distinguished as special natural values of exceptional scientific, cultural, aesthetic, touristic and other importance;

7c) *movable geoheritage objects* (*ex situ* geoheritage objects) are individual geological formations and events: samples of rocks, minerals and ores, fossil specimens (museums, exhibitions, workshops, lectures, collections, films etc.);

7d) *immovable geoheritage objects* (*in situ* geoheritage objects) are part of an area with clearly distinct geological, geomorphological and pedological characteristics: geological profiles and outcrops, formations of surface and underground relief, types of soil (natural surroundings, natural monuments, phenomena and events);

8) *fossil genotype* is the typical species for certain fossil genus that all individuals within that type of genus belong to, and which corresponds to the holotype;

9) *genetic diversity* is the total number and the total diversity of genes, i.e. genetic information contained within each individual species of plants, animals, fungi and microorganisms;

10) a *gene pool* is a total number of genes or the volume of genetic information possesed by all members of a sexually or asexually reproducing organisms population;

11) *genetic material* is any material of plant, animal, microbe or other origin containing functional inheritance units;

12) a *derivative* is any processed part of an animal, plant, fungi, as well as their organic or inorganic product;

13) *wild species* are all species of animals, plants and fungi naturally evolved, including hybrids and all specimens bred in captivity or under artificial conditions, except domesticated breeds whose evolutionary process was influenced by man for his own needs;

14) *mineral druses* are the crystals that emerge as a group of the same or different species located on one base;

15) *registered natural goods* are areas, species and mobile natural documents of importance for protection, for which the protection procedure has still not been initiated or carried out;

16) *(deleted)*

16a) *important ecological areas of the European Union NATURA 2000* are special areas for conservation of habitats and species and areas of special protection for conservation of habitats and certain species of birds, in compliance with the EU regulations on habitat and birds protection;

17) *ecological corridor* is an ecological pathway and/or connection which enables movements of the population units and flow of genes between the protected areas and ecologically important areas from one locality to another and which represents part of the ecological network;

18) *(deleted)*

19) *ecosystem (biocenosis)* is a structurally, functionally and dynamically intricate and unique ecological system within which the impacts of biotopes and biocenosis (abiogenes and biogenes) permeate each other;

20) *endemic species* is a species whose range of distribution is limited to a particular, clearly defined geographic area;

21) *ex situ* conservation is conservation of components of biological and geological diversity outside their natural habitats;

22) *living community (biocenosis)* is the total number of all populations living together in the same habitat (biotope) that build functional communities;

23) *trap* is a device intended for detaining, catching or killing of animals;

24) *nature protection* is a set of measures and activities focused on prevention of damage to the nature, natural values and the natural equilibrium;

25) *protected species* are wild species protected by international agreements and/or this Law;

26) *protected areas* are the areas that have a distinguished geological, biological, ecosystem and/or landscape diversity and are therefore declared by a protection document to be protected areas of general interest;

26a) *protective zone* is the area outside the borders of protected area, important ecological area and/or ecological corridor which may be defined when such areas are established, in order to prevent, i.e. mitigate external impacts;

27) *protected natural resources* are protected areas, protected wild species and protected movable natural documents;

28) *a zoo* is any permanent institution in which wild animal species are kept to be exhibited to the public for seven or more days per year, with the exception of circuses, pet shops and the institutions which do not exhibit a significant number of animals or animal species to the public;

29) an *invasive allochthonous species* is an allochthonous or other species that endangers biological diversity and ecosystem services by its introduction and/or spreading into nature and in addition can endanger human health and cause material damage;

30) *indicator species* is a species sensitive to changes in environment conditions which can therefore be used to estimate the general situation in the nature and the environment;

31) *introduction* is intentional or accidental entering of a species in the territory and the ecosystems where it did not previously live;

32) *in situ protection* is an active protection measure which includes protection of a species in its natural habitat, conservation of natural ecosystems, conservation and recovery of populations in their natural habitats, as well as conservation of geodiversity at the site of formation or occurrence of rocks, ores, minerals, crystals and fossils;

33) *extinct species* is a species for which there is no doubt that even its last specimen has become extinct;

34) *extinct species in the nature* is the species that no longer exists in nature, but its units can be found in zoos, botanical gardens and other places, and which can be bred by *ex situ* methods, for the needs of reintroduction;

35) *umbrella species* are the species by whose protection we are at the same time protecting a larger number of other species in the same habitat, which are less known or it is difficult to protect them in another way;

36) *key species* are those species whose presence or absence is essential for the rest of the biocenosis (ecosystem);

37) *user of protected area* is a legal entity, entrepreneur, private or other entity who, within a protected natural area, performs activities or operations, i.e. uses the natural asset and/or its resources, benefits and properties;

38) *extremely endangered species* is a species that faces the highest probability of extinction in the nature in the foreseeable future, which is established in accordance with the internationally accepted criteria;

39) *crystal* is any mineral that has regular inner structure and outer shape and is distinguished by geometrically regular, smooth and shiny surfaces and/or flats;

40) *lectotype* is a specimen from the type series which represents a duplicate of the holotype, and has been collected at the same time as the holotype;

41) *local endemite* is a species distributed over a smaller extent of territory not exceeding the size of one biogeographical province;

42) *minerals* are indigenous homogenous chemical elements or compounds in the shape of crystalized or amorphous material of particular structure, form and composition, which are not mineral raw materials;

43) *sustainable use of natural goods and/or resources* is the use of components of biodiversity or geodiversity in the way and at a rate that does not lead to the long-term decline

of biodiversity, i.e. geodiversity, thereby maintaining the potential to meet the needs and aspirations of present and future generations;

43a) *appropriate assessment* is the procedure used to assess the likelihood that the implementation of plans, bases, programmes, projects, works and activities, which individually or in combination with other plans, bases, programmes, projects, works and activities, may significantly affect conservation objectives and the integrity of important ecological areas;

44) *nature conservation* is a set of measures and activities performed to protect or renew natural habitats and populations of wild species with the aim to preserve their favourable status, natural ecosystems and landscape diversity;

45) *damaging of nature* is a phenomenon that has occurred due to changing of natural processes to such extent that the natural equilibrium has been disturbed or the natural values have been destroyed. Damaging of nature can be caused by natural and artificial processes, phenomena and disasters (landslides, land slips, earthquakes, floods, fires etc.);

46) *paratype* is a specimen of the species which has been established prior to describing the nominal species;

47) *protected area management plan* is a document by which the subject in charge of the management of the protected area plans measures and activities on protection, conservation, improvement and usage of protected area;

48) *natural resources and goods management plan* make a basis in form of a plan or a programme to manage, run and use natural resources and goods for economic, social and ecological purposes and/or goals prescribed on the basis of special laws;

49) *cave ornaments* are different forms and phenomena of precipitation of natural calcium carbonate in speleological facilities (stalactites, helictites, stalagmites, pillars, salives, draperies, tubs, etc);

50) *cave sediment* is river material (sand, gravel), clay, crushed stone, rock blocks and tufa precipitated or in some other way deposed within the speleological objects;

51) *favourable state of species* is the state in which the species populations have a long-term perspective of survival as a life-capable part of the natural ecological system, and when the ecological distribution range of a species is not getting reduced nor there is a possibility that it will be reduced in the foreseeable future;

52) *favourable state of natural habitat type* is the state of natural habitat type in which its distribution range is stable or increasing, when a specific structure and functions necessary for long-term conservation are present or will be present in the foreseeable future and when the status of protecting their typical species is favourable. Natural habitat is endangered if it is not in favourable state and/or threatened by disappearance;

53) *mobile protected natural documents* are parts of geological, paleontological and biological heritage with exceptional scientific and educational importance;

54) *population* is a spatially and temporally integrated group of units of the same species which has at its disposal a common set of hereditary factors, inhabits certain area, belongs to certain ecosystem, and within which the units are interconnected primarily by reproduction relationships;

55) *follow-up of the state (monitoring)* is planned, systematic and continual following up of the state in nature, i.e. parts of biological, geological and landscape diversity, as part of a comprehensive system for following up the state of environment elements in space and time;

56) *landscape* is a certain territory whose character represents a specific blending of natural and created values characteristic for the given region;

57) *landscape element* is the smallest relatively homogenous ecological unit of the

landscape structure, whether of natural or antropogenous origin;

58) *landscape diversity* is the space structure emerged in the interaction of natural and/or created space elements of certain biological, climate, geological, geomorphological, pedologic, hydrological, cultural and historical and sociological characteristics;

58a) *priority habitat types and priority species* are those types of habitats and species determined as such in the Republic of Serbia, in compliance with generally accepted international legal rules and ratified international agreements;

58b) *transboundary movement and trade* is the import, introduction, or introduction from the sea into the territory of the Republic of Serbia, the export or re-export from the territory of the Republic of Serbia or the transit through the territory of the Republic of Serbia of specimens of wild species, their parts and derivatives;

58c) a *specimen* is any animal, plant or fungus, regardless of being alive or dead, belonging to a wild species, and any part or derivative thereof;

58d) a *rescue center* is an area or space with capacity for temporary or permanent care of live wild animals which a veterinarian and/or expert has assessed as not capable of surviving on their own in the wild and/or are the object of seizure, confiscation or other measures according to the Law;

59*) nature* represents a unity of geosphere and biosphere, exposed to atmospheric changes and various influences and comprises natural goods and natural values expressed through biological, geological and landscape diversity;

60*) natural values* are parts of nature that deserve special protection, due to their sensitivity, endangerment or rarity, for the preservation of biological, geological and morphological, and landscape diversity, natural processes and ecosystem services or for serving scientific, cultural, educational, health and recreation, and other public interest;.

61) *natural equilibrium* is a state of mutually balanced relationships and influences of living creatures among themselves and with their habitat. Natural equilibrium is disturbed when the quantitative or qualitative structure of living communities is disturbed, when a habitat is damaged or destroyed, when the functioning capability of ecological system is destroyed or changed, when interconnection between certain ecological systems is broken or when it causes significant isolation of certain populations;

62) *vulnerable species* is a species that faces a high possibility that it will disappear under natural conditions in the relatively near future;

63) *protection regime* is a set measures and conditions that determine the way and degree of protection, use, organization and development of a protected natural asset;

64) *reintroduction* is a method of protection and conservation of biological diversity by artificially returning the species to its former habitat from which it has disappeared or to habitats in which the numbers of its population have been drastically reduced;

65) *relict species* is the species which in the distant past had an extensive range of distribution, and whose present range (remainder) has been reduced to spatially small parts;

66) *nature rehabilitation* are the measures that are taken in order to stop damaging of the nature, to improve its state and functionality;

67) *fossil syntypes* are all specimens of one series for which there is no

holotype;

68) *speleological object* is an underground cavity in the shape of channels, corridors and halls with different dimensions, slopes and appearances emerged in natural processes primarily in limestone and dolomites, but also in other rocks as well;

69) *habitat* is geographically clearly defined area in which specific community of plants, animals, fungi and microorganisms (biocenosis) interacts with abiotic factors (soil, climate, water quantity and quality, etc.), forming one functional whole;

70) *species habitat* is such habitat in which populations of a specific species have conditions to survive in longer period of time, i.e. an area in which specific species realizes any stage of its life cycle;

71) *stenoendemite* is a species whose range of distribution is limited to a very small area, i.e. one locality (a mountain top, ridge, gorge etc.);

71a) *habitat type* is a set or group of habitats very similar in their biotic and abiotic characteristics;

72) *landscape types* are landscape categories whose uniqueness and quality are determined by ecological, structural, physiognomic, historical, socioeconomic and aesthetic features;

73) *endangered species* is the species that faces a high probability of extinction in natural conditions in the foreseeable future, which is established in accordance with generally accepted international criteria;

74) *nature improvement* is a set of measures and activities that are necessary for renewing the natural habitats and populations in order to bring them to a favourable natural state, as well as a set of activities on revitalization and rehabilitation of natural ecosystems and landscapes;

75) *fossils* are remnants, preserved fully or in segments, of plants and animals that had lived in the past, included traces of extinct organisms, and they serve as pieces of material evidence based on which geological past can be reliably reconstructed;

76) *fossil holotype* is a species that has been established and it serves as a calibrator for all other establishments and that one specimen is preserved in the Natural History Museum;

77) *holotype* is the original specimen used to describe and give name to a species;

78) *red book* is a specialized scientific study of endangered wild species organized by endangerment categories and factors;

79) *red list* is a list of endangered wild species organized by endangerment

categories.

Nature Protection Principles

Article 5

The basic principles of nature protection shall be:

1) the principle of high degree nature protection everyone shall be obliged, taking over his/her duty or performing his/her activities, to contribute to protection and improvement of the nature, biological, geological and landscape diversity, conservation of generally beneficial natural functions and natural equilibrium;

2) the principle of sustainable usage usage of natural resources can be carried out only to the degree and in the way that does not endanger the diversity and functioning of the natural systems and processes;

3) the principle of application of measures and conditions of nature protection the principles, measures and conditions of nature protection shall be applied in the usage of natural resources and protected natural goods, planning and spatial organization

4) the principle of integrated protection nature protection shall be an integrated part of the strategy of sustainable development, spatial and urban planning and other plans, programmes and bases;

5) the "user pays" principle the user of the natural resource and protected natural asset shall be obliged to pay charges for their usage and bear the costs of space rehabilitation and recultivation;

6) the cooperation principle state authorities, autonomous province authorities and the authorities of the local self-government unit, organizations and institutions, as well as other legal and private entities, when carrying out their operations and assignments shall be obliged to act in accordance with the principles, objectives, measures and conditions of protection and permanent conservation of nature and in that way carry out mutual and international cooperation;

7) the principle of direct application of international law state authorities, autonomous province authorities and the authorities of the local self-government unit, organizations and institutions, as well as other legal and private entities, when carrying out their operations and assignments shall directly apply the generally accepted rules of the international law and approved international agreements as an integral part of the legal system.

Also, the basic principles of environment protection are applied in the protection of nature, in compliance with law.

Subjects of Nature Protection

Article 6

The protection and conservation of nature shall be provided for by the following, within their respective competences:

1) the Republic of Serbia;

2) autonomous province;

3) municipality, city and the city of Belgrade (hereinafter referred to as: local self-government unit);

4) manager of the protected area;

5) legal entities, entrepreneurs and private entities which use natural resources and protected natural goods in carrying out their business and other activities;

6) professional and scientific organizations and other public services;

7) citizen, groups of citizens, their associations, professional or other organizations.

II. NATURE PROTECTION

Nature Protection Measures

Article 7

Nature protection shall be carried out in the following ways, in particular:

1) establishing and evaluating the state, phenomena and processes in the nature and the landscape;

2) establishing and determining protected natural goods and the systems for the monitoring of their protection;

3) implementing the measures for protection of nature and landscapes;

4) establishing the conditions and measures for nature protection and protected natural goods and landscapes in the spatial and urban plans, project documentation, bases and programmes for managing of natural resources in mining, energy, transportation, water management, agriculture, forestry, hunting, fishing, tourism and other industries that affect the nature;

5) by sustainable use of natural resources and protected natural goods and control of their use through establishment of the system for management of natural resources and protected natural goods;

6) drafting a nature performance report, by adopting and implementing strategies, programmes, action and rehabilitation plans and management plans;

7) alleviating the harmful effects caused by activities in nature, use of natural resources or natural disasters;

8) connecting and harmonising the national nature protection system with the international nature protection system;

9) encouraging scientific and professional work in the field of nature protection;

10) informing the public on the state of nature and through participation of the public in decision-making concerning the nature protection;

11) encouraging and promoting nature protection, by developing awareness of the need for nature protection in the upbringing and education process;

12) involving the local communities in the follow-up of the nature state, and nature protection and improvement.

1. Planning, Regulation and Use of Space, Natural Resources, Protected Areas and Ecological Network

Article 8

Planning, regulation and use of space, natural resources, protected areas and ecological network shall be implemented on the basis of spatial and urban development plans, planning and design documentation, bases and programmes for the management and use of natural resources and goods in mining, energy, transport, water management, agriculture, forestry, hunting, fisheries, tourism and other activities affecting the nature, in compliance with measures and conditions of nature protection.

Bases, plans and programmes referred to in paragraph 1 of this Article relating to a protected area or whose implementation may have a significant negative impact on the conservation objectives and integrity of an important ecological area shall be adopted with prior consent of the Ministry competent for environmental protection.

Bases, plans and programmes referred to in paragraph 1 of this Article must comply with an act on promulgation of a protected area, a management plan for the protected area and management guidelines for important ecological areas.

Use of space, natural resources and protected areas shall be allowed in the manner prescribed by this and other laws.

Project proponent, i.e. legal entity, entrepreneur and private entity that uses natural resources, performs construction and other works, activities and interventions in nature shall act in compliance with measures for nature protection defined by plans, bases and programmes and in compliance with design-technical documentation, in the manner that shall ensure avoidance or minimization of endangerment and damaging of nature.

Legal entity, entrepreneur and private entity referred to in paragraph 3 of this Article shall carry out rehabilitation, i.e. recultivation upon the completion of their works and activities, in compliance with this Law and other regulations.

Conditions for Nature Protection
Article 9

In the development of plans, bases, programmes, projects, works and activities referred to in Article 8 of this Law, nature protection conditions, issued by the competent institute for nature conservation (hereinafter referred to as: Institute), shall be obtained.

The document on nature protection conditions shall contain in particular:

1) Data on natural values, especially on plants and animals, geo-heritage objects and landscape within the spatial coverage of the document referred to in paragraph 1 of this Article and in spatial environment;

2) Data on protected natural resources, including natural resources planned for protection and in protection procedure;

3) Data on an important ecological area;

4) Data on the established regimes and measures of protection and use of natural resources and goods and important ecological areas;

5) Assessment whether planned works and activities can be implemented from the aspect of nature protection aims and adopted regulations and documents;

6) Conditions, i.e. prohibitions and restrictions under which planned works and activities may be implemented as well as the need for an appropriate assessment;

7) Biological, technical and technological measures of nature protection which

should be applied;

8) Legal and expert grounds for the established conditions and measures, i.e. prohibitions and limitations;

9) Compensatory measures, if grounds exist, in accordance with this Law.

If, during the procedure for issuing a document on conditions for nature protection, the need for initiating the appropriate assessment procedure is identified, the Institute shall issue an opinion on the need for an appropriate assessment instead of the nature protection conditions.

The application for issuance of nature protection conditions shall be accompanied by the following:

1) Data on type and developer of the document referred to in paragraph 1 of this Article and on the investor;

2) Data on location and spatial coverage with appropriate mapping and graphic appendices, and for designs with a copy of the cadaster plan;

3) Short description of goals for which the document is being developed, intended activities at its implementation and main expected results, and for the design, a preliminary concept as well.

The Institute shall, by virtue of a decision, issue the document on nature protection conditions.

In case that applicant does not start works and activities which were the reason for issuance of the document on nature protection conditions within two years from the delivery of the document, the applicant is obliged to obtain a new document.

A fee shall be paid for the collection and evaluation of information needed for issuance of the document on nature protection conditions.

The amount and manner of calculation and collection of the fee referred to in paragraph 7 of this Article, fee payers and exemption or deduction in the fee payment is determined by the Institute with the consent of the Ministry competent for finances.

A complaint may be lodged for the document on conditions for nature protection to the ministry responsible for environmental protection affairs (hereinafter referred to as: Ministry) within 15 days, in the autonomous province to competent authority responsible for environmental protection affairs of the autonomous province.

The authority competent for passing, i.e. adoption of the document referred to in paragraph 1 of this Article shall obtain an opinion from the Institute on the fulfilment of the nature protection conditions referred to in paragraph 2 of this Article.

Appropriate Assessment

Article 10

An appropriate assessment for the ecological network (hereinafter: appropriate assessment) is a procedure assessing the potential impact of a strategy, plan, basis, programme, project, works or activities on conservation objectives and the integrity of the

ecological network.

An appropriate assessment procedure is carried out by the Ministry, the authority competent for environmental protection in the autonomous province and/or an authority competent for environmental protection in a local government unit for strategy, plan, programme, project, works or activities which alone or with another strategy, plan, programme, project, works or activities may have significant negative impact on the conservation objectives and the integrity of the important ecological area with previously obtained conditions from the Institute.

The appropriate assessment procedure referred to in par. 2 of this Article shall include:

1) Previous assessment, and
2) Main assessment.

For strategies, plans, bases and programmes for which, in accordance with a special law, strategic impact assessment is performed, and for projects, for which, in compliance with a special law, environmental impact assessment is performed, an appropriate assessment shall be carried out within those processes.

In case of conducting applied geological researches of the mineral and other geological resources and active mining facilities which, at the time of entry into force of this Law, have been approved by the competent authority, the need for carrying out an appropriate assessment procedure shall not be considered.

For works and activities for which the need for an Appropriate Assessment procedure was identified, the competent authority shall implement the procedure in accordance with this Law.

An Appropriate Assessment Study shall be a special document accompanying the Strategic Environmental Impact Assessment Report, i.e. Elaboration of Environmental Impact Assessment Study of the project. For other works and activities referred to in paragraph 6 of this Article, this study shall be attached as a separate document.

When, based on the appropriate assessment, it is found that plans, bases, programmes, projects, works and activities may have significant negative impact on the conservation objectives and the integrity of the important ecological area, competent authority shall reject to give consent.

In cases of doubt, it shall be deemed that plans, bases, programmes, projects, works and activities may have significant negative impact on the conservation objectives and the integrity of the important ecological area.

When based on the appropriate assessment, it has been established that plans, bases, programmes, projects, works and activities may have significant negative impact on the conservation objectives and the integrity of important ecological area, the competent authority shall give consent if:

1) There is no other alternative solution;

2) With respect to important ecological areas with at least one priority habitat type and/or priority species, only if there are imperative reasons of overriding public interest, relating to human health and public safety, useful effects of primary importance for the environment, and if there are other prevailing reasons of public interest, with previously obtained opinion from the European Commission. With respect to all other parts of the ecological network, only if there are other

imperative reasons of public interest, including interest of social and economic nature, which prevail in comparison to the interest of conservation of these areas;

3) it is possible to carry out the compensation measures referred to in Article 12 of this Law, necessary for the conservation of overall coherence of the ecological network, before giving consent to plans, bases, programmes, projects, works and activities.

The authority responsible for carrying out the appropriate assessment procedure may establish an expert commission, i.e. authorise an expert to evaluate the appropriate assessment study with previously obtained opinion from the Institute on the fulfillment of nature protection conditions referred to in Article 9 of this Law.

The Government shall closely prescribe the procedure, contents, deadlines, manner of carrying out an appropriate assessment, with consideration of the goals of conservation of the important ecological area, as well as a manner of providing information to the public, establishment of prevailing public interest and compensatory measures.

Limitations or Termination of Use
Article 11

If the mode or scope of using the natural resources directly endangers survival of certain species, its habitat or natural ecosystem, the Minister in charge of environment protection activities (hereinafter: the Minister) can issue an order and limit, temporarily or permanently stop the using according to the previously acquired opinion by the Ministry competent for the activities in agriculture, forestry and water management, the Ministry competent for the activities in mining and energy and the Ministry competent for the infrastructure operations.

For the limitations they have been subjected to, under the order referred to in paragraph 1 of this Article, the owners or users of natural resources have the right to compensation proportional to their reduced income.

The amount of compensation shall be established by mutual consent, and in case of dispute, the court of law shall determine the amount of compensation.

The compensation referred to in paragraph 3 of this Article shall be paid from the goods in the budget of the Republic of Serbia.

The owner or user of natural resources which does not act in conformity with the order referred to in paragraph 1 of this Article shall be deemed responsible for the damage to the species, habitat or natural ecosystem, which occurred after the enactment of the order.

Alleviation of the Consequences Damaging to the Nature
Article 12

In order to alleviate harmful consequences to nature, which may occur or have occurred due to implementation of plans, bases, programmes, projects, works or activities in the protected area or ecological network area, legal entity, entrepreneur and private entity, i.e. project proponent, shall implement compensatory measures in compliance with the decision issued by the Ministry at the Institute's proposal.

Compensatory measures are ordered depending on the expected or caused

damages to the nature, in the following manner:

1) by establishing a new locality which has the same or similar properties as the damaged locality;

2) by establishing another locality significant for the conservation of biological and landscape diversity, and/or protection of the natural asset;

3) by a compensation in money in the value of the caused damage to the locality in case it is not possible to implement compensation or rehabilitation measures.

Criteria, procedure and manner of the establishment of compensatory measures shall be prescribed by the Minister.

When establishing the compensatory measures, advantage is given to the compensation by a new locality which has the same or similar properties as the damaged locality.

The only compensatory measure for important ecological areas of the European Union, NATURA 2000, shall be the establishment of new locality in terms of paragraph 2, point 1) of this Article.

The European Commission shall be informed about the compensatory measures pertaining to important ecological area of the European Union NATURA 2000.

The amount in money toward the compensatory measures, shall be paid on the account designated for paying-in of public revenues to the budget of the Republic of Serbia and is used through the Green Fund of the Republic of Serbia exclusively for financing of nature protection projects.

Repairing the Damaging Consequences

Article 13

If the projects or activities in the nature have been carried out without established conditions for nature protection or contrary to the given conditions for nature protection, which has caused damage to the nature and protected natural goods, the leader of the project or activities and/or the user of natural resources, is obliged to repair the damaging consequences of his acts without delay and at his own expense, according to the principles of objective responsibility.

If the leader of project activities referred to in paragraph 1 of this Article does not repair damaging consequences of such activity of theirs, or if they do not act in compliance with Article 12 of this Law which provides for compensatory measures, the Ministry shall implement such reparation at the expense of leader of the activities, and shall issue a decision stating the obligation for compensation of damages and the amount of the incurred costs.

The assessment of the occurred damage, as well as the manner of repair of damaging consequences, shall be proposed to the Ministry by the Institute.

2. Subject of Protection

Protection of Biological Diversity

Article 14

The protection of biological diversity shall be accomplished by carrying out measures for protection and improvement of species, their populations, natural habitats and ecosystems.

Protection of Species

Article 15

Protection of species shall be accomplished by carrying out measures and activities on the preservation of species themselves, their populations and habitats, ecosystems and the corridors connecting them.

Protection of birds and migratory species shall be established through implementation of measures needed for conservation, maintenance and recovery of enough diversity and extension of their habitats, avoidance of pollution or disturbance of habitat quality and encouragement of research and management.

In order to conserve small biotopes and habitats, measures shall be undertaken which will include creation of protected areas, maintenance and management of habitats within protected areas, recovery of destroyed biotopes and creation of new biotopes.

Habitats of species important for survival of populations within the area referred to in paragraph 1 of this Article are documented by a habitat map developed on the basis of a GIS database on the distribution of certain habitats of species in the Republic of Serbia which are made available on the web page of the Ministry and the Institute for Nature Conservation of Serbia.

Data collection and continuous updating of the GIS database shall be assured by the Institute for Nature Conservation of Serbia in collaboration with other authorized expert and scientific institutions.

A map of habitats of species shall be a constituent part of plans, bases and programmes referred to in Article 8 of this Law.

Conservation of Habitat Types

Article 16

Conservation of habitat types shall be achieved through implementation of measures and activities for the protection and conservation of habitat types in order to prevent or reduce negative impact on the habitat types in accordance with the law and international agreements.

The Minister shall prescribe criteria for distinguishing endangered, rare, and sensitive habitat types and for the protection of priority habitat types, as well as protective measures for their conservation and a list of habitat types.

Habitat types referred to in paragraph 2 of this Article shall be documented by habitat maps developed on the basis of the GIS database on the distribution of certain types of habitats in the Republic of Serbia which shall be available on the web pages of the Ministry and the Institute for Nature Conservation of Serbia.

Data collection and continuous updating of the GIS database shall be assured by institutes and other expert and scientific institutions authorized by the Minister.

A map of habitat types shall be a constituent part of plans, bases and programmes referred to in Article 8 of this Law.

Protection of Ecosystems

Article 17

Protection of ecosystems (forest, alpine, water and wet, sensitive, agricultural and other ecosystems) is accomplished through the conservation of their natural composition, structure, function, integrity and equilibrium by carrying out appropriate measures and activities for their protection, improvement and sustainable use.

Protection of Forest, Wet and Water Ecosystems and Habitats within Agroecosystems

Article 18

Conservation of biological diversity of forest ecosystems shall be carried out with purpose of strengthening the generally beneficial functions of forests, in accordance with the law.

Forest management must be based on the principles of sustainable development and conservation of biological diversity, conservation of natural composition, structure and function of forest ecosystems, in conformity with the conditions for nature protection that are an integral part of forest bases.

With purpose of enriching the biological and landscape diversity in forest management, the forests shall be treated in such way so as to preserve forest openings (meadows, pastures etc.) and forest outskirts as much as possible.

Within the wet and aquatic ecosystems with the shore, any acts, activities and operations endangering a hydrological phenomenon or survival and conservation of biological diversity are prohibited.

Quantity of water in wet and aquatic ecosystems, outside of protected areas, which is essential for conservation of hydrological phenomenon and survival of biological diversity shall be determined by the ministry responsible for agriculture, forestry and water management, upon the obtainment of the opinion from the Ministry, while in protected areas and ecologic network areas this shall be determined by the Ministry upon the obtainment of the opinion from ministry responsible for agriculture, forestry and water management.

Conservation of biological and landscape diversity of habitats within agroecosystems and other non-autonomous and semiautonomous ecosystems shall be carried out mainly through the conservation and protection of marginal habitats, hedges, borders, individual trees, groups of trees, ponds and meadow belts, as well as other ecosystems with preserved or partially changed woody, bushy, meadow or swamp vegetation.

When joining plots of agricultural land into larger wholes, care must be taken to conserve the present and create new marginal habitats, in order to secure biological and landscape diversity of ecosystems.

Use of Biological, Biotechnical and Chemical Agents

in the Protection of Ecosystems and Protected Areas

Article 19

In order to protect ecosystem, it shall be allowed to use biological, biotechnical and chemical agents in compliance with law.

Biological and biotechnical agents can be used in protected areas with purpose of conserving biological diversity.

Chemical in protected areas may be used in compliance with prescribed protection regimes with the approval given by the ministry responsible for agriculture, forestry and water management, with the consent of the Ministry.

Conservation of Genetic Diversity

Article 20

Genetic material shall be used in compliance with this Law and special regulations.

Collection of genetic material from the nature for use must not endanger the survival of ecosystems or the population of wild plant, animal and fungi species in their habitats.

Access to the Sources of Genetic Material

Article 21

Genetic material from the nature can be used in compliance with this Law.

No material gain can be achieved on the genetic material created from the genetic material of wild plant, animal and fungi species.

Gene Bank

Article 22

Gene bank shall be established with purpose of conserving genetical diversity of wild plants, animals and fungi.

Biological material of a supervised or bred population, parts of plants, animals and fungi, seeds, spores, sex cells and other biological materials which are used with purpose of conserving species, i.e. their genetic fund and potential shall be kept in gene banks.

Gene bank referred to in paragraph 1 of this Article can be established by a legal entity or an entrepreneur which meets the requirements concerning the personnel, equipment and space.

The Ministry shall establish whether all the requirements referred to in paragraph 3 of this Article are met, in a permit which is issued in the form of a decision.

The permit referred to in paragraph 4 of this Article shall be issued at the request of legal or private entity.

The decision referred to in paragraph 4 of this Article shall be final, and administrative dispute can be instituted against it.

More detailed requirements referred to in paragraph 3 of this Article, as well as the operating mode of the gene bank, the way of treating the biological material, contents of the application and the documentation which is submitted along with the request for issuance of permit shall be prescribed by the Ministry, with prior consent by the Ministry in charge of agriculture, forestry and water management activities.

Protection of Geological Diversity

Article 23

Protection of geological diversity when using and organizing space shall be accomplished by carrying out measures for the protection of nature, geological and paleontological documents, as well as geo heritage objects in conditions of *in situ* and *ex situ* protection.

Geopark

Article 23a

A Geopark is a clearly defined area where geoheritage objects and other natural, cultural and historical values important for science, education, culture and economy are protected, presented and promoted with a clearly defined management structure.

A Geopark referred to in paragraph (1) of this Article shall cover a certain number of geoheritage objects of particular importance, in the sense of their scientific value, rarity, aesthetics or educational value, and objects of archaeological, biological, historical or cultural heritage.

A Geopark territory may cover several protected areas with different protection arrangements.

The potential of an area for the establishment of a geopark shall be evaluated in accordance with geotectonic categorisation respecting geological and other characteristics on the basis of criteria prescribed by the Minister.

Protection of Speleological Objects

Article 24

Speleological objects shall be public assets owned by the Republic of Serbia.

Speleological objects, because of their natural and cultural values, shall enjoy protection and are used in accordance with this Law and other regulations.

A cadastre of speleological objects shall be developed for the speleological objects, as a digital geographical information system (hereinafter: cadastre).

Protection and Use of Speleological Objects

Article 25

It shall be prohibited to do the following in the speleological objects and in their vicinity:

1) to pollute watercourses and springs, sink, bring in and leave behind poisonous materials, solid waste and dead animals or deposit any kind of waste in such places and in such way that they can enter the speleological object by running water or by free movements;

2) to destroy, damage or carry away parts of cave ornaments, cave sediments, fossil remains and artefacts;

3) destroy or carry away specimens of fauna and flora and disturb conditions in their habitats;

4) carry out construction works which can cause significant unfavourable and permanent changes of geo-morphological and hydrological characteristics.

The Government shall prescribe the mode and conditions for management, use and exploration of speleological objects, as well as development and maintenance of the cadastre referred to in Article 24, paragraph 3 of this Law.

Protection of Landscapes

Article 26

According to their natural and created characteristics, landscapes shall be divided into landscape types which express the diversity of natural and cultural heritage.

Protection of landscapes shall imply planning and implementation of measures which prevent unwanted changes, disturbances or destruction of significant landscape characteristics, their diversity, uniqueness and aesthetical values and enable the traditional way of using the landscape.

Conservation of significant and characteristic features of the landscape must be provided for when planning and organizing space and when planning and using natural resources.

Protection, management and planning o landscapes shall be based on identification of landscapes and assessment of their significant and characteristic marks.

The Minister shall prescribe criteria for identification of landscapes and manner of assessment of their significant and characteristic marks.

III. PROTECTED NATURAL GOODS

Protected Natural Goods

Article 27

Protected natural goods shall be:
1) protected landscapes

- strict natural reserve,

- special natural reserve,

- national park,

- natural monument,

- protected habitat,

- landscape of exceptional characteristics,

- natural park;

2) protected species

- strictly protected wild species,

- protected wild species;

3) mobile protected natural documents.

1. Protected Areas
Article 28

Areas that have a substantial geological, biological, ecosystem and/or landscape diversity and that are significant as habitats of bird species and other migratory species relevant according to international regulations may be declared as protected areas of general interest.

Protected areas can border protected areas of neighboring countries.

A management plan and measures to protect the protected area bordering a neighboring country's protected area shall be determined through an agreement with competent authorities of that country and based on an approval from the Ministry.

Strict and Special Natural Reserves

Article 29

Strict natural reserve shall be an area of unchanged natural characteristics with representative natural ecosystems, intended exclusively for conservation of the original nature, gene fund, ecologic equilibrium, following natural phenomena and processes, scientific research which does not damage the natural characteristics, values, phenomena and processes.

Special natural reserve shall be an area of unchanged or insignificantly changed nature, of particular importance due to its uniqueness, rareness or representativeness, and which includes a habitat of an endangered wild plant, animal and fungi species, without settlements or with scarce settlements in which humans live in harmony with the nature, intended for conservation of the existing nature characteristics, gene fund, ecological equilibrium, following of natural phenomena and processes, scientific research and education, controlled visits and preservation of traditional way of life.

Special natural reserve can be floristic, mycological, or with forest and other vegetation, zoological (ornitological, ichtiological and other), geological, paleontological,

hydrogeological, hydrological and others.

Within the strict and the special natural reserve it shall be prohibited to carry out operations and activities and perform actions which can impair the features due to which they have been declared as protected natural asset (picking and destroying of plants, disturbing, catching and killing of animals, introducing new biological species, melioration works, various forms of economical and other usage etc.).

Visiting of strict and special natural reserves with education purpose can be carried out on the basis of permit issued by the manager of protected area (hereinafter: the Manager).

Measures for protection of strict and special natural reserve shall be closely determined by the decision on the proclamation of protected area.

The following of natural phenomena and processes and scientific research shall be carried out on the basis of a permit issued by the Ministry and in presence of the Manager.

All economic and other activities shall be prohibited in the strict natural reserve.

National Park

Article 30

National park shall be an area with a large number of diverse natural ecosystems of national importance, with distinguished landscape characteristics and cultural heritage in which man lives in harmony with the nature, intended for conservation of the existing natural values and resources, with overall landscape, geological and biological diversity, as well as for meeting of scientific, educational, spiritual, aesthetical, cultural, touristic and health and recreational needs and other activities in accordance with the principles of nature protection and sustainable development.

Activities and operations that do not disturb the original state of nature shall be allowed in the national park, as well as carrying out activities that have the function within education, health and recreational and touristic needs, continuation of the traditional way of life of local communities, and in the way that does not jeopardize the survival of species of the natural ecosystems and landscapes, in accordance with this Law and the management plan adopted by the Manager.

The activities referred to in paragraph 2 of this Article can be limited with purpose of preserving the original state of nature in the national park.

The forests within the national park shall be managed by the legal entity that manages the national park.

The forests referred to in paragraph 4 of this Article shall not be included in the forest landscape.

The measures for protection of the national park and the mode of its use shall be determined in detail by a special law.

Natural Monument

Article 31

Natural monument shall be a smaller unchanged or partially changed natural spatial entity, object or phenomenon, physically clearly distinguished, recognizable and/or unique, with representative geomorphological, geological, hydrographical, botanical and/or other characteristics, as well as a botanical value of scientific, aesthetic, cultural or educational significance, created by human activities.

Natural monument can be geological (historical and geological-stratigraphical, paleontological, petrological, sedimentological, mineralogical, structural-geological, hydrogeological and others), geo-morphological, speleological (cave, pit and others), hydrological (whole or part of a watercourse, waterfall, lake, moor and others), botanical (rare or significant specimens of herbal life, an individual tree or a group of trees, alleys, parks, arboreta, botanical gardens and others).

Any actions or activities on the natural monument that endanger its characteristics and values shall be prohibited.

Measures for protection of the natural monument and the mode for its use shall be defined in detail by the decision on proclamation of protected area.

Protected Habitat

Article 32

Protected habitat shall be an area which includes one or more types of natural habitats that are significant for conservation of one or more populations of wild species and their communities.

The objective of habitat protection shall be:

1) to protect endangered and rare types of habitats, ecosystems and/or autochthonous wild species on the national or international level;

2) to provide for favourable state of one or more autochthonous species populations;

3) to enable undisturbed development of some of stages in the life of autochthonous wild species (spawning, mating, building nests, raising the offspring, winter hibernation etc.);

4) to protect extremely endangered and vulnerable species;

5) to enable gene flow among the population species;

6) to provide for migratory routes and resting places;

7) to enable scientific research, population management and education.

The activities and operations which endanger or damage one or more habitat types shall be prohibited within the protected habitats.

The importance, purpose and protection measures of a protected habitat shall be closely established by the decision on proclamation of protected habitat.

Landscape of Exceptional Characteristics

Article 33

Landscape of exceptional characteristics shall be an area of recognizable appearance with significant natural, biological-ecological, aesthetic and cultural-historical values, which developed in time as a result of interaction between the nature, natural potentials of the area and the traditional way of life of the local population.

Landscape of exceptional characteristics can be a natural landscape of exceptional characteristics and a cultural landscape of exceptional characteristics.

Natural landscape of exceptional characteristics shall be an area of significant biological-ecological and aesthetic value, in which the traditional way of life of the local population has not significantly disturbed the nature and natural ecosystems.

Cultural landscape of exceptional characteristics shall be an area of significant landscape, aesthetic and cultural-historical value, which developed in time as a result of interaction between the nature, natural potentials of the area and the traditional way of life of the local population

The activities and operations which disturb primary natural and created values and landscape character shall be prohibited within the landscape of exceptional characteristics.

Protection measures, the mode for carrying out economic and traditional activities and use of natural and created values within the landscape of exceptional characteristics shall be closely established in the formal decision on proclamation of protected area.

Natural Park

Article 34

Natural park shall be an area of well-conserved natural values with mostly conserved natural ecosystems and picturesque landscapes, intended for conservation of the overall geological, biological and landscape diversity, as well as meeting of scientific, educational, spiritual, aesthetic, cultural, touristic, health-recreational needs and other activities harmonized with the traditional way of life and principles of sustainable development.

Within the natural park, no economic or other activities which disturb its substantial characteristics and values shall be allowed.

Protection measures, the mode for carrying out economic activities and use of natural values within the natural park shall be closely established in the formal decision on proclamation of protected area.

Protection Regimes

Article 35

The following protection regimes shall be established in protected area:
1) 1st degree,
2) 2nd degree and/or
3) 3rd degree

1st degree protection regime – strict protection, shall be implemented in protected area or part thereof with original or slightly changed ecosystems of exceptional

scientific and practical importance, which enables processes of natural succession and conservation of habitats and life communities in wilderness conditions.

1st degree protection regime shall:

1) Prohibit use of natural resources and construction of facilities;

2) Restrict works and activities to scientific research and monitoring of natural resources, controlled visits for educational, recreational and cultural purposes, as well as implementation of protective, rehabilitation and other necessary measures in case of fire, natural disasters and accidents, occurrence of plant and animal diseases and excessive propagation of pests, with the consent given by the Ministry.

2nd degree protection regime – active protection, shall be implemented in protected area or part thereof with partially changed ecosystems of high scientific and practical importance and particularly valuable landscapes and geo heritage objects.

2nd degree protection regime can include management interventions in order to restore, revitalize and generally improve protected area, without consequences to primary values of their natural habitats, populations, ecosystems, landscape characteristics and geo heritage objects, and can include traditional activities and restricted use of natural resources in sustainable and strictly controlled manner.

2nd degree protection regime shall:

1) Prohibit construction of industrial, metallurgical and mining facilities, asphalt bases, oil refineries, as well as facilities for storage and sale of oil and LPG derivatives, thermal power plants and wind generators, ports and trade centers, airports, service warehouses, storages and cooling plants, holiday houses and other family retreat houses, exploitation of mineral raw materials, peat and river and lake beds material, ploughing of natural lawns, commercial fishing, introduction of invasive allochthonous species, construction of facilities for waste recycling and incineration and formation of waste disposal sites;

2) Restrict regulation and baffling of watercourses, formation of water accumulations, melioration and other hydrotechnical activities, construction of hydro power plants, solar power plants and biogas power plants, touristic accommodation facilities, catering facilities, nautical tourism and touristic infrastructure and regulation of public ski resorts, construction of transport, energy, utility or other infrastructure, residential and economic facilities of agricultural husbandries, traditional use of stone, clay and other materials for local needs, construction of fisheries, facilities for conventional breeding of domestic animals and game, fishing, hunting, collection of fungi, wild plant and animal species, management of forests and forest land, establishment of forest and agricultural monocultures, introduction of species alien for plants and animals in the region where protected area is located, and application of chemicals.

3rd degree protection regime – proactive protection, shall be implemented in protected area or part thereof with partially changed and/or changed ecosystems, landscape and geo heritage objects of scientific and practical importance.

3rd degree protection regime can include management interventions in order to restore, revitalize and generally improve protected area, rural development and improvement of rural households, regulation of cultural-historic objects and objects of traditional civil engineering, conservation of traditional activities among local residents, selective and restricted use of natural resources and areas with necessary infrastructural and other construction.

3rd degree protection regime shall:

1) Prohibit construction of oil refineries and chemical industry, metallurgical and thermal energy facilities, oil tanks, oil derivative and natural gas tanks, introduction of invasive allochthonous species and formation of waste disposal sites;

2) Restrict construction of other industrial and energy facilities, asphalt bases, touristic accommodation facilities and public ski resorts, infrastructural facilities, storages for industrial goods and construction material, holiday houses, exploitation and primary processing of mineral raw materials, formation of waste management facilities, construction of settlements and spreading of their construction sites, hunting and fishing, formation of forest and agricultural monocultures, application of chemicals and other works and activities that may have significant adverse effects to natural and other values in protected area.

Protection regimes and borders of parts of protected areas with different protection regimes shall be established by way of a decision on proclamation of protected area based on protection study.

Regime of protective zone of protected area shall prohibit and restrict works and activities for which it has been established (in the procedure prescribed by law and other regulations) that they may have significant adverse effects to biological diversity, geo heritage values and landscape of the protected area.

The Government shall prescribe in detail protection regimes, procedure for their designation and facilities, works and activities that are prohibited or restricted.

In compliance with special law, works and activities restricted by protection regimes referred to in this Article may be prohibited in national parks.

2. Strictly Protected and Protected Wild Species

Article 36

Wild species which are endangered or can become endangered, which have special significance from the genetic, ecological, ecosystem, scientific, health, economic and other aspects, shall be protected as strictly protected wild species or protected wild species.

The following wild species can be declared as strictly protected:

1) wild species extinct in the Republic of Serbia and returned through a reintroduction programme;

2) extremely endangered wild species;

3) endangered wild species;

4) relict species;

5) local endemite;

6) stenoendemite;

7) wild species subject to a ratified international agreement;

8) a species requiring strict protection for other reasons.

The following wild species can be declared as protected:

1) vulnerable wild species;

2) endemic species;

3) indicator, key and umbrella species;

4) relict species;

5) wild species subject to a ratified international agreement;

6) wild species not endangered, but, due to its appearance, can be easily confused with an endangered wild species;

7) wild species of economic importance which can be endangered by uncontrolled exploitation or destruction of the habitat.

Strictly protected and protected wild species within the meaning of this Law shall be determined on the basis of national and international red lists or red books, ratified international agreements, expert findings and/or scientific knowledge.

Red lists and red books of endangered wild species with their localities, strength of populations and level of endangerment are established by the Ministry on the proposal of the Institute.

Wild species protection which is not regulated by this Law shall be governed by special regulations.

3. Mobile Protected Natural Documents

Article 37

Parts of geological and paleontological heritage, as well as biological documents which have exceptional scientific, educational and cultural importance can be protected as mobile protected natural documents.

Mobile protected natural documents can be the following:

1) all specimens of holotypes, syntypes and genotypes of fossils, as well as typical kinds of fossils;

2) all individual minerals and/or crystals and mineral druses within the bed;

3) all holotypes and syntypes of fossils, typical kinds of fossils of individual minerals and crystals;

4) mycological, botanical and zoological collections, as well as individual conserved preparations of organic species, their holotypes and syntypes.

It shall be prohibited to collect and/or destroy mobile natural documents or destroy or damage sites of their occurrence.

Ecological Network

Article 38

The ecological network is established as a functionally and spatially connected entity in order to conserve habitat types of particular importance for the protection, renewal and/or improvement of degraded habitats and for the conservation of habitats of wild species of flora and fauna.

The ecological network shall be made up of important ecological areas and ecological corridors.

Important ecological areas are:

(1) areas of national importance which by their bio-geographic presence and representativeness contribute to the conservation of biological diversity in the Republic of Serbia;

(2) areas of international importance which by their bio-geographic presence and representativeness contribute to the conservation of habitat types and habitats of species including birds in accordance with ratified international agreements and common rules of international Law.

The ecological network of the Republic of Serbia is established by the Government.

The Act referred to in paragraph (4) of this Article establishes the list of important ecological areas and list of species including birds and their habitats referred to in paragraph (3), point (2) of this Article, ecological corridors, criteria for determining parts of the ecological network, general management guidelines and the manner of financing.

In collaboration with other expert and scientific institutions, the Institute shall prepare documentation for the establishment of the ecological network in accordance with the law, common rules of international law, ratified international agreements and established criteria.

A digital database and map of an important ecological area shall be produced and updated by the Institute in collaboration with expert and scientific institutions on the basis of base maps provided by the Republic Geodetic Authority free of charge.

Ecological Network Protection

Article 39

Protection of the ecological network shall be ensured through the implementation of imposed protective measures for the conservation of habitat types and habitats of species for which separate important ecological areas were determined and through application of appropriate assessment.

Protective measures for the ecological network apply to legal persons, entrepreneurs and natural persons whose activities and operations could affect areas of the ecological network and ecological corridors.

Measures, methods and technical solutions shall be applied in the area of the ecological network with the aim of conserving the habitat and habitats of species.

Monitoring of ecological network status shall be performed by the Institute and/or other professional and scientific organizations, as authorized by the Ministry.

Works, activities and business that may lead to endangerment and disturbance of ecological network functions, disturbance or permanent damaging of characteristics and values of individual parts in ecological network shall be prohibited.

By way of exception to paragraph 5 of this Article, the Ministry may allow for performance of works, activities and business in compliance with Article 10 of this Law.

Ecological Network Management

Article 40

Ecological network area, at the same protected area as well, shall be managed by the protected area Manager.

For managing the important ecological area and ecological corridor which is not placed under the protection as protected area, the Government can designate or establish a legal entity, at the proposal made by the Ministry, or competent authority of autonomous province, or competent authority of local self-government unit at the territory of which part of ecological network is located.

Management plan may be adopted for ecological network area, or a set of measures may be prescribed for conservation, renewal and improvement of these areas status.

The management plan referred to in paragraph 3 of this Article shall be adopted by legal entity entrusted with management of a part of ecological network.

Closer manner of ecological network management shall be determined through the document referred to in Article 14, paragraph 4 of this Law.

IV PROCEDURE OF PROCLAMATION OF PROTECTED NATURAL GOODS

Categorization of Protected Areas

Article 41

Protected areas, depending on their values and significance, shall be sorted into categories:

1) 1st category – protected area of international, national, i.e. exceptional significance;

2) 2nd category – protected area of provincial/regional, i.e. high significance;

3) 3rd category – protected area of local significance.

The Minister shall prescribe criteria of valuation and procedure for categorization of protected areas.

Proclamation of Protected Areas

Article 41a

National Park shall be proclaimed by law.

Protected area of 1st category shall be proclaimed by the Government at the proposal from the Ministry.

Protected area of 2nd category shall be proclaimed by the Government, i.e. competent authority of autonomous province, when protected area is located at the territory of autonomous province. When protected area is proclaimed by the competent authority of autonomous province, and when it includes land, other properties of the Republic of Serbia and goods of general interest, consent shall be obtained from the Ministry with previously obtained opinion from competent ministries, as a part of proclamation procedure.

Protected area of 3rd category shall be proclaimed by competent authority from local self-government unit, and if such protected area is located at the territories of two or more local self-government units, competent authorities of those local self-government units shall proclaim protected area in agreed manner. When protected area includes land and other properties owned by the Republic of Serbia, or autonomous province, and goods of general interest, consent shall be obtained from the Ministry, or authority of autonomous province responsible for environmental protection activities, with previously obtained opinion from competent ministries, i.e. competent authorities of autonomous province, as a part of proclamation procedure.

Protection Study

Article 42

The proposal for the formal decision on proclamation of the protected area has a scientific and/or professional basis – protection study, which shall establish values of the area whose protection is proposed, and the mode for managing the area.

The initiative for proclamation of the protected area can be submitted by the nature protection subjects referred to in Article 6 of this Law.

The protection study shall be drafted by the Institute, which shall inform the local population of the initiative and the study procedure, as well as the owners and users of the area which is the subject of the study and shall cooperate with them.

The protection study shall contain the rationale for the proposal for the protection procedure, description of the natural, created and landscape characteristics of the natural asset with thematic cartographic enclosures, ground values of the natural asset, assessment of the state of environment in the area, the proposed protection regimes, cartographic view containing the borders and protection regimes on the basis of data from the real estate cadaster, data from the cadaster of research and exploitation grounds and areas, mineral

resources and groundwaters, description of borders, the concept of protection and improvement, possible perspectives of sustainable development, stakeholder analysis, documentation on harmonization of needs for protection with stakeholders, management mode, assessment of socio-economic effects of protection, development and sustainable use, necessary personnel and technical equipment for the manager, possible proposal by the manager and other elements of importance for proclamation of the protected area.

Resources for drafting the protection study shall be provided from the budget of the Republic of Serbia, budget of the autonomous province, i.e. budget of the local self-government unit.

An area for which a conservation procedure has been initiated shall be deemed protected in accordance with this Law and measures proposed in the protection study referred to in paragraph 1 of this Article shall apply until the adoption of an act on promulgation.

Procedure of protection of a natural area shall be started when the Institute submits the protection study to the competent authority and the Ministry shall inform the public of the procedure of launching the protection of the natural area on the web page of the Ministry.

The Ministry shall inform the public on the procedure of launching the protection of the natural area of category I, II and III on the web page of the Ministry.

Public Participation

Article 43

The proponent of the decision on proclamation of the protected area shall inform the public about the proposal for decision.

The proponent shall provide public insight and shall organize public debate on the proposal for decision on proclamation of the protected area and its professional basis – the protection study with cartographic documentation.

The information referred to in paragraph 1 of this Article shall be published in at least one newspaper distributed in the whole territory of the Republic of Serbia and in the local magazine of the local self-government unit in whose territory the area whose protection is proposed is located, and shall contain information on the time and place of public display and public debate.

Presentation of the decision on proclamation of the protected area and the professional basis referred to in paragraph 2 of this Article for public insight shall last for at least 20 days from the date of issuing the information.

Contents of the Decision on Proclamation of the Protected Area

Article 44

The decision on proclamation of protected area shall contain in particular:

1) type, name and position of protected area;

2) basic aims of proclamation and values of protected area;

3) total coverage of the protected area and coverage of municipality areas, i.e. city territories included in protected area borders, with a list of cadastre municipalities;

4) basic ownership structure over the property;

5) description and layout of borders of protected area and borders of areas with prescribed protection regimes, as well as protected zone borderlines, in the manner that provides for identification of those borders in the field and in cadastre plan;

6) closer aims of protection and sustainable use of protected area expressed in areas with prescribed protection regimes and measures applied to achieve those aims;

7) name, legal/organizational status and head office of the Manager;

8) closer contents and manner of management plan adoption;

9) closer manner of provision of funds for implementation of decision on proclamation, i.e. management plan within legally determined sources of financing;

10) other elements of importance for protected area management

Necessary data referred to in points 3), 4) and 5) of this Article shall be provided for from database of the property cadaster issued by the Republic Geodetic Authority, free of charge, at the Institute's request.

Publishing of the Decision on Proclamation

Article 45

The decision on proclamation of the protected area referred to in Article 41, paragraphs 1 and 2 of this Law, shall be published in the "Official Gazette of the Republic of Serbia", the decision on proclamation referred to in Article 41, paragraph 3 of this Law in the official journal of the autonomous province, and the decision on the proclamation referred to in Article 41, paragraphs 4 and 5 of this Law in the official journal of the local self-government unit.

The authority that renders the decision on proclamation of the protected area shall deliver the same within 30 days from the enactment day to the following:

1) *(deleted)*;

2) to the Republic Geodetic Authority, i.e. authority competent for registration;

3) to the manager of the protected area;

4) to the Institute, with purpose of entering into the register of protected natural goods.

Decision on Termination of the Protection

Article 46

If an area has lost values for which it had been protected, the Institute shall propose the adoption of the decision on termination of the protection to the authority that has adopted the decision.

Within six months from the reception of the Institute's proposal, the authority referred to in paragraph 1 of this Article shall adopt the decision on termination of the protection and shall submit it to the Institute in order to provide deletion from the register of protected natural goods.

The decision referred to in paragraph 1 of this Article shall be submitted to the Republic Geodetic Authority, i.e. authority responsible for registration in order to provide for deletion of the entry in land register or property cadastre.

Within one month from the day of adoption of the decision on termination of the protection, the Institute shall delete the protected area from the register of protected natural goods.

Article 47

(Deleted)

2. Strictly Protected and Protected Wild Species

Article 48

On the basis of an estimate of endangerment for certain wild species, and the obligations arising from ratified international agreements, as well as on the basis of the national and international red lists and/or red books and/or other professional documentation, the Minister shall, by mutual agreement with the Minister competent for agriculture, forestry and water management, and at the proposal of the Institute and/or other authorized scientific or expert organisations, declare the wild species as strictly protected wild species or protected wild species.

The Institute shall take care of the species referred to in paragraph 1 of this Article, as well as holders of such species, protected areas managers, public enterprises for forest management, users of hunting and fishing areas who are obliged to plan and implement measures and activities of monitoring and management of strictly protected and protected wild species populations within the management programmes and plans, in compliance with this and special laws.

The decision referred to in paragraph 1 of this Article shall establish the protection measures for the strictly protected and protected wild plant, animal and fungi species, as well as measures for protecting their habitats.

The decision referred to in paragraph 1 of this Article shall be published in the "Official Gazette of the Republic of Serbia".

3. Mobile Protected Natural Documents

Article 49

Geological, paleontological and biological documents which are endangered within the meaning of this Law, shall be, at the proposal by the Natural History Museum, upon the acquired opinion from the Institute, declared as protected natural goods by the Minister, by mutual consent with the minister competent for protection of cultural goods.

The decision referred to in paragraph 1 of this Article shall be published in the "Official Gazette of the Republic of Serbia".

Register of Protected Natural Goods

Article 50

Protected natural goods shall be registered into the register of protected natural goods.

The register of protected natural goods shall be an electronic database on protected areas, areas under previous protection, protected species and mobile protected natural documents, and shall be maintained as central and provincial ones.

Central register of protected natural goods for the territory of the Republic of Serbia shall be maintained by the Institute for Nature Conservation of Serbia.

Provincial register of protected natural goods for the territory of autonomous province shall be maintained by the Provincial Institute for Nature Conservation, which shall be obligated to submit data on changes in the register to the Institute for Nature Conservation of Serbia within 15 days from the day of change recording, so as to provide for registration in the central register.

The Minister shall prescribe type of data, manner of obtainment, maintenance, protection and use of data from the register of protected natural goods, as well as data from the register which are of public character.

V. MANAGEMENT AND USE OF PROTECTED AREA

Protected Area Management Planning

Article 51

Protection, management, use and improvement of protected areas shall be carried out on the basis of the decision on proclamation of the protected area and the plan for managing the protected area.

Plan for Managing the Protected Area

Article 52

The Manager shall adopt the management plan for the period of ten years.

For certain protected areas, a decision to declare a protected area may envisage that a management plan be adopted for a shorter period of time (individual trees, alleys, etc.).

The management plan shall establish the mode of carrying out protection, using and managing a protected area, guidelines and priorities for protection and conservation of natural values of the protected area, as well as development guidelines, taking into account the needs of the local population.

Legal entities, entrepreneurs and private entities shall be obliged to perform their activities within the protected area in accordance with the management plan.

Before the expiry of the time period designated by the plan, its implementation and the accomplished results shall be analyzed, and it can be revised if necessary.

The report on the accomplishment of the plan shall be delivered in the manner and according to the procedure prescribed for the drafting of the plan.

Contents of the Management Plan

Article 53

The management plan shall contain particularly the following:

1) layout of the main natural and created values, as well as natural resources;

2) assessment of the state of environment in the protected area;

3) overview of particular activities, operations and processes which represent the factor of endangerment for the protected area;

4) long-term objectives for protection, conservation and improvement and sustainable development;

5) analysis and assessment of conditions for the accomplishment of those objectives;

6) priority activities and measures for the protection, maintenance, monitoring of the state and improvement of the natural and created values;

7) priority tasks for scientific research and educational work;

8) planned activities on the sustainable use of natural values, development and spatial organization;

9) spatial identification of planned purposes and the regime for land use;

10) activities to promote the value of the protected area;

11) study (research), programme, planning and project documentation necessary to carry out the objectives and activities;

12) forms of cooperation and partnership with the local population and other owners and users of the property;

13) activities and measures to implement the plan with the progress rate and entities to implement the management plan and a method to evaluate success of its implementation;

14) financial means and other material prerequisites for performance of the conferred tasks related to protected area management and the mode of securing them.

A management plan for a protected area, which is at the same time an ecological network area in accordance with the Law, shall contain all management elements for this part of the ecological network.

Implementation of the Management Plan

Article 54

The Government shall give its consent to the plan for managing the national park, according to the previously acquired opinions from the competent ministries.

The Ministry shall give its consent to the plan for managing the protected area which has been declared through the Government decision, according to the preciously acquired opinions of the competent ministries.

The authority competent for the activities of environment protection in the autonomous province, and/or local self-government units, upon previously acquired opinion from the Institute, shall give consent to the plan for managing the protected area which has been proclaimed as such by way of a decision of the competent authority of the autonomous province, and/or the competent authority of the local self-government unit.

The management plans referred to in paragraphs 1, 2 and 3 of this Article shall be achieved through the annual management programmes, which shall be subject to consent by the Ministry, the authority competent for the environment protection activities of the autonomous province, and/or the local self-government units.

By 15 December of the current year, the manager shall submit a report on completion of the previous year's annual programme to the competent authority, by 15 November of the current year the manager shall submit the next year's annual management programme to the competent authority, and, no later than 60 days before the expiry of the plan period he shall submit a report on the completion of the management plan referred to in Article 52 of this Law.

The Manager shall be obliged to inform the public on the proposal of the protected area management plan.

Informing the public shall imply a public display of the proposed plan.

The public display shall be organized and implemented by the Manager of the protected area and shall last for 30 days.

Spatial Plan of Special Purpose Area

Article 55

Organisation, use, spatial planning and building construction in the protected area shall be conducted on the basis of a spatial plan of special purpose area and/or urban planning, in compliance with law.

The plans referred to in paragraph 1 of this Article must be in accordance with the decision on the proclamation of the protected area and plan of the protected area management.

In the procedure of the design of the plans referred to in paragraph 1 of this Article, the competent authority responsible for the design of the plan shall be obliged to obtain the conditions for nature protection, in compliance with Article 9 of this Law.

Rulebook on Interior Order and Guarding Service
Article 56

The Manager shall be obliged to provide interior order and guarding of the protected area in accordance with the rulebook on interior order and guarding, which shall be adopted by the Manager with consent of the competent authorities.

The rulebook referred to in paragraph 1 of this Article, for a national park and protected areas for which the decision on protection has been made by the Government, shall be adopted by the Manager with consent of the Ministry.

The rulebook referred to in paragraph 1 of this Article, for the protected areas for which the decision on protection has been made by the competent authority of the autonomous province or local self-government unit, shall be adopted by the Manager with consent of the competent authority of the autonomous province and/or local self-government unit.

The rulebook referred to in paragraph 1 of this Article shall set forth rules for implementation of the prescribed protection regime, in particular: manner of visitors and other users' behavior in circulation, stay and performance of activities in protected area; manner of doing business when using natural resources and areas for construction of buildings; places, areas and facilities where circulation is prohibited or restricted so as to enable conservation of wild plants and animals and other values, and where performance of certain activities is restricted, as well as duration of such measures; wild plant and animal species use of which, i.e. picking, collection and hunt of which is restricted, as well as manner and conditions for performance of such activities; conditions for protection in performance of scientific research and educational activities; places and conditions for waste disposal; manner of maintenance of tidiness and cleanliness of protected area; procedure for giving consent and other documents to users by managers; manner and organization of guarding, guarding of protected area, equipment and means necessary for guarding and maintenance; manner of implementation of preventive measures related to protection against fire, other disasters and accidents.

The decision on proclamation of the protected area shall determine in more detail the contents, way of adoption and publication of the rulebook referred to in paragraph 1 of this Article.

Works and Activities in the Protected Area

Article 57

It shall be prohibited to perform works and activities in the protected area, i.e. implementation of projects which damage, disturb and change characteristics and values for which certain area is protected shall be prohibited.

The Government may, in compliance with law, allow works and activities, i.e. projects in the protected area, especially in the area of energy, transport infrastructure, water management, agriculture, tourism, sport, mining and nature and environmental protection, performance of which has been prohibited by the prescribed protection regimes, if these projects are of general interest and national importance.

For works and activities, i.e. implementation of projects in the protected area, environmental impact assessment shall be implemented in compliance with law, with obligatory obtainment of the document on conditions and measures for nature protection.

For works and activities, i.e. projects for which environmental impact assessment is implemented, which may affect values and characteristics of protected goods, the contractor, i.e. project proponent shall obtain the document on conditions and measures for nature protection from the Institute, in compliance with this Law.

The project proponent shall notify the protected area manager in written form about the planned works and activities, i.e. implementation of project referred to in this Article, and the protected area manager shall familiarize the project proponent with the options for performance of mentioned works and activities, as well as with further procedure.

Use and Visiting of Protected Areas

Article 58

Protected areas may be used and visited in the manner that will not endanger their values and the implementation of protection.

Use and visiting the protected area shall be permitted to everyone under equivalent conditions in compliance with this Law and the decision on protection of stated protected natural good.

Should use and visiting of the protected area cause danger to its conservation, the use and visiting of the protected area can be prohibited or restricted.

Liabilities of the User or Owner of the Property
Article 59

The owner or the user of the property in the protected area shall be bound to permit access to a particular natural value, for the purpose of satisfying scientific, educational, aesthetic, cultural and recreational needs, in the manner and under the conditions stipulated by the decision on proclamation of the protected area.

Priority Purchase Right

Article 60

The owner of the property within a protected area intending to sell that property shall be obliged to offer the same first to the authority adopting the decision on protection, that is, the Republic of Serbia, autonomous province or local self-government unit in the territory of which the property is located.

The owner of the property within a protected area shall be obliged to quote the price and terms of sale.

The Republic of Serbia, autonomous province or local self-government unit shall

be bound to accept or reject the offer within thirty days from the reception of the offer in writing.

Should the offer not be accepted within the specified time limit, the owner may sell the property under the conditions that are equal or more favorable for him than those contained in the offer.

Should the owner sell the property within the protected area failing to previously act in accordance with paragraphs 1 and 4 of this Article, the Republic of Serbia, autonomous province or local self-government unit shall be entitled to bring the legal action requiring the annulment of the sale contract, within ninety days after the conclusion of the contract has been made known to them, but not later than five years after the conclusion of the sales contract.

The procedure for the annulment of the contract pursuant to paragraph 5 of this Article can also be initiated in case of contract being concluded in the form of a donation or price or terms of sale being fictitious, or actual price lower and terms of contract more favourable for the buyer, in relation to the offer referred to in paragraph 1 of the present Article.

Acquisition of Property Right in Protected Areas

Article 61

The ownership of a property in protected areas may be acquired under the conditions laid down by the present Law and other laws.

Foreign legal or private entities may acquire property right to properties in protected areas, in accordance with law.

Expropriation and Restriction of Property Rights

Article 62

For the purpose of implementation of protection and conservation of protected areas, when there is the interest of the Republic of Serbia, a property may be expropriated or property rights and other actual rights to property may be restricted in the protected area.

The procedure of expropriation of property rights shall be conducted pursuant to special regulation.

Compensation for Prohibition or Restriction of Usage Rights
Article 63

A legal entity, entrepreneur or private entity who, due to restrictions and prohibitions under the present Law or decision on protection adopted, has suffered substantial deterioration of existing conditions for generation of income from activities executed at least five years prior to adoption of the decision on the prohibition, that is, restriction of usage, which cannot be compensated for by an authorized activity within the prescribed framework of protection in the protected area, shall be entitled to get compensation for the restrictions and prohibition imposed on him/her.

The entity referred to in paragraph 1 of this Article to whom damage is being made

as a result of application of biological-technical protection and regulation aimed at sustainable use of the protected area, shall be entitled to get compensation for damages.

The compensation referred to in paragraphs 1 and 2 of this Article can be disbursed provided that the Ministry, the competent authority of the autonomous province and/or local self-government unit in cooperation with the manager of the protected area, has ascertained that the legal or private entity or entrepreneur implements prescribed measures and conditions for nature protection.

The amount of the compensation shall be established by mutual consent and in case of dispute the amount of the compensation shall be determined by the court of law.

The compensation referred to in paragraphs 1 and 2 of the present Article shall be paid from the budget of the Republic of Serbia, autonomous province or local self-government unit.

Liability for Damage
Article 64

The Republic of Serbia shall not be liable for any damage caused by wild species, except in cases determined by this Law or other regulations.

A legal entity, entrepreneur or private entity to whom strictly protected or protected wild species may cause economic or any other damage (hereinafter: the damaged party) shall be obliged to duly and at his/her on expense undertake all authorized actions and activities in order to prevent the occurrence of damage.

Under the action or activity in terms of paragraph 1 of this Article the following shall be understood: fencing, safeguarding of goods and chasing out of strictly protected animal species, from the place wherein directly threaten the goods and in the manner not threatening for the survival of the species.

Should circumstances permit, the opinion of the Institute shall be required for the actions and activities referred to in paragraph 3 of this Article.

Right to Get Compensation for Damage
Article 65

The damaged party shall be entitled to get compensation in the amount of actual damage inflicted by strictly protected and protected wild species if she/he has undertaken prescribed works and activities.

The damaged party damages shall be obliged to notify the Ministry, and/or the competent authority of the autonomous province and/or the manager of the protected area, about the occurrence of the damage without delay, and no later than eight days from the date of the occurrence of damage.

The damaged party and court expert shall establish facts that are important for the establishment of damage occurrence, cause and amount of damages on the spot, and the minutes shall be made.

Actions and activities referred to in Article 64 of this Law, manner of work and acting of court expert on the occasion of determination of damages, amount of compensation and criteria for calculation of damages shall be prescribed by the Minister.

The amount of compensation shall be established by mutual consent between the Ministry and/or the competent authority of the autonomous province and the damaged party, and in case of dispute the court of law shall determine the amount of compensation.

Compensation for Damages Caused by Illicit Action
Article 66

Legal entities, entrepreneurs and private entities shall be obliged to compensate for any damage incurred by violations of this Law.

The amount of compensation for damage shall be established by mutual agreement between the Ministry and/or the competent authority of the autonomous province and the party referred to in paragraph 1 of this Article, and in case of dispute the amount of the compensation shall be determined by the court of law.

The amount of compensation for damage caused by an illicit action in relation to particular specimens of strictly protected and protected wild species shall be determined on the basis of compensation rates approved by the Minister in agreement with the minister responsible for agriculture, forestry and water management.

Funds raised by compensation for damages referred to in paragraphs 1,2 and 3 of the present Article shall constitute the revenue of the budget of the Republic of Serbia and/or the budget of the autonomous province and shall be used for the conservation and improvement of the protected area.

Protected Area Management

Article 67

Protected areas management shall be the activity of general interest.

Protected area shall be managed by legal entity (hereinafter referred to as: Manager), that fulfills professional, human resource and organizational conditions for the activities of conservation, improvement, promotion of natural and other values and sustainable use of protected area.

By way of exception to paragraph 2 of this Article, the Manager may be an entrepreneur and/or private entity, if protected area has smaller coverage and is mainly privately owned in terms of property.

The Manager shall be designated/appointed by the decision on proclamation. The authority competent for the adoption of the decision on proclamation may establish a public enterprise, public institution or commercial entity for management of one or more protected areas.

Fulfillment of conditions referred to in paragraph 2 of this Article shall be determined by the Ministry, i.e. authority responsible for environmental protection in the autonomous province, i.e. authority responsible for environmental protection in local self-government unit, in the procedure of preparation of proposal decision on proclamation.

The Minister shall prescribe closer conditions referred to in paragraph 2 of this Article.

In order to protect and present natural values of protected area, the Manager,

when legal entity, may be granted publically owned properties for use, in compliance with law and regulations that pertain to use of assets owned by the Republic of Serbia and goods of general interest.

Liabilities of the Manager

Article 68

In the management of the protected area, the Manager shall be particularly obliged to:

1) guard the protected area and implement the prescribed protection regimes;

2) improve and promote the protected area;

3) adopt the management plan and the Rulebook on Interior Order and Guarding, specified by the decision on protection;

4) mark the protected area, borders and protection regimes in conformity with a special rulebook on marking;

5) provide for free development of natural processes and sustainable use of the protected area;

5a) give consent for scientific research, performance of research activities, film shooting, mounting of temporary buildings on surfaces within the protected area and to give other approvals in compliance with law and rulebook on interior order and guarding service;

6) provide for monitoring of implementation of measures and conditions of nature protection;

7) monitor the movement and activities of visitors and provide trained guides for tourist visits;

8) keep records of natural values and submit the data thereof to the Institute;

9) keep records of human activities, operations and processes that represent the factor of endangerment and damage to the protected area and submit the data thereof to the Institute and the Ministry;

9a) keep records of immovable property with data of importance for protected area management;

10) prevent all activities and operations non-complying with the decision on protection and representing the factor of endangerment and devastation of the protected area, in cooperation with state and regional inspection and security officers;

11) adopt a rulebook on charges;

12) perform other activities specified by the law and decision on protection.

If the Manager, performing his/her duties re and 6) of this Article, establishes that

offence has been committed or that there is reasonable doubt that criminal act or economic offence has been committed, he/she shall be authorized and obligated to file appropriate report or request for initiation of offence proceedings.

In order to inform, provide assistance and control visitors and collection of charges for use of motor vehicle in protected area, an entrance station may be established on the public road passing through the protected area, provided with appropriate facilities, equipment and staff, based on the spatial, i.e. urban development plan and protected area management plan, with the consent given by the public road manager.

The entrance station may have facilities, assets, equipment and personnel for maintenance of the public road and traffic safety.

When charges are collected at the entrance station, the protected area manager shall organize the collection so as to enable smooth passage of vehicles, with as few blocks as possible, in compliance with traffic-technical conditions, as established by the public road manager in the procedure of consent giving.

Should it be established during the procedure of work supervision by inspection of competent authorities that the manager fails to carry out the responsibilities stipulated by the decision on protection, the management of the protected area shall be assigned to another manager.

The Minister shall prescribe the manner of protected area marking referred to in paragraph 1, point 4) of this Article.

Financing of the Protected Area

Article 69

The funds for financing of the protected area shall be provided from:

1) The budget of the Republic of Serbia, autonomous province, i.e. local self-government unit;

2) Means of the Green Fund of the Republic of Serbia;

3) Charges for the protected area use;

4) Revenues from activities and management of the protected area;

5) Revenues for the implementation of programs, plans and projects in the field of nature protection;

6) Donations, gifts and aids;

7) Other sources in compliance with law.

The funds referred to in paragraph 1 of this Article may be used for purposes defined by this and other law.

The budget funds referred to in paragraph 1, point 1) of this Article shall be primarily used for financing of works and other costs pertaining to:

1) Guarding, maintenance and presentation of protected areas (establishment, equipping and training of guarding services, marking, maintenance of interior order, media and other public presentation of values, rehabilitation of degraded areas, waste management, information system development, etc.);

2) Visitors management (construction of entrance stations, educational and visitors centres, printing of materials intended for visitors, etc.);

3) Regulation of ownership-legal relations (purchase or change of land, charges for owners and users of immovable property for deprivation and restriction of utilization rights, the damages or other costs they suffered in relation to protection);

4) Monitoring and development of protected area status (monitoring, reintroduction, recultivation, etc.);

5) Spatial organization and sustainable use of natural resources (programmes, plans and projects for development of eco-tourism, organic agriculture, etc.).

Charges for the Use of the Protected Area

Article 70

Charges shall be paid to the Manager for use of protected area.

The Manager may prescribe and collect the charges referred to in paragraph 1 of this Article for the following:

1) Activities in the area of tourism, catering, trade, services, craftsmanship, industry, mining, energy, water management, civil engineering, transport, telecommunication, use of wild flora and fauna;
2) Holiday houses and other non-commercial facilities for rest in nature;

3) Motor vehicles in use in the protected area;

4) Touristic, recreational, sports and other manifestations and activities, advertisements, commercial film, photo and audio recordings;

5) Use of services, regulated fields, facilities and other property of the Manager and name and logo of the protected area;
6) Visit to the protected area, parts and facilities thereof.

The obligated entity shall be a user of the protected area, i.e. legal entity, entrepreneur or private entity who, with regard to the charge subject referred to in paragraph 2 of this Article, performs activities or has property and other possessions in the protected area, uses services and property of the Manager, visits the protected area for holiday, sport, recreation and similar needs, and otherwise uses its values and advantages.

The Manager shall prescribe the amount of charges depending on:

1) Degree of use of the protected area;

2) Degree of damages made to the protected area;

3) Degree of increased Manager's obligations in maintenance of tidiness and

cleanliness, guarding and other activities related to conservation, improvement, presentation and development of the protected area;

4) Advantages and uses provided by the protected area for performance of allowed business and activities.

The Manager may prescribe reduction or relieve from payment for one or more subjects to the charge referred to in paragraph 2 of this Article, primarily for the following:

1) Residents and permanently employed, private entities who perform activities or official duties in the protected area, disabled persons and persons with special needs, children, pensioners, etc.;

2) Users whose activities directly contribute to improvement of the status, presentation and promotion of values in the protected area;

3) Users who suffered from natural disaster or other reasons which resulted in circumstances which significantly complicate working and business conditions.

The Government shall prescribe joint elements for determination of charges for use of the protected area, especially closer subject, bases, highest amounts and manner of calculation and collection of the charge referred to in paragraph 2, points 1), 2) and 3) of this Article, manner of calculation and collection of the charge for visit to the protected area referred to in paragraph 2, point 6) of this Article, closer criteria for determination of the amount for the charge referred to in paragraph 4 of this Article and closer conditions for reduction or relieve from payment referred to in paragraph 5 of this Article.

The Manager's decision which determines the amount, manner of calculation and payment of charges for use of protected area shall be approved by the Ministry for the National Park and protected area proclaimed on the basis of the Government's decision, while the authority responsible for environmental protection in the autonomous province, i.e. authority responsible for environmental protection in local self-government unit shall adopt the Manager's decision for the protected area proclaimed on the basis of the decision made by the competent authority of autonomous province, i.e. by the competent authority of local self-government unit.

The Manager shall keep the funds collected from charges referred to in paragraph 1 of this Article at the special account and shall use those funds for protection, development and improvement of the protected area, i.e. for the implementation of management programme and plan.

With regard to payment of charges referred to in paragraph 2, points 1) and 2) of this Article, interest for delay in payment, forced collection and everything else that has not been prescribed by this Law, provision of the law that regulates tax procedure and tax administration shall be applied accordingly.

VI PROTECTION AND CONSERVATION OF WILD SPECIES

Protection and Conservation of Wild Species

Article 71

Prevention of all activities that contribute to disturbance of favourable state of wild species populations, destruction or damage to their habitats, nests, litters or disruption of their life cycle and/or favourable state, shall be deemed as protection and conservation of

wild species.

The favourable state of wild species shall be provided by the protection of their habitats and protection measures for particular species in compliance with this Law.

Protection of Wild Species Habitats

Article 72

During the execution of works and activities in nature and use of natural values in the wild species habitats, measures, methods and technical means that contribute to the conservation of favourable state of species and/or do not endanger wild species and/or disturb the habitats of their populations shall be applied, or these works and activities may be restricted in the period overlapping with significant stages of the life cycle of the species.

The conservation of wild species and their habitats referred to in paragraph 1 of this Article shall make an integrated part of the measures and conditions for nature protection referred to in Article 9 of this Law.

Strictly Protected Wild Species

Article 73

Strictly protected wild species can be protected in the entire territory of the Republic of Serbia, or in individual parts thereof.

If an area is the temporary habitat of a strictly protected wild species and its protection cannot be provided in some other way, the Ministry can, by a special decision, with prior opinion of the ministry responsible for agriculture and forestry, declare that area or the part thereof is temporarily protected as long as the need for protection exists.

Measures for Protection of Strictly Protected Wild Species

Article 74

It shall be prohibited to use, destroy, and execute other activities that could endanger strictly protected wild plant, animal including birds and fungi species and their habitats.

Pursuant to paragraph 1 of this Article, it shall be prohibited to:

1) destroy specimens of plant and fungi species and the development forms thereof by picking, collecting, cutting, or digging and uprooting in all stages of the biological cycle, and to endanger or destroy their habitats;

2) keep and trade in strictly protected plant and fungi species growing in the wild and their development forms thereof;

3) capture, keep and/or kill strictly protected wild animal species in all stages of the biological cycle, damage or destroy the development forms thereof, eggs, nests and litters, as well as the area of their breeding sites and resting places and to endanger or destroy their habitats;

4) significantly disturb these species, particularly during the period of breeding,

rearing, hibernation and migration;

5) cut off migratory routes;

6) hide, keep, breed, trade in, export, transport and offer for sale or exchange or in any other way acquire or publicly expose animal species including all their derivatives and development forms.

The detailed conditions and protection measures for strictly protected wild species and measures for the protection of their habitats shall be specified by the decision referred to in Article 48 of this Law.

Permitted Activities with Strictly Protected Wild Species

Article 75

Notwithstanding the provisions of Article 74 of this Law, when there is no other satisfactory solution and the exemption is not damaging the survival of populations of strictly protected wild species at a favourable conservation status in their natural habitat, i.e. when there is no other satisfactory solution for wild bird species, the Ministry may allow activities that aim at:

1) research and education, recolonization, (repopulation), reintroduction and breeding operations in *in-situ* and *ex-situ* conditions;

2) prevention of serious damage to crops, livestock, forests, fishponds and water and other forms of property;

3) protection of public health and public safety and in case of birds the air safety as well, or for other reasons of predominant public interest, including reasons of social and economic nature and beneficial consequences of primary importance for the environment;

4) protection of wild plant and animal species and conservation of wild habitats;

5) allowing, under strictly controlled conditions and under limited scope, taking or keeping of certain specimens in limited quantity.

A permit for the situation referred to in paragraph 1 of this Article shall be issued by the Ministry upon previously obtained opinion of the Institute.

An application for the permit referred to in paragraph 2 of this Article shall contain scientific name of the species, reasons, purpose and aim of the use, i.e. performance of activities, elaboration/study on the manner, place, time, useful or harmful consequences and other proofs and relevant facts of importance for the specific case.

The permit referred to in paragraph 2 of this Article shall be issued by virtue of a decision.

The Ministry shall keep records of the issued permits referred to in paragraph 2 of this Article.

No claims shall be permitted against the decision referred to in paragraph 4, but an administrative dispute may be initiated.

Protected Wild Species

Article 76

Protected wild species can be protected in the entire territory of the Republic of Serbia, or in individual parts thereof.

The management of populations of protected wild species that is not regulated by rules concerning hunting and fisheries shall be implemented on the basis of a permit issued by the Ministry in accordance with law.

Protected wild species of fungi, lichen, plants, animals or their parts, can be collected for the purpose of processing, trading, transboundary trade, as well as cultivation and rearing, on the basis of a permit issued by the Ministry in accordance with law.

The detailed conditions and protection measures for protected wild species and measures for the protection of their habitats shall be specified by the decision referred to in Article 48 of this Law.

Permits referred to in paragraphs 2 and 4 of this Article shall be issued by the Ministry upon previously obtained opinion of the Institute.

Permits referred to in paragraph 2 and 4 of this Article shall be issued in the form of a decision and shall contain: name of the species, purpose and objective of population management, i.e. activities, place of activity performance, validity period of the permit, manner and conditions under which activities can be performed as well as the manner of delivering reports on the activities performed.

No claims shall be permitted against the decision referred to in paragraph 6 of this Article, but an administrative dispute may be initiated.

The Way of Use of Protected Wild Species

Article 77

The use and collecting of protected wild species shall be allowed exclusively in the way that does not endanger favourable status of the population.

The Minister shall prescribe in more detail the conditions and measures for the protection of protected wild species including the following:

1) Prohibition of use in terms of time;

2) Quantitative and qualitative restrictions in their use;

3) Prohibition of use in terms of space aiming at recovery of population to a satisfactory level.

The institute shall register the manner and scope of usage of protected wild species for the purpose of determination and follow-up of population status including wild

species whose usage is regulated by the Law on Hunting and the Law on Fishery.

Should it be established that due to usage a protected wild species is endangered, the Minister can prohibit or restrict the use of that species, previously acquiring the opinion of the Institute.

Permit to Research Strictly Protected and Protected Wild Species
Article 78

For the research of strictly protected and protected wild species that is performed by methods that could endanger the species (such as capturing, collecting, marking, sampling, etc.) the Ministry shall issue a permit for scientific-research and educational purposes, by way of a decision and with previously obtained opinion of the Institute.

Permitted activities referred to in paragraph 1 of this Article shall be performed in the protected area in compliance with the decision on interior order and guarding service.

The research reports referred to in paragraph 1 of this Article shall be submitted to the Ministry, the Institute and the manager of the protected area by the end of the calendar year.

Taking out of specimens of strictly protected and protected wild species referred to in paragraph 1 of this Article for scientific and research purposes shall be carried out on the basis of a permit issued by the Ministry, in accordance with Article 94 of this Law.

No claims shall be permitted against the decision referred to in paragraph 1, but an administrative dispute may be initiated.

Prohibited Means for Capturing and Killing of Wild Animals
Article 79

The use of certain means for capturing and killing of wild animals, that endanger or disturb their populations and/or habitats, affect their welfare, and that can cause their local disappearance shall be prohibited.

The prohibited means shall be considered the following in particular:

1) Traps;

2) Adhesives;

3) Chemical means like attractants;

4) Live animals used as decoys in hunting of birds and game;

5) Crossbows, bows, arrows and/or other weapon with strings, that can fling an arrow or other projectile by pulling the string or some other elastic;

6) Bird hunting with nets;

7) Lethal or stunning electrical devices;

8) Luminous devices;

9) Mirrors and other dazzling devices;

10) Sound transmitters (tape recorders, cassette recorders, audio recorders and players etc.) that emit sound of calling, crying or responding;

11) Devices for illuminating targets;

12) Sighting devices for night shooting comprising an electronic image magnifier or image converter;

13) Explosives;

14) Poisons or anaesthetic baits;

15) Automatic weapons;

16) Aircrafts;

17) Motor-driven vehicles in motion used to hunt animals;

18) Other devices specified by other law and ratified international agreements.

Certain means referred to in paragraph 2 of this Article can be used exceptionally and restrictively for scientific and research purposes, aimed at implementation of reintroduction programme, parenting, monitoring of species, relocation of animals, implementation of protection and conservation programs, and other cases in accordance with special law.

The permit to use the means referred to in paragraph 3 of this Article shall be issued by the Ministry, by virtue of a decision, with the prior opinion of other competent authorities.

No claims shall be permitted against the decision referred to in paragraph 4, but an administrative dispute may be initiated.

Measures for Protection of Migratory Species
Article 80

Public roads and other traffic routes, telecommunication and electric systems, waterworks and other buildings whose construction cuts off usual corridors for daily and seasonal migration of wild animals, causes habitat fragmentation or in some other way disturbs their normal life cycle, shall be constructed so as to reduce negative impacts with the application of special construction and technical solutions on the buildings and around them, during the periods of both construction and exploitation.

Special technological solutions enabling free and secure communication of wild animals (ecological bridges, passages and viaducts, tunnels, permeable tubes, pitches, secure and orientation objects, fish paths and lifts etc.) as well as protection measures and the methods of maintaining technological solutions shall be prescribed by the Minister with previous consent of the minister in charge of transport, mining and energy, agriculture, forestry and water management.

Measures for Protection of Birds and Bats
Article 81

Towers and technical components of medium and high voltage ducts shall be so

executed as to protect birds and bats against the electric shock and mechanical injury.

Locations of wind powered generators (windmills) shall be so determined as to avoid important habitats and migration routes thereof.

The provision of paragraph 1 of the present Article does not apply to railway overhead contact lines.

In construction of high facilities (wind generators, masts, towers, bridges etc.) in the vicinity of ecologically important areas, it shall be necessary to apply technical-technological measures, implying, first of all, lighting of facilities, to avoid adverse effects of such facilities.

Usage of strong light sources (advertising rotating reflectors, lasers and the like) pointed towards the sky shall not be allowed, unless when used for safety and air traffic control purposes.

Introduction of Allochthonous Wild Species into the Wild

Article 82

Introduction of allochthonous wild species and hybrids thereof into the wild on the territory of the Republic of Serbia shall be prohibited.

By way of exception, the introduction referred to in paragraph 1 of the present Article shall be permitted if scientifically and professionally proven and acceptable from the aspect of nature protection and sustainable management, that is, if such introduction does not endanger populations or natural habitat of autochthonous wild species.

The Ministry shall issue the permit referred to in paragraph 2 of this Article based on the acceptability study, upon previously obtained opinion of the Institute and the nature impact assessment study, with approval of the Ministry in charge of agriculture, forestry and water management.

Introduction of allochthonous wild species in controlled conditions shall be possible based on the permit issued by the Ministry by way of a decision, upon obtaining an opinion from the Institute or other authorized scientific and expert organization, expressing that there is no danger for autochthonous species in case of accidental or intentional escape of specimens into the wild in the Republic of Serbia.

Allochthonous wild species that by introduction and/or spreading endanger other species and overall biodiversity on the territory of the Republic of Serbia shall be declared as invasive by the Ministry, based on acknowledged international criteria, scientific findings and obligations arising from international agreements and international documents, as per proposal of authorized scientific and expert organizations, upon previously obtained opinion of the ministry responsible for agriculture, forestry and water management.

The document referred to in paragraph 5 of this Article shall stipulate actions to control and combat invasive species.

Unintentional Introduction of Allochthonous Wild Species

Article 83

In the event of unintentional introduction of allochthonous wild species and hybrids thereof into the wild on the territory of the Republic of Serbia, or if there is a reasonable doubt that such introduction will occur, the Minister shall stipulate actions to exterminate or prevent further spread of introduced allochthonous wild species and hybrids thereof.

Relocation of Live Specimens of Autochthonous Wild Species

Article 84

Relocation of live specimens of autochthonous wild species into the wild on the territory of the Republic of Serbia can be carried out based on researches and planning documents, in accordance with this and other laws.

The relocation referred to in the preceding paragraph can be carried out provided that research findings show that such action does not in any way endanger the favourable status of the species populations, i.e. welfare of animals, and in case of accidental occurrences (floods, fires, droughts, etc.).

Relocation of live specimens of autochthonous wild species into the wild shall be approved by the Ministry upon obtaining the opinion of the Institute.

Reintroduction of Wild Species

Article 85

Reintroduction of wild species into the wild on the territory of the Republic of Serbia can be carried out based on research, reintroduction programme and permit.

Feasibility Study and Environmental Impact Assessment Study should be done prior to any reintroduction.

Scope and contents of the studies referred to in paragraph 2 of the present Article shall be determined by the Ministry upon the proposal of the Institute.

Reintroduction of wild species can be carried out provided that research findings show that such action contributes to the favourable status of the species.

The permit referred to in paragraph 1 of the present Article shall be issued by the Ministry by way of a decision, upon previously obtained opinion of the Institute and the ministry responsible for agriculture and forestry.

No claims shall be permitted against the decision referred to in paragraph 5, but an administrative dispute may be initiated.

Conditions for Keeping and Marking Live Specimens of Wild Animal Species in Captivity

Article 86

Live specimens of wild animal species may be kept in captivity only if they are provided with living conditions in accordance with the law, well suited for the type, breed, gender, age, physical and biological specificities and ethological needs of the species.

Keeping live specimens of wild animal species in inappropriate conditions shall be prohibited.

Specimens of wild animal species referred to in paragraph 1 of this Article must be marked in the prescribed manner.

The Minister shall prescribe conditions that must be fulfilled by zoos and other facilities and/or spaces for keeping animals in the sense of paragraph 1 of this Article, the conditions for keeping, prohibition or restriction on keeping certain species, training and educational programmes and the manner of marking and recording specimens of wild animal species referred to in paragraph 1 of this Article.

Keeping live specimens of the wild animal species stipulated within a regulation referred to in paragraph 4 of this Article in captivity shall be prohibited, unless:

1) they are kept in suitable facilities within a zoo, rescue center and scientific institutions or other scientific organisations for the purpose of biomedical research or scientific research with the aim of species conservation;

2) they are kept in other facilities, when temporarily held for treatment, recovery and return to the wild and/or, when the objective is the welfare of animals, the specimens are kept under the prescribed conditions, given appropriate veterinary care and represent no danger for the health and safety of people and the environment.

A legal person, entrepreneur or natural person owning live specimens of wild animal species whose keeping is prohibited or restricted in accordance with this Law shall be obliged to report the specimens to the Ministry.

By way of a decision, the Ministry shall prohibit the trade, change in ownership, further reproduction of reported specimens and obtaining new specimens of wild animal species whose keeping is prohibited or restricted in accordance with this Law, to the persons referred to in paragraph 6 of this Article, except in cases to which the exception referred to in paragraph 5 of this Article applies.

Based on the decree referred to in paragraph 7 of this Article, the Ministry shall keep a register of legal persons, entrepreneurs and natural persons referred to in paragraph 6 of this Article.

The decree referred to in paragraph 7 of this Article is final and an administrative dispute may be filed against it.

Zoo

Article 86a

A legal person keeping wild animals within a zoo shall submit to the Ministry an application for a zoo licence.

The zoo licence is issued for a period of five years.

The licence referred to in paragraph 1 of this Article shall be issued provided that all conditions for keeping wild animals in the zoo are met in accordance with a regulation referred to in Article 86, paragraph 4 of this Law.

Six months before the expiry of the time-limit referred to in paragraph 2 of this Article, an application for the renewal of the licence shall be submitted in accordance with this Law.

The following documentation shall be submitted with the application for the licence, containing in particular:

1) the species and number of animals;
2) a detailed plan of facilities and spaces for keeping animals;
3) other evidence and documentation prescribed in accordance with this Law.

The Ministry shall evaluate the fulfilment of conditions for granting a licence on the basis of the submitted application and findings of the relevant inspection.

If a regular or extraordinary inspection determines that a zoo or part thereof does not fulfill the conditions for granting the licence, i.e. the conditions imposed by the licence issued or revised licence, the Ministry shall close:

1) to the public the part of the zoo that fails to fulfill conditions, or

2) to the public the whole zoo and revoke the licence.

By way of a decision, the Ministry may temporarily permit the operation of a zoo that was established or existed before the entry into force of this law and shall mandatorily prescribe the time limit, of maximum two years, for fulfillment of all conditions for obtaining a permit.

The licence conditions may be changed during the validity of the licence if:

1) there is a risk of damage or a damage to human health or
the environment has occurred, if the law or other legislative act has been changed;
2) conditions related to occupational safety require a revision, i.e. modification of the licence.

The Ministry shall, ex officio, modify the licence conditions, i.e. perform the licence revision referred to in paragraph 9, points 1 and 2.

The Minister shall closely prescribe the content of the application, the documentation to be submitted with the application and the application form for the zoo licence.

Origin of Specimens of Strictly Protected and Protected Wild Species

Article 87

Legal persons, entrepreneurs and natural persons keeping specimens of strictly protected and protected wild species shall keep evidence confirming that these are:

(1) lawfully imported specimens;

(2) lawfully acquired specimens before the species was protected by the Law;

(3) specimens originating from breeding in accordance with this Law;

(4) specimens or their offspring, that were in accordance with this Law reported to the Ministry by 1 June 2011.

The permits and certificates issued in accordance with this Law, the regulations adopted based on this Law or in accordance with the Law on the Ratification of the Convention on International Trade in Endangered Species of Wild Fauna and Flora („Official Gazette of FRY – International Agreements“, No. 11/01 - hereinafter: CITES Convention), as well as other substantiated evidence based on which the Ministry can

determine the lawful acquisition of specimens, including the results of laboratory and other technical analysis carried out by institutions designated by the Ministry for determining the origin of specimens, shall be deemed proof of origin referred to in paragraph 1 of this Article.

For specimens referred to in paragraph 1, point 4 of this Article which their owners reported by 1 June 2011 without providing substantiated proof of origin, during the process of issuing certificates based on regulations governing transboundary movement and trade in protected species, the statements on origin of specimen shall be taken into consideration as proof of origin.

Based on opinions from authorised scientific or expert organisations, the Ministry shall authorise or reject certificate request applications based on regulations governing transboundary movement and trade in protected species .

Legal persons, entrepreneurs or natural persons owning dead specimens, parts and derivatives of certain animal species protected under the CITES convention shall notify the Ministry of the possession of these specimens in order to obtain the certificate referred to in paragraph 2 of this Article.

When legal persons, entrepreneurs or natural persons inherit a specimen of strictly protected or protected wild species they shall without delay notify the Ministry and obtain the appropriate certificate.

The Minister shall prescribe the conditions and manner of treating the specimens referred to in paragraph 3 of this Article and their offspring, manner of notification, species that should be notified, conditions and manner of treating dead specimens, parts and derivatives referred to in paragraph 5 of this Article.

Registering possession of specimens of strictly protected and protected wild animal species

Article 88

A legal person, entrepreneur or natural person keeping a specimen of strictly protected or protected wild species in captivity shall submit an application to the Ministry for a certificate, in accordance with the regulation governing transboundary movement and trade in wild flora and fauna species, except in cases when for the concerned species there is already a valid certificate issued by the ministry or when an exemption has been stipulated.

The certificate referred to in paragraph 1 of this Article shall be issued if the applicant proves that the conditions imposed by this Law and the regulation on transboundary movement and trade in wild flora and fauna species have been met.

The Ministry shall keep a register of speecimens of strictly protected and protected wild animal species for which the certificates referred to in paragraph 1 of this Article have been issued.

Breeding of strictly protected and protected wild species

Article 89

A legal person, entrepreneur or natural person who intends to breed or artificially

propagate specimens of strictly protected or protected wild species shall obtain a licence in accordance with this Law.

The Ministry shall prohibit the breeding if, on the basis of an opinion from a scientific or expert organisation, it establishes that breeding or artificial propagation of the strictly protected or protected wild species represents a danger to human health, welfare of animals or the environment.

If, during the validity of the license referred to in paragraph 1 of this Article, an inspection procedure in accordance with this Law determines that breeding or artificial propagation are performed contrary to conditions based on which the license was issued, the Ministry shall revoke the license.

The owner of specimens of strictly protected or protected wild animal species referred to in paragraph 1 of this Article shall ensure that those specimens do not escape into the wild and shall be responsible for damages caused by those animals if they escape.

Breeding places of specimens of strictly protected or protected wild species, in accordance with the CITES convention, can apply for permits for transboundary trade of these specimens for commercial purposes, only if the breeding place was registered with the CITES Secretariat.

Trade in strictly protected and protected wild animal species

Article 90

A legal person, entrepreneur or natural person engaged in trade in specimens of strictly protected, i.e. protected wild animal species shall keep live animals in accordance with Article 86 of this Law, shall treat specimens in accordance with Article 87 of this Law and shall conduct trade in accordance with regulation governing transboundary movement and trade in specimens of wild species.

The trade referred to in paragraph 1 of this Article shall cover the sale and purchase, acquisition for commercial purposes, presentation to the public for profit, use with the aim of acquiring profit, keeping for sale, offering for sale, requesting for purchase or transport for sale, rent, exchange or any other form of change in ownership.

When performing trade in specimens of strictly protected or protected wild animal species, the seller, i.e. owner shall provide the new owner with the proof of origin in accordance with Article 87 of this Law.

Certificates and other documents issued on the basis of this Law for the purpose of trade in strictly protected or protected wild animal species shall be used only for the specimens to which they relate.

Taking care of live specimens of wild animal species

Article 91

For the purpose of temporary and/or permanent care of live specimens of wild animal species, the Ministry shall establish rescue centers, zoos or other legal or natural persons.

The Minister, in consent with the minister responsible for veterinary activities, shall stipulate conditions to be met by the rescue centers referred to in paragraph 1 of the present Article.

The rescue center referred to in this Article shall be obliged to obtain an operating licence issued by the Ministry by virtue of a decision.

No claims shall be permitted against the decision referred to in paragraph 3 of this Article, but an administrative dispute may be initiated.

Financial means for the care of specimens of wild animal species shall be provided through:

1) the budget of the Republic of Serbia, autonomous province, i.e. local government unit;

2) funds of the Green Fund of the Republic of Serbia;

3) other sources in accordance with the law.

Handling of temporarily kept, temporarily confiscated, permanently confiscated and abandoned specimens of strictly protected, protected and allochthonous wild species

Article 92

Specimens of strictly protected, protected and allochthonous wild species that are handled contrary to provisions of this Law shall be confiscated in accordance with this Law and a notice of confiscation containing data on the confiscated specimens shall be issued.

The Ministry shall decide how the temporarily kept, temporarily confiscated, permanently confiscated and abandoned specimens of strictly protected, protected and allochthonous wild species are handled, in accordance with the regulation on transboundary movement and trade in wild flora and fauna species.

The temporarily kept, temporarily confiscated, permanently confiscated and abandoned live specimens are taken for further care by an authorized person from the Ministry, an inspector competent for environmental isues (hereinafter: inspector), an authorized scientific or expert organisation or a zoo, i.e. rescue center determined by the Ministry, if the authority that carried out the confiscation or seizure thereof is not able to transport them to a place of care.

The costs of taxonomic determination of species and/or identifying the species from which a part or derivative originates, of sampling, analysis, unharmful removal, transport, treatment, care, return into the wild and taking care of the confiscated specimens referred to in paragraph 1 of this Article, shall be borne by the legal person, entrepreneur or natural person from whom the specimens were confiscated.

In case transboundary movement is performed contrary to regulations and the consignee was not identified, all costs referred to in paragraph 5 of this Article shall be borne by the sender, carrier or ordering party, i.e. the state if the above persons are not identified.

The total amount of costs shall be determined by the Ministry based on reports on resources spent for the purpose of taking care of the specimens.

Reimbursement of costs is executed on the basis of a final court decision.

Mutual rights and obligations in connection with the provision of care services for confiscated specimens shall be regulated by an agreement concluded between the Ministry and the legal or natural person authorized to take care of the specimens.

The Minister shall prescribe the list of expenditures associated with the care of confiscated specimens of strictly protected, protected and allochthonous wild species.

Treatment of found specimens of strictly protected and protected wild animal species

Article 93

A person who finds a specimen of a strictly protected or protected wild animal species shall immediately notify the Ministry and the Institute of:

(1) dead specimens found,

(2) live specimens that are sick, injured or unable to survive in the wild by themselves.

The Ministry may establish a special team of experts - natural and/or legal persons for cases requiring intervention on living specimens of wild animals in the wilderness or in captivity.

Mutual rights and obligations shall be regulated by an agreement concluded between the Ministry and the persons referred to in paragraph 2 of this Article.

The Ministry or the Institute shall direct the specimens referred to in paragraph 1 point 2 of this Article, for treatment and recovery, to temporary care and after the recovery, if assessed that they are able to survive by themselves, the specimens shall be released back into their natural habitat.

Justifiable expenses for transport, care and treatment of animals shall be borne by the Ministry.

All specimens of strictly protected and protected wild animal species referred to in paragraph 1 of this Article shall be marked in a prescribed manner.

Killed specimens, or specimens that died otherwise, of strictly protected wild species found within the territory of the Republic of Serbia shall be handed over to the closest veterinary organisation, or other institution determined by the Ministry, for determining the cause of death.

Expenses for sample analysis and diagnostics for determining the cause of death of the specimens referred to in paragraph 7 of this Article shall be borne by the Ministry.

Dead specimens referred to in paragraph 1 of this Article shall be handed over to an authorized scientific or expert organisation for taxidermy, conservation and keeping by which they become protected movable natural resources as part of the biological heritage, which also have scientific, educational and cultural importance, when such handling does not pose danger for human health.

The authorised scientific or expert organisation that takes over the dead

specimens referred to in paragraph 7 of this Article shall keep a register of those specimens and shall submit data from the register to the Ministry and the Institute.

Transboundary movement, trade in and breeding of strictly protected, protected and allochthonous wild species

Article 94

Based on the opinion of an authorized scientific or expert organisation, the Ministry shall issue permits and other documents (certificates, opinions, notifications etc.) authorizing the import, export, introduction and re-export of specimens of wild species and their parts and derivatives protected under the Law and ratified international agreements, and the import of live specimens of allochthonous wild species that are not protected.

The permit, i.e. certificate referred to in paragraph 1 of this Article shall be issued provided that:

(1) the right to use a specimen of wild species of animal, fungi and plant was acquired in accordance with the law;

(2) the animals or consignment are marked in a prescribed manner;

(3) during transport, all measures for the welfare of animals have been taken;

(4) other conditions imposed in accordance with this Law have been fulfilled.

Based on judgements sanctioning offences related to transboundary movement of wild species that are timely delivered to the Ministry by the relevant courts, the Ministry may reject an application for a permit and/or certificate submitted by persons punished for illegal transboundary movement of specimens of strictly protected or protected wild species:

1) for economic offence, i.e. infringement in a period of six months to two years from the final court decision; or

2) for criminal offence in a period of two to five years from the final court decision.

Transboundary movement of specimens of wild species shall be prohibited in case:

(1) transboundary movement, including dispatch, transport and transit is performed without a permit or certificate;

(2) it is performed contrary to the issued permit or certificate, or the permit or certificate is used for a specimen other than the one for which it was issued;

(3) the permit or certificate used was invalidated or its validity has expired;

(4) a false or falsified permit or certificate, including a document with unauthorized modifications is used.

The Ministry may declare the issued permits and certificates void or prohibit the issuance of permits and certificates during the year following the day a permit was invalidated.

The Ministry shall declare a permit or certificate void if:

(1) after issuing the permit or certificate, the export, import or transit cannot be performed in accordance with the conditions stated in the certificate or permit due to unpredicted circumstances;

(2) it is subsequently established that the decision to issue a permit or certificate was adopted on the basis of inaccurate data, falsified documents or documents with unauthorized modifications.

The Ministry shall not issue a permit or certificate to a person whose permit or certificate was declared void due to circumstances referred to in paragraph 6, point 2 of this Article while having been aware of the data accuracy, during a period of 12 months following the day a permit or certificate has been declared void.

Every consignment of strictly protected, protected and allochthonous wild species must be accompanied by an original permit or certificate.

During import, export, introduction, re-export and transit, live animals must be transported and kept in a manner that is not at all harmful or damaging to their health, nor should they be treated inhumanely, in accordance with special regulations.

The Minister may prohibit or restrict the import of certain allochthonous wild species on the basis of the opinion of an authorized scientific or expert organisation in accordance with imposed conditions and in particular if:

(1) the import represents a danger for the autochthonous species or the health or safety of people;

(2) the level of trade may endanger the survival of the population of given wild species in the wild;

(3) the percentage of specimens of the wild species dying during transport is too high.

In accordance with ratified international agreements and with the aim of protecting the wild species referred to in paragraph 1 of this Article, the Minister shall prescribe:

(1) conditions under which the import, export, introduction, re-export or transit, trade in and breeding of wild species referred to in paragraph 1 of this Article may be performed;

(2) the issuance of permits and other documents (certificates, opinions and notifications, etc.);

(3) lists of wild species, their parts and derivatives subject to permits, i.e. other documents;

(4) wild species, their parts and derivatives whose import, i.e. export is prohibited, limited or suspended;

(5) exemptions from issuance of permits and other documents;

(6) the content, appearance and manner of maintaining the register of permits and other documents issued;

(7) the manner of marking animals or consignments;

(8) the manner of handling confiscated specimens;

(9) the manner of conducting supervision and keeping records;

(10) preparation of reports, etc.

No claims shall be permitted against the decision referred to in paragraph 1, but an administrative dispute may be initiated.

Notification of transboundary movement of strictly protected, protected and allochthonous wild species

Article 95

Transboundary movement of specimens of strictly protected or protected wild species, their parts and derivatives and the import or introduction of live specimens of allochthonous wild species must be notified to the customs service in accordance with provisions of this Law and other regulations.

An importer or exporter of specimens as well as a natural person who introduces or re-exports the specimens referred to in paragraph 1 of this Article shall notify the Ministry of the expected time of arrival or dispatch 48 hours before performing the import or export if this condition is stated in the permit or document referred to in Article 94, paragraph 1 of this Law.

A veterinary medical examination and phytosanitary examination of the consignments referred to in paragraph 1 of this Article, under the competence of the border veterinary and phytosanitary inspection, is performed in accordance with special regulations.

Border crossings where the import, export, introduction, re-export or transit of strictly protected or protected wild species, their parts or derivatives may be performed as well as conditions regarding their equipment and training for performing these activities shall be prescribed by the Minister.

At the border crossings, the Ministry shall make available to the public the information related to conditions and manner of conducting transboundary movement of strictly protected or protected wild species.

If the transboundary movement of specimens of strictly protected, protected or allochthonous wild species is performed contrary to the prescribed conditions, the specimens shall be temporarily kept by the customs authority and confiscated by the relevant inspector in accordance with Article 92 of this Law.

Obligations of the Customs Service

Article 96

The customs authority shall, within the limits of its competences, control the import, introduction, export, re-export and transit of specimens within the meaning of this Law.

The customs authority shall particularly check if valid permits, certificates or other documents issued in line with the regulation referred to in Article 94 of this Law, and/or the

prescribed permits of another country issued in line with the CITES Convention, have been submitted with the specimens referred to in Article 95, paragraph 1 of this Law.

The customs authority shall handle the permits and certificates referred to in paragraph 2 of this Article in a manner prescribed within the regulation governing transboundary movement of protected wild species referred to in Article 94 of this Law.

The customs authority shall inform the Ministry in case expertise is required for examining the contents of the consignment being checked.

If the customs control shows that the specimens referred to in Article 94 of this Law are imported, introduced, exported, taken out, re-exported or are in transit in a manner contrary to provisions of this Law, the customs service shall temporarily keep them and immediately inform the Ministry in order to conduct further activities under the responsibility of the Ministry.

The temporarily detained specimens, until a decision from the Ministry is issued, that is by the end of court proceedings, the customs authority:

(1) may keep the specimens or entrust them to the Ministry for safekeeping in the case of parts and derivatives;

(2) entrust the dead or live specimens to the Ministry for the purpose of disposal in accordance with this Law.

The expenses generated during the procedure referred to in paragraph 6 of this Article shall be borne by the person whose specimens were temporarily kept, i.e. temporarily or permanently confiscated.

In case expertise is required for conducting controls referred to in paragraph 4 of this Article, the costs of the control shall be borne by the importer, i.e. exporter on the territory of the Republic of Serbia.

The Government shall determine the amount and manner of paying a tax for the expert control of the contents of the consignment referred to in paragraph 4 of this Article.

VII PROTECTION OF MOBILE PROTECTED NATURAL DOCUMENTS

Protection of Mobile Protected Natural Documents

Article 97

Protected geological, paleontological and biological documents shall be kept where found, and the finding site shall enjoy protection as a protected natural asset.

If certain protected geological and paleontological documents (fossils, minerals, crystals and others) cannot be protected at the finding site, they shall be given in custody of a legal entity (Natural History Museum, County Museum, museum within a faculty or collection) that shall ensure thereof competent museology protection (inventory, determination, preparation and conversation, constant maintenance and monitoring) and enable utilization thereof for educational, scientific and cultural purposes.

The Minister shall prescribe detailed conditions under which fossils, minerals and crystals can be given to a legal entity for protection and custody.

Botanical and zoological collections shall enjoy protection as protected natural goods. They can be a property of legal entity, entrepreneur or private entity, which shall

ensure thereof competent museology protection (inventory, determination, preparation and conversation, constant maintenance and monitoring) and enable utilization thereof for educational, scientific and cultural purposes.

Restrictions and Bans

Article 98

It shall be prohibited to take from nature the geological and paleontological documents (fossils, minerals, crystals, cave ornaments and other) that are declared as protected natural goods or that are situated at geo heritage object and protected finding site.

As an exemption, the Ministry may allow fossils, minerals and crystals that are declared as protected natural goods or that are situated at geo heritage object and protected finding site to be taken from nature, for scientific and specialized research, education, display at exhibitions etc.

Handling Geological and Paleontological Material Documents

Article 99

The found geological and paleontological documents (fossils, minerals, crystals and others) that may represent protected natural value must be reported by the finder to the Ministry within eight days from the day of finding, and the finder must take measures to protect them against destruction, damage or theft.

The Ministry shall issue a decision on research of the finding site containing geological and paleontological documents, not later than thirty days from the day the finding is reported, by which it shall stipulate the conditions for nature protection.

Unless the Ministry stipulates otherwise, the finder cannot perform actions and activities on the finding site that may result in destruction or damage of finding, except for taking protective measures.

The owner or user of right on land where geological and paleontological documents are found shall allow the research of finding in line with the decision issued by the Ministry.

Research of finding can be performed by a legal entity, entrepreneur or private entity based on the right to research.

The legal entity, entrepreneur or private entity shall provide, within thirty days from the performed research the Ministry with the report on research performed, containing data on state of finding, possible endangerment of the finding and on necessary further research and additional protective measures.

If the finding is a potential geo heritage object, legal entity, entrepreneur or private entity shall provide, within the same period of time, the Institute with the report on research performed, containing data on state of finding, possible endangerment of the finding and on necessary further research and additional protective measures.

Trade in Mobile Protected Natural Documents

Article 100

It shall be prohibited to export any of mobile protected natural documents that are declared as protected natural goods.

As an exemption, the Ministry may permit the import, export, i.e. carrying out of mobile protected natural goods for purposes of scientific research, education or exhibition.

The permit referred to in paragraph 2 of the present Article shall determine the conditions for export of mobile protected natural documents in line with their kind.

VIII ORGANISATION OF NATURE PROTECTION

Performance of Nature Protection Administrative Activities

Article 101

Nature protection administrative activities shall be performed by the Ministry, the competent authority of autonomous province and competent authority of local self-government unit.

State authorities, autonomous province authorities and authorities of local self-government unit shall, in line with the present Law, the Strategy, nature protection programmes and spatial planning documents:

1) take care of conservation of nature, natural values and landscape diversity on their territory;

2) declare protected natural goods from their area of competence;

3) provide conditions for protection and conservation of protected natural goods from their area of competence;

4) participate in the procedure for proclamation of protected area to be declared by the National Assembly or the Government or competent authority of autonomous province or competent authority of local self-government unit;

5) take part in preparation of plans for protected area management from their area of competence;

6) inform public of status of nature and natural values on their territory and of taking measures for protection and conservation;

7) provide necessary assistance to local self-government units in protecting nature on their territory;

8) perform other activities as stipulated by the present Law and regulations adopted pursuant hereto.

Professional Activities for Nature Protection
Article 102

Professional activities for nature and natural goods protection shall be performed by competent nature protection organizations and such activities shall particularly refer to

the following:

1) Collection and processing of data on nature and natural values;

2) Monitoring of performance and assessment of conservation of nature and level of endangerment of geo heritage objects, wild species and their habitats, habitat types, ecosystems, ecologically important areas, protected areas, ecological corridors, ecological networks and landscapes;

3) Preparation of protection studies determining the values of areas proposed to be protected and methodology for managing such areas;

4) (*deleted*)

5) Drafting of proposal for termination of area protection;

6) Drafting of proposal for prior area protection;

7) Providing conditions for works on protected natural goods, issuance of the opinion on plan for managing of protected area;

8) Performing competent supervision of protected natural goods with proposed

measures;

9) Providing professional assistance to managers of protected natural goods, local self-government authorities, associations of citizens, groups of citizens and individuals in protecting nature, landscapes and natural goods;

10) Determining the conditions and measures for protection of nature and natural values in drafting and implementing spatial and town plans, designing documents, bases (forestry, hunting, fishing, water management and other), programmes and strategies in all industries that affect the nature;

11) Performing professional activities in drafting an appropriate assessment for works and activities in nature, preparation and implementation of projects and programmes on protected area;

12) Proposing scope and contents of feasibility studies and environmental impact assessments in the process of reintroduction and inhabitation of wild species into the wild;

13) Maintaining records on method and scope of use, as well as on factors of endangerment of protected and strictly protected wild species to identify and monitor performance of their population;

14) Taking part in the procedure of public insight for proclamation of protected natural goods;

15) Organizing and implementing nature protection educational and promoting

activities;

16) Participating in implementation of ratified international agreements on nature

protection;

17) Maintaining registers of protected natural goods and other data significant to

nature protection;

18) Inventory of individual elements of geological, biological and landscape diversity with statistical analyses and reports on thereof performance;

19) Maintaining nature protection database as a part of a single information system of the Environmental Protection Agency;

20) Informing public of natural values, nature protection, thereof endangerment, factors and consequences of endangerment;

21) Performing of other activities as determined by the present Law.

Nature Protection Organizations

Article 103

Activities for protection of nature and natural goods situated on the territory of the Republic of Serbia shall be performed by the Institute for Nature Conservation of Serbia.

The Institute for Nature Conservation of Serbia shall keep a register of protected natural goods and nature protection information system (databases on protected natural goods, habitats, protected species, ecological network area) for the territory of the Republic of Serbia; it shall also develop medium-term programme of natural goods protection, develop professional bases for the Strategy on Conservation of Nature and Natural Values of the Republic of Serbia and the State of Nature Report.

Activities of nature protection and protection of the natural goods that are partly or wholly located on the territory of AP Vojvodina shall be performed by the Provincial Institute for Nature Conservation.

Nature protection organizations are legal entities.

Nature protection organizations are institutions to whose establishment, organisation and operation public service regulations apply.

The rights, obligations and responsibilities of employees in organisations for nature conservation shall be regulated in accordance with general labour rules while salaries are regulated in accordance with the regulation governing public sector salaries financed from the budget of the Republic of Serbia, the autonomous province and local government units.

In performing activities for protection of nature and natural goods, the nature protection organizations referred to in paragraphs 1 and 2 of the present Article shall establish cooperation through harmonization of programmes for protection of natural goods.

The Provincial Institute for Nature Conservation shall submit the medium-term and annual programme for natural goods protection and the report on their implementation to the Institute for Nature Conservation of Serbia.

Programmes for Protection of Natural Goods
Article 104

Professional activities referred to in Article 102 of the present Law shall be performed on the basis of medium-term and annual programmes for protection of natural

goods established by nature protection organizations, in line with the nature protection documents referred to in Article 111 of the present Law.

The medium-term programme for protection of natural goods shall be approved by the Government, and the annual programme for protection of natural goods shall be approved by the Ministry, i.e. by the competent authority of autonomous province.

Nature protection organizations shall submit the report on implementation of medium-term and annual programmes for protection of natural goods to the Ministry, i.e. to the competent authority of autonomous province.

Funds for performing activities of nature protection organization stipulated by the present Law and for operation of nature protection organization shall be provided from the budget of the Republic of Serbia, i.e. from the budget of autonomous province and from other sources of funds in line with the law.

In performing professional activities the nature protection organizations shall establish cooperation with scientific, cultural, educational and other organizations and shall organize activities to raise environmental awareness.

IX. NATURE PROTECTION SIGN

Nature Protection Sign

Article 105

In order to promote nature protection and in order to identify official person in charge of supervision and application of measures related to nature protection, nature protection sign shall be used.

Minister shall closely prescribe layout of the sign, as well as procedure and requirements for usage thereof.

Nature Protection Day

Article 106

In order to develop nature protection, Nature Protection Day shall be celebrated every year.

On the occasion of Nature Protection Day, upbringing, educational, recreational, professional and other activities will be organized which will suitably encourage and develop nature protection.

Nature Protection Day shall be celebrated every year, on 11 April.

X. FINANCING NATURE PROTECTION

Providing Funds for Nature Protection
Article 107

Funds shall be allocated from the budget of the Republic of Serbia for

protected areas, measures and activities stipulated in the document on protection, protection of natural values of republic and international importance, as well as for those natural values determined by the Ministry, for financial and other incentive measures prescribed in this Law, for compensation of damage done to protected wild species, for implementation of right on priority purchase, for compensation to owners and users of property rights to which they have been subjected in protected natural goods/resources which are of international and republic importance, as well as for other measures stipulated in this Law.

Funds shall be allocated from the budget of autonomous province and self-government unit for protection of natural resources which had been proclaimed as such by them, for measures and activities stipulated in the document on protection, for financial and other incentive measures prescribed in this Law, as well as for implementation of right on priority purchase and compensation to owners and users of property rights to which they have been subjected in protected those natural areas.

Funds intended for nature protection shall be provided through use of natural goods/resources and protected areas, if this or special Law has not prescribed otherwise, and from other sources established by Law or bylaws adopted on the basis of this Law.

Incentive Measures for Conservation and Protection of Biological and Landscape Diversity

Article 108

Conservation of endangered wild species, endangered habitat types, protected areas and other protected natural goods ecological network shall be encouraged through financial charges and soft loans intended for protective activities.

Incentive measures referred to in paragraph 1 of this Article are intended for protection and conservation of biological and landscape diversity, particularly for management which accepts and implements measures for conservation of biological and landscape diversity, and which is not harmful for nature, as well as for compensation given to legal entities, entrepreneurs and private entities that suffer certain limitations or damages due to protection of biological and landscape diversity.

Government shall establish financial incentive and charges referred to in paragraphs 1 and 2 of this Article.

XI. GUARDING OF PROTECTED AREAS

Guarding Service

Article 109

Direct supervision of the protected area shall be performed by the guarding service ensured by the Manager, through protected area guard (hereinafter referred to as: guard).

The guard shall control the implementation of interior order rules in the protected area and shall perform other activities in compliance with law and Manager’s decision.

Rights and Duties of the Guard

Article 110

In performing the guarding activities, the guard shall in particular:

1) monitor movement and activities of visitors and other users in the protected area, especially the transport of construction material and construction of buildings, use of mineral raw materials, forests, flora and fauna, including game and fish, use of motor vehicles and vessels, installation of facilities on water, entrance into zones and facilities where visiting is prohibited or restricted, lighting fire in the open space, waste disposal, sport competitions and other manifestations;

2) monitor status of plant and animal species, as well as other values in the protected area;

3) provide assistance and cooperate with local authorities;

4) provide data, assistance and services to visitors and other persons visiting and sightseeing around the protected area, in scientific research and educational activities;

5) cooperate with users of natural resources in the protected area;

6) cooperate with holders of real rights on property in the protected area in order to protect nature;

7) cooperate with another guarding service, the inspection and the internal affairs authority.

When the guard establishes or reasonably assumes that a visitor, i.e. owner of the protected area has done something contrary to interior order rules or measures of nature protection prescribed in compliance with law, he shall be authorized to:

1) establish the identity of a person found in illicit activity, and bring person found without personal documents to the competent authority for interior affairs;

2) inspect all types of vehicles, boats and cargo;

3) temporary seize objects and assets used for the offence or criminal act and objects generated or acquired in such act, as well as to deliver such objects, without delay, to the protected area Manager for custody;

4) require restitution of the previous status, i.e. order measures for prevention and removal of harmful consequences;

5) perform any inspection, except for apartments and other premises for which it is necessary to have warrant.

When performing his duty, the guard shall display their official identification cards.

The guard's identification card shall be issued by the protected area Manager on the template prescribed by the Minister.

The guard shall have at least secondary school education, one year of occupational work experience and certificate on passed professional exam, and shall fulfill prescribed conditions to carry weapons and other conditions defined by the Manager's decision.

The Minister shall prescribe in more detail the conditions, programme and manner of taking the professional exam referred to in paragraph 5 of this Article.

During the service, the guard shall wear official clothes, nature protection mark and mark of the protected area being guarded, and can carry weapons as determined by the Manager, in compliance with law.

The official clothes, i.e. the guard's uniform in national parks and protected areas proclaimed by the Government decision, shall be prescribed by the Minister.

The guard shall have the status of an authorized officer.

The guard may simultaneously act as a fishery guard, forest guard and gamekeeper, if he/she fulfills conditions established by regulations governing the use of fish resources, forestry and hunting only in protected areas of less than 100 ha.

XII. NATURE PROTECTION DOCUMENTS

Key Nature Protection Documents

Article 111

Key nature protection documents are: Nature Conservation Strategy of the Republic of Serbia (hereinafter: the Strategy), nature conservation programmes of the autonomous province and local government units and state of nature reports.

The Strategy is a basic instrument for the implementation of ratified international agreements in the field of nature protection, establishing long-term objectives and measures for the conservation of biological and geological diversity and the manner of their implementation.

Nature Conservation Strategy

Article 112

The Strategy shall be adopted by the Government for the period of at least ten years.

The Strategy shall determine a long-term planning framework and policy of integrated nature protection including landscape biodiversity and geo-heritage conservation.

The Strategy shall in particular contain an analysis (assessment) of state, aims, main tasks, measures, activities and instruments for conservation and improvement of biological diversity, landscape and geo-heritage, development of protected areas network and development of ecological network.

In order to implement the Strategy, action plans shall be developed, which shall be adopted by the Government for the period not longer than five years.

The action plan referred to in paragraph 4 of this Article may be adopted as part of the Strategy.

The Strategy shall be drafted on the basis of reports on the state of nature and contains in particular: principles and general objectives, assessment of the state, special objectives and activities for their implementation as well as possible sources of financing.

A report on the state of nature shall be prepared by the Nature Conservation Institute of Serbia in collaboration with other expert and scientific organisations and other public services.

If necessary, the Strategy may be revised before the expiry of the period for which it has been adopted.

The Strategy shall be published in the "Official Gazette of the Republic of Serbia.

Programme on Nature Protection
Article 113

Autonomous province and local self-government unit, within their competences defined by this and special law, and compliant with the Strategy and its specificities, shall adopt the Programme on Nature Protection for the period of ten years.

Two or more local self-government units may adopt a joint programme referred to in paragraph 1 of this Article.

Nature Status Report

Article 114

Once in five years, the Ministry shall submit the Nature Status Report for the Republic of Serbia, which shall particularly contain the following:

1) data on status of geological, biological and landscape diversity, protected natural areas, ecologically important areas, ecological corridors and ecological network with the analysis of degree of endangerment, endangerment factors and problems in protection and development;

2) data on impacts of utilization of natural values to geological, biological and landscape diversity, to protected natural goods and ecological network;

3) data on impact of certain projects and activities to nature and its values;

4) assessment of measures implemented with the aim to protect nature, its values and landscape diversity;

5) analysis of the Strategy implementation, as well as other documents important for nature protection;

6) assessment of implemented professional supervision performed by the

Institute;

7) data on use of financial resources for nature protection;

8) assessment of needs for development of new or amendments of existing documents, as well as other data important for protection and conservation of nature.

Nature Status Report, as well as reports referred to in paragraph 1 of this Article shall be prepared by the Institute, in collaboration with Provincial Institute for Nature Conservation and other professional and scientific institutions.

Autonomous province, i.e. local self-government unit shall prepare nature status reports for their territories.

XIII. ACCESS TO INFORMATION AND PUBLIC PARTICIPATION

Access to Information
Article 115

State authorities, autonomous province authorities, local self-government unit authorities, Institute, protected areas managers, as well as authorized and other organizations, shall be obligated to provide public with information referring to nature performance and protection, unless confidentiality of data has been prescribed by special law or special regulations.

Public shall be entitled to access prescribed registers or records which contain information and data in compliance with this Law.

Information which pertains to nature protection shall be submitted to the applicant in compliance with law.

Public Participation in Decision-making Process

Article 116

During the development of regulations, i.e. decisions on proclamation of protected natural goods, plans on protected areas management and plans on utilization of natural resources, public participation shall be ensured in compliance with this Law.

Upbringing and Education on Nature Protection
Article 117

Ministry in charge of education shall ensure conditions for development of upbringing and education on nature protection.

Ministry, competent authority of autonomous province, Institute and legal entities

– holders of public empowerments, shall inform public about natural values, nature protection, its endangerment, factors and consequences of endangerment.

XIV. SUPERVISION

Supervision over Work and over the Application of Law
Article 118

Supervision over application of provisions contained in this Law and regulations adopted on the basis thereof shall be done by the Ministry, unless otherwise has been prescribed by this Law.

Supervision over legality of Institute's work shall be done by the Ministry, i.e. competent authority of autonomous province.

Ministry shall carry out supervision over work of managers of protected natural goods, Institute and holders of public empowerments in performance of entrusted activities.

Inspection supervision

Article 119

Inspection supervision shall be carried out by the Ministry through environmental inspector within the scope of competences established by this Law.

In performing the inspection supervision over transboundary movement and trade in strictly protected and protected species, and live specimens of wild animals, the relevant inspector shall cooperate with the person authorized for issuing the permits referred to in Article 94 of this Law.

Autonomous province shall be entrusted with performance of inspection supervision over the application of provisions contained in this Law in protected areas located within the territory of the autonomous province.

Local self-government unit shall be entrusted with performance of inspection supervision over the application of provisions of this Law in the protected areas declared by the competent authority of the local self-government unit.

The inspection supervision referred to in paragraph 1 of this Article shall be performed without prior written notice to the inspected subject and without obtaining a written order to perform the inspection.

By way of exception, the inspector may notify the inspected subject of the start of the inspection if he assesses that such notification is necessary for carrying out the inspection.

Joint body for surveillance of transboundary movement and trade in wild species

Article 119a

In performing the surveillance of transboundary movement and trade in wild species the Ministry shall cooperate with the customs service, the police and the republic public prosecutor's office.

The Ministry shall establish a joint body for planning, monitoring, harmonizing and implementing joint measures and activities for conducting surveillance of transboundary movement and trade in wild species in accordance with regulations governing public administration.

A decision on the establishment of the joint body referred to in paragraph 1 of this Article shall regulate matters of programming and executing training, coordination of surveillance, reporting on the inspection of transboundary movement and trade in wild species and the sanctioning of illegal activities referred to in paragraph 2 of this Article.

Rights and Duties of the Inspector

Article 120

While performing activities of inspection supervision, inspector shall be entitled and obligated to determine the following:

1) utilization and use of protected natural values and other parts of nature;

2) implementation of conditions and measures for nature protection, other documents adopted on the basis of this Law and other regulations;

3) implementation of compensatory measures;

4) implementation of plans on natural goods/resources management in the part which pertains to measures and conditions of nature protection;

5) implementation of management plan and protection, conservation, utilization and development programmes pertaining to protected nature and its values;

6) implementation of management plan and other acts of protected area;

7) activities which may cause changes and damages in protected area or in other protected natural goods;

8) implementation of direct protection, conservation and utilization of natural goods;

9) implementation of protective measures and conditions of protected natural goods, protected plant and animal species and fungi;

10) wild species in transboundary movement and trade, i.e. whether the transboundary movement of strictly protected, protected and allochthonous wild species of plants, animals and fungi is conducted in accordance with this Law and regulations adopted on the basis of this Law;

11) whether introduction and re-introduction of wild species into the nature is done in compliance with provisions of this Law;

12) providing public with information about nature performance, management plans for protected areas;

13) implementation of other prescribed conditions and measures of biological and landscape diversity established by this Law and regulations adopted on the basis thereof;

14) whether monitoring of nature performance and state of its values is being implemented;

15) whether register on protected natural goods and other prescribed records are being maintained;

16) whether genetic material is used in compliance with this Law and special regulations;

17) whether manager of protected area is performing their duties established by

document on protection;

18) whether manager of protected area uses funds for operation and activities related to protection and development of protected area;

19) whether use of fossils, crystal minerals and *bigars* (chemical sediment rock which belongs to the group of sediment rocks) or researches of their deposits are done in compliance with this Law;

20) whether collection and trade of wildlife and fungi, their development forms and parts are done in compliance with prescribed conditions;

21) whether artificial relocation and settlement of populations or part of populations of autochthonous wild species is conducted in accordance with the provisions of this Law;

22) whether keeping, breeding, marking and trade in specimens of wild species is conducted in the prescribed manner;

22a) whether conditions for the operation of a zoo in accordance with this Law and regulations adopted on the basis of this Law are met.

Inspector Powers

Article 121

While performing activities of inspection supervision, inspector shall be empowered to:

1) ban utilization and use of protected natural values and other parts of nature without approval or contrary to the approval;

2) order implementation of conditions and measures for nature protection, other acts adopted on the basis of this Law and other regulations;

3) order implementation of compensation measures;

4) order implementation of plans on natural goods/resources management in the part which pertains to measures and conditions of nature protection;

5) order implementation of management plan and protection, conservation, utilization and development programme pertaining to protection of nature and its values;

6) order implementation of management plan and other acts of protected area and ecological networks;

7) ban activities which may cause changes and damages in protected area, ecological network or other protected natural goods;

7a)prohibit activities, i.e. works in the protected area, which are contrary to the document on protection and rulebook on interior order and guarding service;

8) order implementation of direct protection, conservation and utilization of protected natural values;

9) order the implementation of measures and conditions for the conservation of protected natural resources, protected wild plant and animal species and fungi;

10) control transboundary trade in specimens of strictly protected, protected and allochthonous wild species and prohibit the transboundary movement conducted contrary to the provisions of this Law and regulations adopted on the basis of this Law and/or ratified international agreements;

11) ban introduction of wild species into the nature if such introduction is contrary to provisions of this Law;

12) order to provide public with information about nature performance, plans on protected area management;

13) order implementation of other prescribed conditions and measures for protection of biological and landscape diversity established in this Law and regulations adopted on the basis thereof;

14) order the Manager to monitor nature status and state of its values;

15) order maintenance of registers of protected natural goods and other prescribed records;

16) ban use of genetic material if such use is contrary to provisions of this Law and special regulations;

17) order protected area manager to fulfil obligations established in the document on protection;

18) order protected area manager to use funds for work and performance of activities pertaining to protection and development of protected area;

19) ban the use of fossils, crystal minerals and *bigars* or researches of their deposits if such actions are contrary to this Law;

20) ban the collection and trade in wildlife and fungi and their development forms and parts is collection and trade is performed without permit and contrary to prescribed conditions;

21) ban the artificial relocation and settlement of populations or parts of autochthonous wild species populations without a permit or contrary to prescribed conditions;

22) ban the keeping, breeding and trade in strictly protected, protected and allochthonous wild species that is conducted contrary to provisions of this Law and regulations adopted on the basis of this Law;

23) ban the damaging or destruction of habitats of strictly protected and protected wild species;

23a) control the keeping, breeding and trade in specimens of strictly protected, protected and allochthonous wild species;

24) ban other actions and activities which are contrary to provisions of this Law and regulations adopted on the basis thereof;

25) order the owner or holder of specimens of wild species to allow an inspector, a representative of an authorized scientific or expert organisation or a veterinarian an unimpeded access to a wild species specimen for physical examination and/or collection of samples of blood or other tissue from the specimen for the purpose of analysis;

25a) conduct inspection and verification of the location, premises, facilities, objects, vehicles and other means of transport in legal entities, entrepreneurs, natural and other persons in order to check compliance with provisions of this Law;

26) order the execution of other obligations prescribed by law within a specified time limit.

In order to prevent unrecoverable damage to protected natural good, biological and landscape diversity, reduce damage occurred due to illicit work, action or activity, i.e. take urgent protection measures or avoid immediate danger to human life and health or property, during the supervision, the inspector may issue an oral decision as well.

Statement on decision issued orally shall be entered into the minutes, noting that written decision will be issued within 8 days.

It shall be allowed to file an appeal against the inspector's decision referred to in paragraphs 1 and 2.

Inspector's decision referred to in paragraph 1, points 1), 7), 10), 11), 16), 19), 20), 21), 22), 23), 23a) and 24), 25), 25a) and 26) of this Article shall be final and an administrative dispute may be conducted against it.

Providing Information to Other Competent Authorities
Article 122

If during an inspection, the inspector finds that beside this Law, other laws and regulations governing issues relevant for nature protection or protection of certain part thereof have been violated too, he shall, besides taking actions he is empowered to, be obliged to inform other competent authority.

Other competent inspection body shall inform the inspector about the measures undertaken.

In cases when inspector finds the violations of law falling under the competence of other inspections too, the inspector shall inform the Minister thereof without delay in order to enable joint supervision and appropriate measures to be undertaken.

Seizure of Objects and Protected Natural Goods

Article 123

While performing inspection supervision, the inspector shall have right and duty to temporarily confiscate:

1) objects, goods or devices whose use is prohibited or which were created, or used for illicit actions;

1a) specimens of strictly protected, protected and/or allochthonous wild species during their transboundary movement, trade and/or posession within the territory of the Republic of Serbia if contrary to this Law, regulations adopted on the basis of this Law and ratified international agreements, order their keeping but prohibit their use and request

that the Ministry be urgently informed about possible changes concerning the specimens, and issue certificates on the confiscated specimens;

2) mobile protected natural documents or protected wild species and order their keeping.

The confiscated mobile protected natural documents and specimens of wild species referred to in paragraph 1 of this Article shall be treated in a manner appropriate in terms of their conservation and protection and upon suggestion from an authorized scientific or expert organisation for live specimens.

An appeal may be filed to the Minister against the inspector's decision referred to in paragraph 1 of this Article.

Protected wild species obtained in illegal action, which are perishable or which cannot be appropriately taken care of or if their keeping incurs substantial costs, shall be sold, and a decision on the selling, the manner and conditions of the sale shall be made by the Minister.

The acquired funds shall be kept at a public Ministry account until the court proceedings has ended.

XV. COMPETENCE OVER SETTLEMENT OF APPEALS

Article 124

Appeal filed against inspector's decision shall be settled by the Minister. Appeal is to be filed within 15 days upon receipt of the decision. Appeal to the decision shall not delay its execution.

First-degree appeal filed against decision issued by competent authority of autonomous province within performance of entrusted activities shall be decided upon by the Minister.

First-degree appeal filed against decision issued by competent authority of local self-government unit within performance of entrusted activities shall be decided upon by the Minister.

XVI. PENALTY PROVISIONS

Economic Offences

Article 125

A legal entity shall be charged with an economic offence and assessed a fine of 1,500,000 to 3,000,000 RSD if they:

1) use an area, natural resources and protected areas in a manner that causes permanent degradation of biological, geological, hydrological, pedologic and landscape diversity (Article 8, paragraph 2);

2) fail to act in compliance with measures for nature protection established in plans, programmes, bases and project-technical documentation (Article 8, paragraph 3);

3) fail to carry out rehabilitation, i.e. recultivation (Article 8, paragraph 4);

4) without any delay and at their own expense do not eliminate the harmful effects on nature and protected natural goods arising from projects and activities executed without established nature protection conditions or contrary to given conditions (Article 13, paragraph 1);

5) perform or attempt to collect and/or use specimens of strictly protected or protected wild species without a permit, i.e. contrary to the prescribed conditions (Articles 75, 76 and 77);

5a) keep, trade or attempt to trade in specimens of strictly protected or protected wild species contrary to Articles 86a, 90 and 94 of this Law;

6) perform or attempt to perform transboundary movement, including dispatch, transport and transit of specimens of strictly protected, protected or allochthonous wild species without the appropriate permit or certificate issued by the Ministry, or use a permit or certificate that has been declared void or whose validity period has expired (Article 94, par. 4, points 1 and 3);

6a) perform or attempt to perform transboundary movement of wild species contrary to the issued permit or certificate, i.e. use a permit or certificate issued for the transboundary movement of a specimen other than the one for which it was issued (Article 94, par. 4, point 2);

6b) use a false, falsified permit or certificate for transboundary movement of strictly protected, protected or allochthonous wild species, including a document with unauthorized modifications (Article 94, par. 4, point 4);

7) fail to notify or they make a a false report on the transboundary movement of strictly protected, protected or allochthonous wild species in accordance with Article 95 of this Law.

For the economic offence referred to in paragraph 1 of this Article, a fine proportionate to a damage incurred, an unexecuted obligation or the value of goods or other commodity which is subject of economic offence, may be pronounced, the maximum amount of which shall not exceed twentyfold amount of the damage incurred, unexecuted obligation or the value of goods or other commodity which is subject of economic offence.

For the economic offence referred to in paragraph 1 of this Article, a fine ranging from 100,000 and 200,000 RSD shall be imposed on the accountable officer of the legal entity.

For en economic offence referred to in paragraph 1 of this Article, and particularly in case of a repeated economic offence, in addition to the fine imposed upon a commercial company or other legal entity, they may be prohibited from performing certain economic activities as a protective measure, whereas the accountable officer may be prohibited from performing certain duties during a period of up to ten years.

In case of the economic offence referred to in paragraph 1, points 5, 5a, 6, 6a, 6b and 7 of this Article, the penalty shall mandatorily be accompanied by a protective action of permanent confiscation of the specimens of strictly protected, protected and allochthonous species stated in invalidated permits and certificates as well as of objects used or intended for committment of the offence, i.e. developed through that offence.

For the economic offence referred to in paragraph 1 of this Article, the penalty may be accompanied by a protective action of confiscation of objects which were used or intended for commitment of economic offence, i.e. which were created through

commitment of economic offence.

Infringements

Article 126

A legal entity shall be charged with an infringement and assessed a fine of 500,000 to 2,000,000 RSD if they:

1) perform the planned projects and activities in nature, which themselves or combined with other projects or activities may affect an ecologically important area or a protected natural good, without consent (Article 10, paragraph 3);

2) perform actions, activities and operations which threaten a hydrological phenomenon or the maintenance and preservation of biological diversity (Article 18, paragraph 4);

3) (*deleted*);

4) use chemical substances, without obtaining consent from the Ministry (Article 19, paragraph 3);

5) take genetic material from nature, contrary to Article 20, paragraph 2 of this Law;

6) perform or undertake activities and operations which may disturb characteristics of a protected area (Articles 29 to 35);

7) performs actions and/or activities which may lead to disturbance or destruction of ecologically important area (Article 39, paragraph 5);

8) perform an activity in protected area contrary to management plan (Article 52, paragraph 4);

9) perform works and activities, i.e. project implementation in the protected area without or contrary to the document on conditions and measures of nature protection, or fail to inform the Manager thereof (Article 57, paragraphs 3, 4 and 5);

10) do not undertake all permitted measures and activities to prevent a damage, in an appropriate manner and at their own expense (Article 64, paragraph 2);

11) undertake actions which may endanger strictly protected species of plants, animals, fungi and their habitats (Article 74);

12) fail to obtain the permit referred to in Article 75 of this Law;

13) collect and use protected wild species contrary to prescribed conditions (Article 77);

14) perform researches on protected species without the Ministry's consent or fail to submit results of such researches (Article 78);

15) use prohibited means to catch and kill wild animals contrary to Article 79 of this Law;

16) fail to undertake protective measures referred to in Article 81 of this Law;

17) introduce allochthonous wild species and their hybrids into the wild contrary to Article 82 of this Law;

18) perform relocation of live specimens of autochthonous wild species without the Ministry's consent (Article 84);

19) perform reintroduction of wild species without the Ministry's consent (Article 85);

20) keep specimens of strictly protected, protected or allochthonous wild animal species or either fail to mark or mark the specimens of strictly protected or protected wild species contrary to prescribed conditions (Art. 86, 86a);

20a) keep specimens of strictly protected or protected wild species for which the Ministry has rejected the certificate request application (Article 88);

21) possess specimens of strictly protected, protected or allochthonous wild species contrary to Article 87 of this Law;

22) breed wild species contrary to Article 89 of this Law;

23) perform activities of lodging without permit issued by the Ministry (Article 91);

24) handle found specimens of strictly protected and protected wild animal species contrary to Article 93 of this Law;

25) take geological and paleontological documents from nature, which have been proclaimed protected natural goods or are located in the object of geo heritage, protected site or deposit of mineral feedstock contrary to Article 98 of this Law;

26) perform researches in deposit sites of geological and paleontological documents contrary to Article 99 of this Law;

27) export movable protected natural documents contrary to Article 100 of this Law;

27a) fail to act in accordance with the inspector's decision referred to in Article 121 of this Law.

For the infringement referred to in paragraph 1 of this Article, a fine proportionate to a damage incurred, an unexecuted obligation or the value of goods or other commodity which is subject of the infringement, may be pronounced, the maximum amount of which shall not exceed twentyfold amount of the damage incurred, unexecuted obligation or the value of goods or other commodity which is subject of the infringement.

For the infringement referred to in paragraph 1 of this Article, accountable officer of the enterprise or other legal entity shall be assessed a fine of 25,000 to 150,000 RSD.

For the actions referred to in Article 125, paragraph 1, points 5), 5a), 6), 6a) and 7), as well as for actions referred to in paragraph 1 of this Article, an entrepreneur shall be charged with the infringement and assessed a fine of 250,000 to 500,000 RSD.

For the actions referred to in Article 125, paragraph 1, points 5), 5a), 6), 6a), 6b) and 7), as well as for actions referred to in paragraph 1 of this Article, a private entity shall

be charged with the infringement and assessed a fine of 50,000 to 150,000 RSD or punished by imprisonment of up to 30 days.

For the infringement referred to in paragraph 1 of this Article, the penalty may be accompanied by a protective action of confiscation of objects which were used or intended for the infringement, i.e. which were created through the infringement.

For the infringement referred to in paragraphs 5 and 6 of this Article, together with the sanction, it is mandatory to impose a protective measure of permanent confiscation of specimens of strictly protected, protected and allochthonous species stated in invalidated permits and certificates, as well as of objects used for or intended for the infringement, i.e. created through the infringement.

For the infringement referred to in paragraph 1 of this Article, besides the fine imposed upon the legal person, i.e. entrepreneur may be prohibited from performing certain activity for up to 3 years, whereas the accountable officer may be prohibited from performing certain duties during a period of up to one year, as a protective measure.

Infringement Committed by an Accountable Officer of State Administration Body, Holder of Public Empowerments, i.e. Authorized Legal Entity

Article 127

An accountable officer of state administration body, territorial autonomy authority, local self-government unit authority and holder of public empowerments shall be charged with the infringement and assessed a fine of 25,000 to 150,000 RSD if they:

1) fail to obtain nature protection conditions in the procedure of plans and programmes adoption (Article 9, paragraphs 1 and 2);

2) fail to determine quantity of water in wet and water ecosystems which is essential for conservation of hydrological phenomenon and maintenance of biological diversity (Article 18, paragraph 5);

3) fail to monitor state of ecologically important areas, ecological corridors and whole ecological network (Article 39, paragraph 4);

4) fail to keep a register of protected natural goods (Article 50);

5) fail to submit management plans and reports on their implementation and fail to ensure information to public (Article 54);

6) fail to obtain nature protection conditions in the development of plan (Article 55, paragraph 3);

7) fail to adopt the Rulebook on Internal Order and Guarding Service (Article 56);

8) fail to manage a protected area in the prescribed manner (Article 68);

9) fail to use funds acquired on the basis of charges imposed for utilization of natural area for protection and development of protected area and if such funds are not kept in special account (Article 70, paragraph 8);

10) fail to perform professional tasks within the scope of their activity referred to in

Article 102, paragraph 1, points 8, 13, 16 and 19 of this Law;

11) fail to obtain the competent authority's consent for the medium-term, i.e. annual conservation programme for natural goods (Article 104, paragraph 2).

Article 128

Fine ranging between 5,000 and 150,000 RSD shall be pronounced to private entity if such entity has not acted as instructed by the protected area guard or if such entity disrupts the guard in performance of his duties, or otherwise acts contrary to interior order rules (Article 56, paragraph 4).

Article 129

Fine of 5,000 RSD shall be pronounced for the offence to a parent, tutor or responsible person in tutorial institution, if due to failure to apply duly supervision over a juvenile, such juvenile has committed offence referred to in Article 126, paragraph 1, points 11), 15), 21), 22) and 24) and Article 128 of this Law.

XVII. TRANSITIONAL AND FINAL PROVISIONS

Article 130

Protected goods protected until this Law enters into force shall remain under protection, while managers, owners and users of such goods have rights and duties prescribed in this Law.

Ecological network shall be established and shall become part of the European Ecological Network Natura 2000 till the day when Republic of Serbia accesses to the European Union.

Article 131

Legal entities that manage forests, game and water shall harmonize forest, hunting, fishing and water management bases with provision of this Law on the occasion of their renewal or first revision.

Legal entities, entrepreneurs and private entities that manage protected area shall harmonize protected area management plans to provisions of this Law within two years from the day when this Law enters into force.

Owners of towers and technical components constructed before this Law entered into force, which greatly endanger birds and bats, shall undertake measures of protection against electric shock in compliance with Article 81 of this Law, within five years from the day when this Law enters into force.

Legal entities, entrepreneurs and private entities that perform trading activities in terms of this Law, shall harmonize their business activities with provisions of this Law within thirty days from the day when this Law enters into force.

Legal entities, entrepreneurs and private entities that own or on any other base keep protected wildlife, for which according to this Law it is necessary to obtain permit, shall apply to the Ministry within three months from the day when this Law enters into

force.

Protected areas managers shall harmonize protected area management with provisions of this Law within one year from the day when this Law enters into force.

Article 132

Institute shall harmonize its operation, business and general regulations with provisions of this Law within two years from the day when this Law enters into force.

Public enterprise “National Park of Djerdap”, public enterprise “National Park of Sar planina”, public enterprise “National Park of Kopaonik”, public enterprise “National Park of Tara” and public enterprise “National Park of Fruska gora” shall harmonize their operation, business and general regulations with provisions of this Law within two years from the day when this Law enters into force.

Article 133

Government, i.e. competent authority of Autonomous Province of Vojvodina shall establish organizations referred to in Article 103 of this Law within six months from the day when this Law enters into force.

For the performance of activities referred to in Article 103 of this Law, funds, rights and duties for the operation of the Provincial Institute for Nature Conservation shall represent part of funds, rights and duties of the so far Institutes for Nature Protection of Serbia which are located at the territory of Autonomous Province of Vojvodina.

Allocation of funds, rights and duties originating from the time of so far operation of Institute for Nature Conservation of Serbia shall be determined through share balance of the so far Institute for Nature Conservation of Serbia.

Organizations referred to in paragraph 1 of this Article shall take over funds, rights and duties of Institutes referred to in paragraph 2 of this Article, as well as employees of those Institutes, on the first day of their operation.

Institute for Nature Conservation of Serbia cannot alienate property, perform status changes or employ new staff from the day when this Law enters into force till the establishment of Institutes referred to in paragraph 1 of Article.

Article 134

Bylaws for implementation of this Law shall be adopted within one year from the day when this Law enters into force.

Until the day when regulations established in this Law enter into force, regulation adopted on the basis of Law on Environmental Protection (“Official Gazette of RS”, no. 66/91, 83/92, 53/93-other law, 67/93-other law, 48/94-other law, 53/95 and 135/04) shall remain in force.

On the day when this Law enters into force, provisions which regulate nature protection, contained in the Law on Environmental Protection (“Official Gazette of RS”, no. 66/91, 83/92, 53/93-other law, 67/93-other law, 48/94-other law, 53/95 and 135/04) and Law on National Parks (“Official Gazette of RS”, no. 39/93) shall cease to be valid, except for provisions referred to in Articles 6 and 7 and description of national park areas, until the adoption of special laws.

Procedures started according to provisions of the Law on Environmental Protection ("Official Gazette of RS", no. 66/91, 83/92, 53/93-other law, 67/93-other law, 48/94-other law, 53/95 and 135/04) shall be finalized according to provisions of this Law.

Article 135

This Law shall enter into force on the eighth day upon publication thereof in the "Official Gazette of the Republic of Serbia".

Independent Articles of the Law on Amendments of the Law on Nature Protection

("Official Gazette of RS", no. 88/2010)

Article 55

Important ecological areas of the European Union NATURA 2000 shall be identified and shall become a part of the European ecological network NATURA 2000 on the day of the Republic of Serbia accession to the European Union.

Article 56

Legal entities, entrepreneurs and private entities who are owners or otherwise keepers of protected wild animals, for which permit is required compliant with this Law, shall report to the Ministry about keeping of those animals so as to enable recording thereof, within six months from the enactment of this Law.

Keepers of wild animals shall harmonize the conditions for keeping and acceptance of wild animals with the prescribed conditions within one year from the enactment of bylaw that regulates conditions for keeping, i.e. conditions for acceptance of animals.

Article 57

Provisions contained in the Law on Public Enterprises and Performance of the Activities of General Interest ("Official Gazette of RS", no. 25/00, 25/02, 107/05, 108/05 – correction and 123/07-other laws) shall be applied to the function of public enterprises established for the management of national parks until the adoption of special laws.

Article 58

Bylaws for the implementation of this Law shall be adopted within one year from the enactment of this Law.

The decision referred to in Article 4, paragraph 6 of this Law shall be adopted by the Government within two years from the enactment of this Law.

Article 59

This Law shall enter into force on the eighth day from publication thereof in the "Official Gazette of the Republic of Serbia", while provisions referred to in Article 4, paragraph 5, point 2), which pertain to the opinion of the European Commission and Article 5, paragraph 3 of this Law shall start to be applied on the day of the Republic of Serbia accession to the European Union.

ANNEX 5

Regulation on Ecological Network

REGULATION

ON ECOLOGICAL NETWORK

("Official Gazette of RS", No 102/2010)

I INTRODUCTORY PROVISION

Article 1

This Regulation shall regulate the ecological network (hereinafter referred to as: ecological network), as well as a detailed method of management and funding of the ecological network with a view to conservation of biological and landscape diversity, i.e. the habitat types of special conservation interest, renewal and/or improvement of damaged habitats and conservation of certain species.

II THE STRUCTURE OF THE ECOLOGICAL NETWORK

Article 2

The ecological network shall be composed of:

1) ecologically important areas;

2) ecological corridors linking ecologically important areas on the territory of the Republic of Serbia, as the corridors of national importance enabling the connection with the ecological networks of neighbouring countries in comformity with the international regulations as internationally important ecological corridors;

3) protective zone where necessary, so as to protect ecologically important areas and ecological corridors from possible harmful exterior impacts.

Article 3

Ecologically important areas referred to in Article 2 of this Regulation shall include spatial wholes on which the following areas and facilities are located:

1) certain protected areas proclaimed pursuant to law governing the protection of nature with the priority objective to conserve biodiversity including the areas under the proclamation of protection and the areas planned to be protected based on the respective strategy documents planned for protection;

2) important conversation areas, i.e. Emerlad network, identified on the basis of the Convention on the conservation of European Wildlife and Natural Habitats (Bern Convention)

3) certain areas specified pursuant to the international programmes for the identification of Important Bird Area (IBA), Important Plant Area (IPA) and Prime Butterfly Area (PBA);

4) the areas on the list of the Convention on internationally important wetland habitats (Ramsar areas) or are planned for entering the list;

5) certain speleological facilities;

6) cross-border ecologically important areas that enable the connection with the ecological networks of neighbouring countries in comformity with the international regulations;

7) certain areas of habitat types of special conservation interest identified in comformity with the Rulebook on the criteria for the definition of habitat types, habitat types, sensitive, endangered, rare and priority habitat types for protection as well as of protection measures for their conservation ("Official Gazette of RS", No 35/10);

8) certain wild species habitats set forth in conformity with the Rulebook on proclamation and protection of strictly protected and protected species of wild flora, fauna and fungi ("Official Gazette of RS", No 5/10);

9) other ecologically important areas not embraced in those areas specified as important in accordance with spatial plans.

Article 4

Ecological network shall be graphically documented by the index map of ecological network and referral map in the ratio 1:300.000 that shall be amended and kept in the competent ministry in charge of environmental protection and in the Institute for Nature Conservation of Serbia (hereinafter referred to as: the Institute).

The list of ecologically important areas shall be given in the Annex- Ecologically important areas of the Republic of Serbia printed out along with this Regulation whereof it is an integral part.

Internationally important ecological corridors shall be specified in the Appendix 2 - Internationally important ecological corridors in the Republic of Serbia, printed out along with this Regulation whereof it is the interal part.

In addition to ecological corridors referred to in para. 3 of this Article, ecological corridors may be natural and semi-natural waterflows and canals with semi-natural vegetation, as well as other landscape elements (boundaries, hedges, agri-protective zones, pastures, meadows and other artificial corridors) that links ecologically important areas identified in the database of the Institute and Province Institute for the Conservation of Nature (hereinafter referred to as: the Province Institute).

The Institute and the Province Institute in cooperation with other professional and scientific institutions shall prepare the documentation and perform identification activities and mapping of habitat types referred to in Article 3, point 7) and 8) of this Regulation.

Databases on the habitats referred to in para. 5 of this Article shall be amended in conformity with the identification activities and mapping and shall be managed by in the Institute and the Province Institute, and shall not be published in "Official Gazette of the Republic of Serbia" being available to public in compliance with law.

III ECOLOGICAL NETWORK MANAGEMENT

Article 5

The ecological network shall be managed so as to provide conservation of favourable status of sensitive, rare, endangered and habitat types of special conservation interest and populations of nationally and internationally important strictly protected and protected wild species as well as the maintenance and improvement of functional and spatial connection of their parts.

The enviromental network management shall imply the management of certain ecologically important areas and ecological corridors with a view to maintaining and improving the functional integrity of the ecological network.

Article 6

The protection of the ecological network shall be provided by the implementation of measures prescribed with a view to conserving biological and landscape diversity, sustainable use and renewal of natural resources and improvement of protected areas, habitat types and wild species habitats in compliance with law governing nature protection and other regulations, as well as in compliance with acts concerning the proclamation of protected areas and with international contracts.

Protection measures for the ecological network shall refer to legal entities and natural persons that use natural resources and perform the activities and operations in compliance with law governing nature protection.

Measures, methods and technical-technological solutions shall be implemented in the area of the ecological network with a view to conserving the favourable status of ecologically important areas and improving damaged status of the ecological network parts.

In addition to protection measures referred to in para. 1 of this Article, protection measures are listed in the Appendix 3 –Protection measures for the ecological network, printed out along with this Regulation whereof it is an integral part.

Article 7

The manager of the respective protected area in compliance with law shall manage the ecological network area that is at the same time a protected area.

The ecologically important area that is not under protection as protected area shall be managed by a legal entity established or appointed by the Government upon the proposal of the ministry in charge of environmental protection, i.e. the competent

authority for environmental protection of the Autonomous Province, i.e. the competent authority for environmental protection of local self-government unit the territory on which the ecological network area is located.

The ecological corridors outside the protected area shall be managed by a legal entity established or appointed by the authority in charge of environmental protection of local self-government unit the territory on which the ecological network area is located.

The respective local self-government units shall, by mutual consent, manage ecologically important area and/or ecological corridor that is not under protection as a protected area and is located on the territory of two or more local self-government units.

Article 8

Management of the ecological network parts shall be carried out based on management plans.

The management plan referred to in para.1 of this Article shall be adopted by a legal entity entrusted with the task of management of the part of the ecological network.

With regard to the part of the ecological network, that is at the same time a protected area, the management plan shall be adopted pertaining to the respective area, containing all the management elements with respect to this part of the ecological network.

Article 9

Spatial and urban development plans, programmes and basics pertaining to the use of natural resources shall be compliant with the management plans for the parts of the ecological network and this Regulation.

IV FUNDING

Article 10

Funding of the ecological network shall be provided out of:

1) budgetary funds of the Republic of Serbia, Autonomous Province, i.e. local self-government unit;

2) resources of Environmental Protection Fund;

3) compensation for the use of protected area;

4) funds for the conservation of priority habitat types and endangered species shall be provided on the basis of the projects financed from national and international funds and credit financing.

5) donations, grants and aid;

6) other sources in compliance with law.

The Government shall provide the budgetary funds of the Republic of Serbia for the project implementation with regard to the identification and mapping of habitats on the territory of the Republic of Serbia and drawing the map of habitats referred to in Article 4, para.5 of this Regulation.

V MONITORING OF THE ECOLOGICAL NETWORK STATUS

Article 11

The following status monitoring shall be provided in the area of the ecological network:

1) with regard to the habitats of wild species population;

2) with regard to the habitat types of special conservation interest;

3) with regard to the effectiveness of the protection and improvement measures undertaken as well as of the extent of realization of objectives set forth pertaining to conservation and improvement of functionality and integrity of the ecological network.

The Institute and the Province Institute in cooperation with other professional and scientific institutions and managers shall perform monitoring of the ecological network status in compliance with law.

VI SUPERVISION

Article 12

The ministry in charge of environmental protection shall perform the supervision of the implementation of this Regulation.

VIII TRANSITORY AND FINAL PROVISIONS

Article 13

The Institute and the Province Institute in cooperation with the Republic Geodetic Institute shall identify the borders of parts of the ecological network, from the referral map referred to in Article 4, para.1 and Annexes 1 and 2 of this Regulation, on the state map in the ratio 1:5000 within two years from the day of this Regulation coming into force in such a manner that border of parts of the ecological network shall be laid on orthophoto base of a state map on which the borders od cadastre lots shall be folded over.

By the completion of activities referred to in para. 1 of this Article, cartographic presentation referred to in Article 4, para.1 of this Regulation and the data of the Institute

that shall be presented to the implementers of drafting the respective documents in the procedure for setting the rules pertaining to nature protection shall be used for drafting the plans for the management of parts of the ecological network, spatial and urban development plans, development programmes and projects

Management plan referred to in Article 8, para. 2 and 3 of this Regulation shall be adopted within two years from the day of this Regulation coming into force.

Article 14

Ecologically important areas of EU NATURA 2000 shall be identified and shall become the part of European the ecological network NATURA 2000 on the day of the Republic of Serbia accession to the European Union.

Article 15

The Government, i.e. the authority of the Autonomous Province or the authority of local self-government unit shall establish, i.e. appoint a legal entity for the management of the part of the ecological network in compliance with Article 7 of this Regulation within a year following the day of this Regulation coming into force.

The existing spatial and urban development plans, project documentation, foundations (forestry, hunting, agricultural, water management, fishing, etc.), programmes and strategies in all fields affecting the parts of the ecological network shall be compliant with the management plan and this Regulation.

Article 16

This Regulation shall enter into force on the eighth day from its publishing in "Official Gazette of the Republic of Serbia".

Annex 1

ECOLOGICALLY IMPORTANT AREAS IN THE REPUBLIC OF SERBIA

No	Area	1	2	3	4	5	6	7	8
1.	Subotica lakes and deserts	1. Special Nature Reserve Ludaško jezero, 2. Special Nature		Kapetanski rit (part)	1. * Subotica sands RS0000016 2. Palić RS0000029 3.	1. Subotica sands, 2. Palić 3. Ludaško jezero 4. Selevenje	Subotica lakes and deserts (part) (RS002IBA)		Ludaško jezero 3RS002

		Reserve Selevenje deserts, 3. Area of exceptional features* Subotica sands 4. Nature park Palić			Ludaško jezero RS0000013 4. Selevenje deserts RS0000023	deserts 5. Northern Bačka II			
2.	Velika Droplja pastures	Special Nature Reserve Velika Droplja pastures			Velika Droplja pastures RS0000022	1. Northern Banat 2. Area of Čoka-Ostojićevo mineral springs 3. Velika Droplja pastures	Velika Droplja pastures RS008IBA		
3.	Upper Danube Basin	Special Nature Reserve Upper Danube Basin			Upper Danube Basin RS0000001	Upper Danube Basin	Upper Danube Basin RS001IBA	Upper Danube Basin 10	Upper Danube Basin 3RS007
4.	Mineral springs of Northern Bačka			Mineral springs of Bačka (part)		Northern Bačka I			
5.	Mineral springs area of Doroslovo					Mineral springs area of Doroslovo			
6.	Forest valleys of Krivaja	1. Regional park "Complex General Nature Reserve Panonija"	Area of exceptional features Forest valleys of Krivaja			1. Telečka I; 2. Telečka II; 3. Telečka III			

		(part); 2. Regional park "Zobnatica" 3. Nature monument "Park in Bačka Topola" 4. Nature monument "Park at Natural Resource Krivaja"							
7.	Bečejski ribnjak						Bečejski ribnjak (deo) RS003IBA		
8.	Slano kopovo	Special Nature Reserve Slano kopovo			Slano kopovo RS0000010	Slano kopovo, Central Banat I (part: Ostrovo)	Slano kopovo RS009IBA		
9.	Okanj and Rusanda		Special Nature Reserve Okanj bara	Nature park Rusanda		Central Banat I (part: Okanj, Rusanda)	Okanj and Rusanda RS010IBA		
10.	Jegrička	Nature park Jegrička				1. Rimski šanac 2. Žabalj tumulus with mineral springs	Jegrička RS004IBA		
11.	Titelski breg		Special Nature Reserve Titelski breg			Titelski breg	Titelski breg RS006IBA		
12.	Carska bara	Special Nature Reserve			Stari Begej-Carska	1. Carska bara 2. Mineral	Carska bara RS011I		Stari Begej-

		Stari Begej-Carska bara			bara RS0000024	springs area Mužlja-Aradac	BA		Carska bara 3RS003
13.	Karađorđevo	1. Special Nature Reserve Karađorđevo 2. Nature parkTikvara		Šarengradska ada and Hagla	Karađorđevo RS0000038		Karađorđevo RS005IBA		
14.	Fruška Gora and Koviljski rit	1. National park Fruška Gora 2. Special Nature Reserve Koviljsko-petrovaradinski rit			1. Fruška Gora RS0000007 2. Koviljsko-petrovaradinski rit RS0000021	Fruška Gora and Koviljsko-petrovaradinski rit	1. Fruška Gora RS019IBA 2. Koviljski rit RS007IBA 3. Danube forest section (RS018IBA),	Fruška Gora 07	
15.	Potamišje			Potamišje		Central Banat II	1. Gornje Potamišje RS012IBA 2. Srednje Potamišje RS013IBA		
16.	Vršac mountains and meadows	Area of exceptional features Vršac mountains	Nature park Mali vršački rit	Mineral springs of Central Banat (part: along	Vršac mountains RS0000017	Vršac mountains, part: (Vršac mountains; Mali rit; Margita,	Vršačke mountains RS014IBA		

				the Moravica River from Vatina to Margita)		Plandište, Jasenovo)			
17.	Forests of Bosut	1. Strict Nature Reserve "Rađenovci" 2. Strict Nature Reserve "Raškovica" 3. Strict Nature Reserve "Varoš" 4. Strict Nature Reserve "Majzeca va bašta" 5. Strict Nature Reserve "Vinična", 6. Strict Nature Reserve "Stara Vratična", 7. Nature Monument "Sastojina starih slavonskih hrastova Smogva"		Forests of Bosut			Forests of Bosut e RS021IBA		
18.	Zasavica	Special Nature Reserve Zasavica			Zasavica RS0000014	Zasavica	Zasavica RS022IBA	Zasavica 40	Zasavica 3RS009
19.	Obedska bara	Special Nature Reserve			Obedska bara RS0000	Obedska bara	Obedska bara RS020I		Obedska bara

		Obedska bara			003		BA		3RS001
20.	Deliblatska pescara	1. Special Nature Reserve Deliblatska pescara, 2. Special Nature Reserve Kraljevac, 3. Nature monument Straža		Nera and Karaš river areas	Deliblatska pescara RS0000005	Deliblatska pescara	1. Deliblatska pescara RS015IBA 2. Labudovo okno RS016IBA	Deliblatska peščara 03	Labudovo okno 3RS005
21.	Donje Podrinje						Donje Podrinje RS023IBA		
22.	Confluence of Sava into Danube	Area of exceptional features Veliko ratno ostrvo	Protected Habitat Zimovalište malog vranca	Pančevačke ade			Confluence of Sava into Danube RS017IBA		
23.	Košutnjak	1. Strict Nature Reserve Forest of Silver linden tree 2. Strict Nature Reserve Oak tree forest of English oak and hornbeam near Hajdučka česma	Nature Monument Košutnjak						
24	Avala	Area of			Avala			Avala	

.		exceptional features Avala			RS0000058			01	
25.	Kosmaj	Area of exceptional features Kosmaj			Kosmaj RS0000059			Kosmaj 17	
26.	Šalinački lug	Nature monument Šalinački lug			Šalinački lug RS0000045				
27.	Prugovo	Area of exceptional nature beauty Prugovo							
28.	Đerdap	National park Đerdap			1. Đerdap RS0000012	Đerdap	Đerdap RS041IBA	Đerdap 05	
29.	Mala Vrbica						Mala vrbica RS042IBA		
30.	Kladovo - Radujevac					Kladovo Radujevac			
31.	Cer						Cer RS024IBA		
32.	Danilova kosa	General Nature Reserve Danilova kosa							
33.	Valjevo mountains	1. Special Nature Reserve Tresnjica River Gorge 2. Area of exception		Valjevo mountains	1. Suvobor RS0000036 2. Tresnjica River Gorge RS0000039		Valjevo mountains RS025IBA	1. Povlen 15 2. Maljen-Suvobor 39	

		al features Gradac River Gorge 3. Strict Nature Reserve Čalački potok 4. Strict Nature Reserve Crna reka 5. Strict Nature Reserve Velika pleć - Vražji vir 6. Strict Nature Reserve Zabalac 7. Ovčar-Kablar Gorge Rajac			4. Gradac River Gorge RS0000054				
34.	Veliki Šturac	Strict Nature Reserve Veliki Šturac	Regional park Veliki Šturac						
35.	Brđanska klisura					Brđanska klisura			
36.	Accumulation Gruža						Accumulation Gruža a		
37	Ovčarsko-Kablarska klisura	Area of exceptional features Ovčarsko-Kablarsk			Ovčarsko-Kablarska klisura RS0000033		Ovčarsko-Kablarska klisura RS031IBA		

		a klisura							
38.	Brzansko Moravište		Special Nature Reserve Brzansko Moravište						
39.	Osanica River Gorge	Nature Monument Osanica River Gorge			Osanica River Gorge RS0000050				
40.	Mustafa	Strict Nature Reserve Mustafa	Regional park Felješana		Mustafa RS0000042				
41.	Felješana	Strict Nature Reserve Felješana	Regional park Felješana		Felješana RS0000041				
42.	Mali Krš							Mali Krš 20	
43.	Stol - Veliki Krš					Veliki Krš and Stol		Stol - Veliki Krš 35	
44.	Deli Jovan							Deli Jovan 02	
45.	Bukovo	General Nature Reserve Bukovo							
46.	Kučaj mountains	1. Strict Nature Reserve Resava River gorge, 2. Strict Nature Reserve Busovata, 3. Strict Nature		Kučaj mountains	1. Lazar canyon RS0000043 2. Vinatovača RS0000047 3. Kučaj mountains RS0000	Lazar River gorge	1. Resavska klisura 2. Zlotska klisura	*	

		Reserve Suvaja river gorge, 4. Area of exceptional nature beauty Part of the area in the river basin of Resava, Suvaja, Čemernica, Jalov potok and Beljanica rivers			055 4. Busovata RS0000043				
47.	Rtanj	Strict Nature Reserve Rtanj	Special Nature Reserve Rtanj		Rtanj RS0000027	Rtanj	Rtanj	Rtanj 28	
48.	Mala Jasenova glava	Strict Nature Reserve Jasenova glava	Special Nature Reserve Mala Jasenova glava		Mala Jasenova glava RS0000051				
49.	Gornje Pomoravlje						Gornje Pomoravlje RS030IBA		
50.	Ozren and Devica	1. Area of exceptional nature beauty Ozren meadows, 2. Area of exceptional	Area of exceptional features Ozren meadows		Ozren meadows RS0000052			Devica 33	

		features Lepterija Sokograd							
51.	Mojsinjske planine and Stalaćka klisura		Area of exceptional features Mojsinjske planine and Stalaćka klisura Južne Morave						
52.	Osredak		Special Nature Reserve Osredak						
53.	Kalenić	Strict Nature Reserve Kalenić							
54.	Peak Željina - Pločka čuka	Strict Nature Reserve Željina Peak-Pločka čuka							
55.	Goč	Strict Nature Reserve Brezna	Special Nature Reserve Goč-Gvozdac					Goč-Studena-Stolovi 08	
56.	Ibar River Gorge					Ibar River Gorge			
57.	Iznad Tatalije	Strict Nature Reserve Iznad Tatalije	Special Nature Reserve Iznad Tatalije						
58.	Tesne Jaruge	Strict Nature Reserve Tesne Jaruge	Special Nature Reserve Tesne Jaruge		Tesne Jaruge RS0000046				
59.	Zelenika	Strict Nature	Special Nature		Zelenika RS0000				

		Reserve Zelenika	Reserve Zelenika		049				
60.	Klisura Djetinje		Area of exceptional features Klisura Djetinje						
61.	Tara	1. National park Tara 2. Nature park Šargan - Mokra Gora	Area of exceptional features Zaovine		1. Tara RS0000009 2. Šargan-Mokra Gora RS0000018 3. Zaovine RS0000057	1. Tara 2. Mokra gora and Šargan	Tara RS026IBA	Tara 25	
62	Zlatibor		Nature park Zlatibor		Zlatibor RS0000034	Zlatibor		Zlatibor 30	
63	Forest park near Ribnica	Strict Nature Reserve Forest park							
64	Mali Rzav Valley		Area of exceptional features Mali Rzav Valley						
65	Mučanj					Mučanj			
66	Uvac and Mileševka	1. Special Nature Reserve Uvac, 2. Regional Nature Park Mileševka River Gorge,	Special Nature Reserve Mileševka River Gorge		1. Uvac RS0000025 2. Mileševka River Gorge RS0000026	Mileševka canyon	Uvac i Mileševka RS027IBA	Zlatar 22	

		3. Area of exceptional nature beauty Forest park Ivlje 4. Strict Nature Reserve Ravništa							
67.	Paljevine	Strict Nature Reserve Paljevine	Special Nature Reserve Paljevine						
68.	Kamena Gora		Area of exceptional features Kamena gora						
69.	Ozren - Jadovnik		Area of exceptional features Ozren-Jadovnik			Ozren			
70.	Pešter			Pešter	Pešter RS0000037	1. Pešter 2. Štavalj	Pešter RS028IBA	Pešter 37	Pešterskopolje 3RS006*
71.	Gutavica	Strict Nature Reserve Gutavica	Special Nature Reserve Gutavica						
72	Golija	Nature park Golija			Golija RS0000030	Golija	Golija RS029IBA	Golija 09	
73	Ras - Sopoćani		Area of exceptional features Ras - Sopoćani						
74	Rogozna					Rogozna			
75	Kopaonik	National			Kopaoni	Kopaonik	Kopaoni	Kopaon	

		park Kopaonik			k RS0000002		k RS032IBA	ik 16 Ibarska klisura 12	
76	Ćelije		Area of exceptional features Ćelije						
77	Prokop	Regional park Prokop			Prokop RS0000044				
78	Lalinačka slatina					Lalinačka slatina			
79	Kamenički vis	Forest park Kamenički vis							
80.	Stara planina	Nature park Stara planina			Stara planina RS0000011	Stara planina	Stara planina RS040IBA	Dimitrovgrad 04 Stara planina 36	
81.	Sićevačka klisura	1. Nature park Sićevačka klisura 2. Special Nature Reserve Jelašnička klisura			Sićevačka klisura RS0000031	Sićevačka klisura	Sićevačka klisura RS039IBA	Sićevačka klisura 032	
82.	Suva planina		Special Nature Reserve Suva planina		Suva planina RS0000019	Suva planina	Suva planina RS038IBA	Suva planina 36	
83.	Šljivovički vis					Šljivovički vis			
84.	Krupačko blato		Special Nature Reserve Krupačko blato						
85.	Jerma	Special Nature	Special Nature		Jerma RS0000	Klisura Jerme	Jerma	Klisura Jerme	

		Reserve Venerina padina	Reserve Jerma		035			13	
86.	Zeleničje	Strict Nature Reserve Zeleničje	Special Nature Reserve Zeleničje		Zeleničje RS0000048				
87.	Kukavica	Strict Nature Reserve Kukavica	General Nature Rerserve Kukavica					Kukavica 18	
88.	Vlasina	Area of exceptional features Vlasina			Vlasina RS0000006	Vlasinska visoravan	Vlasina RS037IBA	Besna Kobila 38	Vlasina 3RS008
89.	Radan		Area of exceptional features Radan		Radan RS0000060			Radan 26	
90.	Aleksandrovačka slatina					Aleksandrovačka slatina			
91.	Rujan					Rujan			
92.	Pčinja	Area of exceptional features Pcinja Valley			Pcinja Valley RS0000015	Pcinja Valley	Pčinja RS036IBA		
93.	Jarešnik	Strict Nature Reserve Jarešnik	Special Nature Reserve Jarešnik						
94.	Rudina					Rudina		Rudina planina 29	
95.	Golemi vrh							Golemi vrh 06	
96.	Grmija	Nature park Grmija			Grmija RS0000028	Grmija			
97.	Gazimestan	Strict Nature Reserve Gazimest	Special Nature Reserve Gazimes						

		an	tan						
98.	Sitnica						Sitnica RS033IBA		
99.	Miruša	Area of exceptional features Miruša			Miruša RS0000032	Mirusa Gorge with Koznik			
100.	Prokletije	1. Strict Nature Reserve Kaljavica, 2. Strict Nature Reserve Maja Rops, 3. Strict Nature Reserve Kožnjar, 4. Strict Nature Reserve Pogled, 5. Strict Nature Reserve Beleg	NP Prokletije		Prokletije RS0000004	Prokletije	Prokletije RS034IBA	Metohijske Prokletije 21	
101.	Šar planina	National park Šar planina			Šar planina RS0000008	1. Koritnik 2. Šar planina	Šar planina RS035IBA	Ošljak 23	

Key:

1. protected area:

1) SRP - Special Nature Reserve;

2) PIO – Region of Exceptional Features;

3) PP – Nature Park;

4) SP – Nature Monument;

5) NP - National Park;

6) RP - Regional Park;

7) StPR – Strict Nature Reserve;

8) PnPL – Region of Exceptional Natural Beauty;

9) OPR- General Nature Reserve;

10) PŠ – Forest Park;

2. area under protection;

3. areas planned for protection pertaining to which preliminary research shall be carried out;

4. Emerald area with classification code;

5. Internationally Important Plant Area (IPA / *Important Plant Area*);

6. Internationally and Nationally Important Bird Area with classification code (IBA / *Important Bird Area*);

7. Prime Butterfly Area (PBA / *Prime Butterfly Area*);

8. Ramsar area with classification code.

Annex 2

INTERNATIONALLY IMPORTANT ECOLOGICAL CORRIDORS IN THE REPUBLIC OF SERBIA

International important ecological corridors shall be the following waterflows and their coastal zone:

1) The Danube River including protected areas of Special Nature Reserve "Bagremar", National park "Begečka jama", Nature Monument "Kamenički park", Nature Monument "Ivanovačka ada", Nature Monument "Ritske šume na Mačkovom sprudu", Nature Monument "Ribarsko ostrvo" in Novi Sad (under protection), as well as the areas envisaged for protection: Bogojevački rit, Bogland between Plavna and Bačko Novo Selo, boglands of Podunavlje.

2) The Tisa River, including protected areas of Nature Park "Kamaraš, Nature Park "Stara Tisa - Biserno ostrvo", as well as the areas envisaged/reserved for protection: Gornja Tisa and Donja Tisa.

3) The rivers- Sava, Drina, Južna and Velika Morava, Tamiš, Kereš, Zlatica, Karaš, Nera, Brzava, Moravica, Bosut and Studva.

Annex 3

PROTECTION MEASURES FOR THE ECOLOGICAL NETWORK

1) the destruction and violation of habitats as well as the destruction and perturbation of wild species shall be prohibited;

2) the modification of area use with regard to natural and semi-natural vegetation (meadows, pastures, etc.)

3) the modification of morphological and hydrological features of areas on which the functionality of corridors depends shall be prohibited;

4) natural and semi-natural elements of corridors in compliance with landscape and vegetation features of the area shall be conserved and improved by means of planning of area use as well as by active protection measures;

5) encourage the traditional methods of use of space contributing to conservation and improvement of biodiversity;

6) measures ensuring prevention, i.e. reduction, control and rehabilitation of all forms of pollution shall be undertaken;

7) improve ecological corridors within civil engineering areas by setting up the continuity of green areas whereof structure and purpose shall support the functions of corridors;

8) technical-technological solutions for smooth movement of species shall be provided with regard to the spots of ecological corridors crossing with elements of infrastructure systems forming the barriers for species migration;

9) outside settlement zone the construction of facilities whereof purpose shall not be directly linked to water at the distance shorter than 50m from the coast of stagnant waters, i.e. from the line of intermediate waterflow.

PROTECTION MEASURES FOR PROTECTIVE ZONE

1) zonal distribution of urban-rural structures, implementation of respective technical-technological solutions shall eliminate or mitigate negative impacts on the living world;

2) the performance of activities that may lead to penetration and spreading of invasive species from the environment shall be prohibited;

3) the conservation of hydrological regime required for the functionality of ecologically important area and/or ecological corridors shall be provided with respect to use of natural resources;

4) encourage the establishing the protective greenery along the borders of ecological corridors in compliance with the necessities of species and habitat types of areas.

ANNEX 6

Regulation on the protection of Special Nature Reserve Gornje Podnavlje

Pursuant to Article 43, paragraph 2, of the Law on Environmental Protection ("The Official Gazette of the RS", No. 66/91, 83/92, 53/93, 67/93, 48/94, and 53/95), the Government of the Republic of Serbia adopted

REGULATION

ON THE PROTECTION OF SPECIAL NATURE RESERVE GORNJE PODUNAVLJE

Article 1

A part of the valley plateau and the Danube waterway on the territory of the Republic of Serbia from the state border with the Republic of Hungary to Bogojevo is protected as a special nature reserve under the title of Gornje Podunavlje, and ranked as protected area of exceptional importance, i.e. category I (hereinafter: Special Reserve Gornje Podunavlje).

Article 2

The Special Reserve Gornje Podunavlje is protected as an area with particularly prominent features of relief and hydrographic phenomena as well as the inundation-alluvial structures of the river belt, preserved and lush wetland native plant communities (swamp forests, meadows, reeds, etc.), which are characterized by diversity and abundance of rare plant species (white and yellow water lilies, winter aconite, water violet, blue iris, badgeworth buttercup, great spearwort, black hawthorn), the richness of fauna, particularly large mammals (common deer, wild boar, deer), fish and wading birds, the presence of rare animal species (white-tailed eagle, black stork, beech marten, European pine marten, European badger, European wildcat, etc.), and the peculiar beauty of the landscape.

Article 3

The Special Reserve Gornje Podunavlje is located in the Republic of Serbia – Autonomous Province of Vojvodina with the total area of 19,648 ha owned by the state, covering the left bank of the river Danube from Bogojevo 1367 + 500 km up to the border with the Republic of Hungary 1433 km.

Description of the borders of the Special Reserve Gornje Podunavlje with graphic image is printed with this Regulation and is its constituent part.

Article 4

In the region of the Special Reserve of Upper Danube Basin the 1st degree protection regime is established for the area of 261.62 ha, 2nd degree protection regime for the area of 4,843.81 ha, and 3rd degree protection regime for the area of 14,542.57 ha.

The 1st degree protection regime comprises the regions:

1) Spoljna Kovačica – the Lake, area of 8.89 ha, GJ: Karapandža, Region: Karapandža, Part: 30, clearings 2, 3;
2) Opaljenik – Slana bara, area of 29.43 ha, GJ: Kolut-Kozara, Region: Štrbac, Part: 14, clearing 6;
3) Šarkanj, area of 20.59 ha, GJ: Monoštorske šume (forest), Region: Kazuk, Part: 49, sections a, b, c, d, clearings 1, 2, 5, 6;
4) Crna bara, area of 12.81 ha, GJ: Monoštorske šume, Region: Kazuk, Part: 52, clearings 1, 9, Part: 53, clearing 5;
5) Adler, area of 20.78 ha, GJ: Apatinska bara, Region: Kanije-Pesak, Part: 35, section d, clearings 4, 5, 6, Part: 40, clearings 3, 4;
6) Velika hagla – Srebrenički dunavac, area of 83.78 ha, GJ: Apatinski rit, Region: Duboki jendek, Part: 47 clearing 1, Part: 48 clearing 5, Part: 49 sections a, b, c, d, e, g, clearings 1, 2, 3, 4, 5, 6, 7;
7) Velika bakulja, area of 85.34 ha, GJ: Apatinski rit, Region: Bakulja, Part: 77, sections c, f, g, clearings 2, 3, 4, 5, Part: 80 clearing 3, Part: 81, sections e, f, clearing 4, Part: 82, section c, clearings 1, 2, 3, 4, 5, 6, 7, 8, Part: 83, sections a, b, c, clearings 1, 2, 3, 4, 5, Part: 84, sections a, b, c, clearings 1, 2.

The 2nd degree protection regime comprises the regions:

1) Prodor, area of 30.42 ha, GJ: Karapandža, Region: Karapandža, Part: 3, section a, Part: 4, sections a, b, c, d, e, f, g, Part: 6, sections a, b;
2) Labudovnjača, area of 398.16 ha, GJ: Karapandža, Region: Karapandža, Part: 14, clearings 1, 4, Part: 15, sections a, b, c, d, e, clearings 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, Part: 16, sections a, b, g, clearings 1, 2, 3, 4, 5, 6, 7, Part: 17, clearings 1, 2, 3, Part: 18, sections a, b, c, d, e, clearings 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, Part: 19, sections c, f, clearings 2, 3, 4, 5, Part: 20, clearing 1, Part: 21, clearings 5, 6, 10, Part: 22, sections a, e, clearings 1, 2, 3, 4, 5, 6, 7, 8, Part: 24, section a, clearings 1, 2, 3, 4, Part: 25, section d, clearings 2, 3, 4, 5, 6, 7, 8;
3) Štrbac-Crna bara, area of 562.13 ha, GJ: Kolut-Kozara, Region: Štrbac, Part: 10, sections a, b, c, d, e, f, g, h, i, j, k, l, clearings 1, 2, 3, 4, 5, 6, 7, Part: 11, sections a, b, c, d, e, f, g, h, i, j, k, l, clearings 1, 2, 3, 4, 5, 6, 7, Part: 12, sections a, b, c, d, e, clearings 1, 2, 3, 4, Part: 13, sections a, b, c, clearings 1, 2, 3, 4, 5, 6;
4) Halasica, area of 66.06 ha, GJ: Monoštorske šume, Region: Šmaguc, Part: 16, sections a, b, c, d, e, clearings 1, 2, 3, 4, 5, 6, 7, 8, Part: 17, clearings 1, 2, 3;

5) Đurđinska greda, area of 6.21 ha, GJ: Monoštorske šume, Region: Siga, Part: 46, sections b, c, d, h;
6) Široki rit area of 153.94 ha, GJ: Monoštorske šume, Region: Kazuk-Hampo (Široki rit), Part: 56, sections a, b, clearings 1, 2, 3, 4, 5, Part: 57, sections a, b, c, clearings 1, 2, 3, 4, 5, 6, Part: 58, clearings 7, 5, Part: 61, clearing 1;
7) Kazuk-Danube, area of 0.84 ha, GJ: Monoštorske šume, Region: Kazuk-Hampo, Part: 55, section a;
8) Mirkovića bara-Varoško jezero, area of 28.00 ha, marsh ecosystem;
9) Golić-Bara Danguzovac, area 287.18 ha, GJ: Apatinski rit, Region: Staklara, Part: 63, sections c, d, e, f, g, h, i, clearings 1, 2, 3, 4, 5, 6, Part: 64, sections c, d, clearings 4, 5, Part: 66, sections e, f, g, h, clearings 1, 2, Part: 67, sections a, b, c, d, e, f, clearings 1, 2, 3, 4, 5, Part: 69, section c, clearings 2, 3, Part: 70, sections a, b, c, d, e, f, clearings 1, 2, 3, 4, 5, Part: 71, sections a, b, c, d, e, f, g, h, clearings 1, 2, 3, 4, Part: 72, sections a, b, c, d, e, f, g, h, i, j, k, clearings 1, 2, Part: 73, sections a, b, c, d, e, f, clearings 1, 2, 3, 4, 5, 6, 7, Part: 74, sections a, b, c, d, e, f, clearings 1, 2, 3;
10) Košare-Sonćanska bara, area 82.68 ha, GJ: Protected forests, Region: Košare, Part: 46, clearings 1, 2, 7, Big swamp;
11) Velika Bakulja, area 32.88 ha, GJ: Apatinski rit, Region: Bakulja, Part: 80, sections b, c, d, e, f, clearings 1, 2;
12) Old waterways Danube-anthropogenic waterway, area of 3,124.87 ha;
13) Bestrement, area of 55.10 ha, GJ: Protected forests, Region: Duboki jendek (Bestrement), Part: 32, clearing 2, Part; 33, sections e, f, clearings 3, 4, 6, Part: 34, sections a, b, c, clearings (Bestrement swamp) 1, 2, 3, 4, 5, Part: 35, clearing (swamp) 2;
14) Hrastova greda, area of 15.24 ha, GJ: Protected forests, Region: Kanlija pesak, Part: 20, clearings 1, 3, Part; 21, sections e, d, clearing 1, Part: 23, section a.

The remaining surface of the protected reserve is under the 3rd degree of protection regime.

Article 5

In the area of the Special Reserve Gornje Podunavlje under the regime of 1st level of protection it is forbidden to use natural resources, all other forms of land-use and other activities are banned, except those related to scientific research and controlled education.

In the Special Reserve of Gornje Podunavlje under the regime of 3rd level of protection it is forbidden to:

1) Erect industrial or other facilities or execute works which disturb the morphological and hydrological characteristics of the terrain, destroy flora

and fauna or disrupt the integrity of the surface in any other way, except for the construction of hard forest paths made of natural materials, and for the drainage and irrigation systems – open channels for intensive management;
2) Collect and use plant and animal species protected as natural rarities;
3) Discharge untreated wastewater;
4) Burn reeds;
5) Change the purpose of the land;
6) Exploit mineral resources;
7) Open and shape landfills;
8) Construct holiday houses and vacation settlements outside the building construction areas regulated by special spatial and urban planning documents;
9) Graze cattle.

In section of the Special Reserve of Upper Danube Basin which is under the regime of 2nd level of protection, beside the measures cited in paragraph 2 of this Article, it is forbidden to:

1) Clearfelling, changing the species (substitution);
2) Fell trees with white-tailed eagle and black stork nests;
3) Introduce autochthonous plant and animal species, except for the forest tree species which are already managed under special regime;
4) Disturb the birds in their reproductive period;
5) Drain Mirkovića swamp (Varoško lake), to expand the canal network around the swamp or to plough the grounds next to the swamp;
6) Hunt or fish in any form at Mirkovića swamp, except for sanitary purposes;
7) Ride motor boats along the old Danube waterway at the time of spawning, except the guard service boats;
8) Block migratory routes.

In the region of the Special Reserve Gornje Podunavlje the following has been ensured: monitoring and regulation of the quantities and quality of water in the alluvial Danube plane and maintenance of its optimal level referring to the requirement of preserving the living species and aimed at preventing the flooding of the terrain above the elevation of 84.50 mwl; preservation, improvement and enlargement of natural forests, application of forest management measures by which preservation of tree trunks and parts of forest as the existing and potential places for nesting of birds, especially for the white-tailed eagle and black stork, are guaranteed (such as breeding and sanitary measures aimed at preserving stability and health status of those elements); protection and monitoring of the status plant and animal species, their population and habitat, preservation and improvement of the status of the population of endangered species of flora and fauna; setting up of monitoring, preservation of stability and quality of the population of hunting game, planning, construction and equipping the space with infrastructure needed for hunting, fishing, forest management, tourism and recreation, in a way which does not jeopardize the special values of the area;

continuing with research and educational activities and presentation of the values of nature.

Article 6

Protection and development of the Special Reserve Gornje Podunavlje are conducted according to the programme of protection and development (hereinafter: Programme).

The Programme contains goals and priority activities and tasks for fulfilment of the protection regime from Article 5 of this Regulation, particularly the tasks related to protection of forests, rare plants and animals and their communities, and in maintaining the biological balance; in monitoring of the regime of underground waters; in establishment of monitoring; in performance of research, cultural, educational, tourism and recreational activities; in establishing and developing cooperation with local inhabitants and other users of the natural goods; in presentation and necessary equipping the area to realize the activities and tasks, with resources needed to realize this Programme, and the way to secure them.

The Programme is adopted for the period of five years, and it is realized according to the annual programme containing tasks and duties to be realized in current year, the dynamics of their implementation and the amount of needed funds.

Upon obtaining opinions by the ministries responsible for forestry, water management, urban planning, science, culture and education, the approval is granted by the ministry authorised for environmental protection.

Article 7

The Special Reserve Gornje Podunavlje is managed by the Publice enterprise “Vojvodinašume” Petrovaradin (hereinafter: Company).

Article 8

While performing the tasks of protecting and developing the Special Reserve Gornje Podunavlje, which the Company provides for the realization of the Programme, the prescribed regime of protection and preservation of natural resources, for scientific, cultural, educational, informational and other activities, adopts the Programme and annual programme of protection and development.

The Company submits a report on the realization of the Programme from Article 6 of this Regulation by December 15 of the current year to the ministry responsible for the activities related to environmental protection.

Article 9

Through performing the tasks of protecting and developing the Special Reserve Gornje Podunavlje, the Company ensures marking of the protected area , internal order and ranger service in accordance with an act adopted with the approval by the ministry responsible for the environmental protection.

The Act of paragraph 1 of this Article regulates the rules for the realization of the protection and development regime, and specially: the way and terms for movement and stay of visitors, use of recreational and other public surfaces, placement of information and other signs, protection measures while performing scientific and research i operations, conditions for performing permitted activities, and special measures and limitations in realizing the regime of protection.

Article 10

The funds for the protection and development of the Special Reserve Gornje Podunavlje are provided by income realized in operations of the Company, budget funds of the Republic, and other sources according to law.

Article 11

The Programme of Article 6 of this Regulation shall be adopted by the Company within six months after the date the Regulation enters into force, and the annual programme within 90 days after the date the Regulation has entered into force.

Until the Programme is adopted, the Company may perform tasks in protecting and developing according to a temporary programme of protection and development which is adopted within 60 days after the date the Regulation has entered into force.

Article 12

Plans and programmes of landscaping, forestry, hunting, water management, agricultural and other plans and programmes covering the protected area shall be aligned with the Spatial Plan of the Republic of Serbia, with the Programme and protection regime as set by this Regulation.

In the area of Special Reserve of Upper Danube the appropriate regional plan will be passed in accordance with the law.

Article 13

This Regulation shall enter into force on the day following its publication in "The Official Gazette of the Republic of Serbia".

05 No. 353-5996/2001
Belgrade, 10 July 2001

Government of the Republic of Serbia
Vice-president,
Prof. dr Žarko Korać

DESCRIPTION OF BORDERS OF THE SPECIAL NATURE RESERVE OF GORNJE PODUNAVLJE

The border starts at the Danube waterway on the three-border point between the state frontiers of SR Yugoslavia, Republic of Hungary and Republic of Croatia at 1433 km, going north-east to the big dike of the first defence line up to the border with Hungary, and heads east along the state frontier between Federal Republic of Yugoslavia and Republic of Hungary up to Bajski kanal near the old watchtower – Prodor (Karapandža). The border there crosses the Bajski kanal to its eastern left bank up to the secondary levee following the west leg of the secondary levee to the south, up to a point where the secondary levee joins the embankment by the left bank of the Bajski kanal. From there on the border still goes south along the west leg of the levee up to the dam "Šebešfok". At "Šebešfok" point the border breaks its course perpendicularly swerving to the west along the north leg of the paved causeway Bezdan – the Danube bridge "51st divizija" up to the junction with the first defence line embankment where the border breaks perpendicularly to the south cutting across the paved road and the Bezdan-Bečej canal, reaching the south leg of the embankment. From that point on the border continues along the secondary levee south leg to the west up to the foot of the paved road causeway of the bridge "51st divizija" – Bezdan, continuing along the east leg of that causeway to the south up to the point where the causeway, i.e. the paved road turns perpendicularly towards the Danube. From there the border follows the secondary levee west leg beside the DTD canal left bank in the direction of south-southeast up to the junction with the secondary defence line levee near the place called "Kostina pumpa".

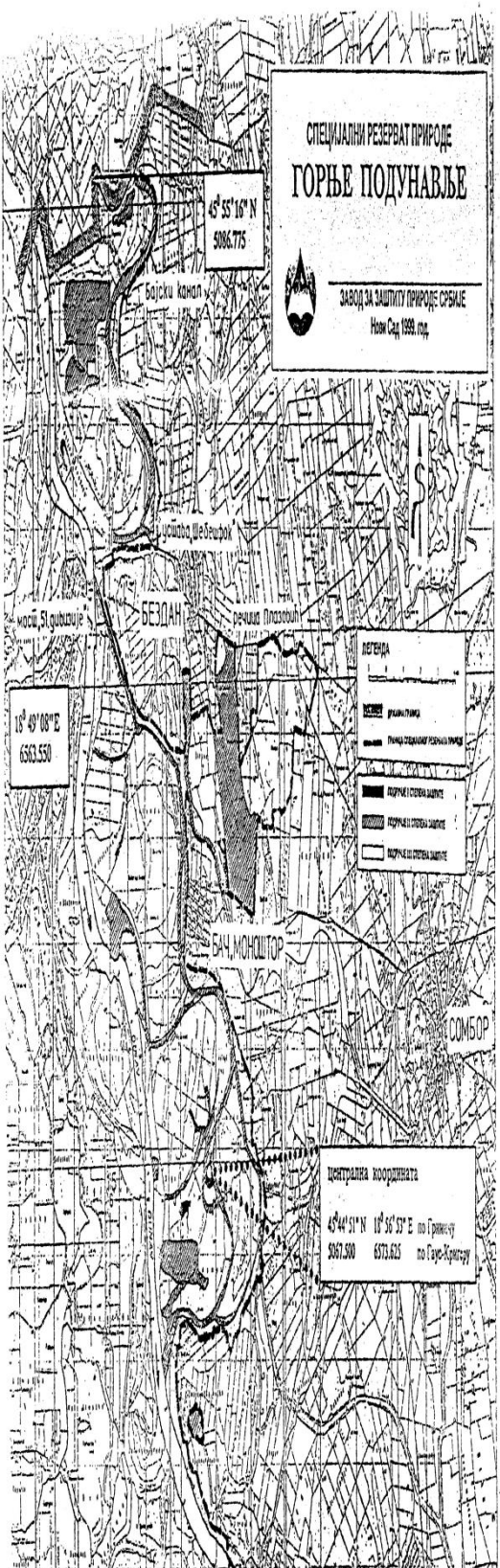
From the junction point between the secondary levee and the levee of the secondary defence line, the borderline of the protected natural reserve points southeast along the west and south embankment leg to the point where it joins the Big canal (Bezdan-Bečej), where it breaks perpendicularly and goes north along the east embankment leg which follows the right bank of the Big canal up to the Bezdan

settlement, where it breaks perpendicularly and turns east across the Bezdan-Bečej canal, encompassing the surface of Čapljarnik and arriving to the causeway (paved road Bezdan-Bački Monoštor). There, the border breaks and returns south along the west embankment leg up to the forest borderline at the forestry economy unit "Kolut-Kozara", section 18, cutting perpendicularly across the Bezdan-Bački Monoštor road towards east, following the north and east brim of the section 18 GJ "Kolut-Kozara", traversing the Bezdan-Bački Monoštor railroad tracks, continuing eastwards along the north side of section 11 to section 10, where it swerves northwards perpendicularly along the west brim of sections 10 and 9 up to the paved road Sombor-Bezdan, then breaking perpendicularly towards east up to the Plazović (Kiđoš) rivulet crossing to its left bank. When the border crosses to the left bank of the Plazović rivulet it proceeds south along its left bank to the northwest brim of section 30, the economy unit "Kolut-Kozara". Further on, the border continues along the northwest and west brim of sections 30, 25, 24 and 19 to the foot of the paved road Sombor-Bezdan (to the monument dedicated to Russian combatants), and continues along the north brim of sections 19 and 20 toward east up to the west brim of section 21, cutting across Sombor-Bezdan road, encompassing section 21 from the west, north and east, up to the east brim of section 22 where it turns south following the east brim of sections 22 and 27, then swerving westwards along the section 27 south brim, then continues along the east brim of sections 27 and 28 southwards up to section 33, where it turns southwest along the brim of sections 33 and 32 up to the Plazović (Kiđoš) rivulet, it crosses the rivulet and continues along the south brim of sections 32 and 31 up to the borderline with section 13 (Štrbac region). From that point the border swerves southwards along the section 13 east side, then to the west along the section 13 south brim, cutting across Bezdan-Sombor railroad tracks, continuing along the section 14 south brim to the Bezdan-Bečej big canal bank, crosses the canal, breaks perpendicularly northwards and goes along the secondary levee along the right bank of the canal up to the shipyard north of Bački Monoštor, where it emerges onto the secondary defence line embankment along the left side of the DTD canal. From this point the border follows the foot line (west leg) of the embankment southwards up to the water protective dam on DTD canal north of Kupusina settlement, where it breaks westwards and continues along the foot (north leg) of the embankment up to the junction point with the first defence line dike located at the left bank of the Danube (camping site Vagoni). From the point where the second defence line embankment joins the first line defence dike the border proceeds southwards along the first defence line dike west leg up to the shipyard "Dunav" – Apatin, where it breaks emerging to the Danube left bank, continues along the Danube bank to 1401 km, breaking and reaching the first defence line dike, goes south along the west leg of the dike to the place "Ciglane", where it reaches the Apatin-Bogojevo embankment. From there the border goes along the first defence line dike east leg (Apatin-Bogojevo) up to the greenhouse "Zverinjak" (section 14, GJ "Zaštićene šume").

At the greenhouse "Zverinjak" point the nature reserve border joins the protective fencing and follows the protective fence up to the forest region of Košare (section 44) wherefrom it continues along the protective fence towards northeast (borderline of sections 44 and 40), up to the place where the forest region Košare joins the swamp

(Velika bara). At that point the nature reserve border departs from the protective fence breaking perpendicularly and proceeding northwards along the west bank of the Velika bara beside the Đanićev farmstead up to Balgov farmstead. At Balgov farmstead the nature reserve border breaks perpendicularly, crosses the swamp to its east bank wherefrom the border follows the Velika bara east bank southwards up to section 49 of the forestry region Košare, where it joins the protective fence again. The nature reserve border continues along the protective fence up to the anglers' house under the first defence line dike Apatin-Bogojevo. From the fisherman's house the border goes on along the protective fence up to the Danube river, crosses the Danube up to its waterway (state frontier between the Federal Republic of Yugoslavia and Republic of Croatia) and goes further upstream the waterway (the state frontier) up to the starting point.

A constituent part of the Special Nature Reserve "Gornje Podunavlje" is also the Mirkovića bara (Varoško jezero) which extends over the cadastre lots 5053, 5054, 5055, 5056, 5057, 5058, 5059, 5060, 6221, and 6222 KO Apatin.


СПЕЦИЈАЛНИ РЕЗЕРВАТ ПРИРОДЕ
ГОРЊЕ ПОДУНАВЉЕ
ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ
Нови Сад 1999. год.
45° 55' 16" N
5086.775
Бајски канал
Сивина Шевешрок
БЕЗДАН
речица Плазовић
мост, 51 државни пут
19° 49' 08" E
6563.550
ЛЕГЕНДА
ПОДРУЧЈЕ I СТЕПЕНА ЗАШТИТЕ
ПОДРУЧЈЕ II СТЕПЕНА ЗАШТИТЕ
ПОДРУЧЈЕ III СТЕПЕНА ЗАШТИТЕ
БАЧ, МОНШТОР
СОМБОР
централна координата
45°44' 51" N 18° 56' 53" E по Гриничу
5067.500 6573.625 по Гаус-Кригеру

ANNEX 6a

Regulation on amendments to the Regulation on protection
of the Special Nature Reserve Gornje Podunavlje

Official Gazette of the Republic of Serbia no. 81
5 September 2008

1754

Pursuant to Article 43 paragraph 2 of the Law on Environmental Protection ("The Official Gazette of the Republic of Serbia", No. 66/91, 83/92, 53/93 – other law, 67/93 – other law, 48/94 – other law, 53/95 and 135/04), and Article 42 paragraph 1 of the Law on the Government ("The Official Gazette of the Republic of Serbia", No. 55/05, 71/05 – amendment, 101/7 and 65/08), the Government adopts

REGULATION
ON AMENDMENTS TO THE REGULATION ON PROTECTION OF THE SPECIAL NATURE RESERVE "GORNJE PODUNAVLJE"

Article 1

In the Regulation on protection of the Special Nature Reserve Upper Danube Basin ("The Official Gazette of the RS", No. 45/01) in Article 7 the words "JP Srbijašume" are replaced with the words: "Public Enterprise 'Vojvodinašume' Petrovaradin".

Article 2

This Regulation shall enter into force on the eight day following its publication in "The Official Gazette of the Republic of Serbia".

05 No. 353-5996/2001-3
Belgrade, 4 September 2008
The Government
First Vice-President of the Govt.
Deputy President of the Govt.
Ivica Dačić

ANNEX 6b

Regulation on amendments to the Regulation on protection
of the Special Nature Reserve Gornje Podunavlje

Official Gazette of the Republic of Serbia no. 107
23 December 2009

4146

Pursuant to Article 41, paragraph 2, in relation to article 130, paragraph 1, of the Law of Environmental Protection ("The Official Gazette of the RS", No. 55/05, 71/05 – amendment, 101/07 and 65/08), the Government adopts

REGULATION

ON AMENDMENTS TO THE REGULATION ON PROTECTION OF THE SPECIAL NATURE RESERVE "GORNJE PODUNAVLJE"

Article 1

The Regulation on protection of the Special Nature Reserve Gornje Podunavlje ("The Official Gazette of the RS", No. 45/01 and 81/08), article 3 is changed as follows:

"Article 3

The Special Reserve Gornje Podunavlje is located in the Autonomous Province of Vojvodina, with the total area of 19,605 ha owned by the state, covering the left bank of the river Danube from Bogojevo 1367 + 500 km up to the border with the Republic of Hungary 1433 km.

Description of the perimeter of the Special Reserve Gornje Podunavlje with graphic image is printed with this Regulation and is its constituent part."

Article 2

In Article 4, paragraph 1, the number: "14,542.57" is replaced with the number: "14,499.56".

Article 3

Article 5, paragraphs 2, 3 and 4, is changed as follows:
"In the Special Reserve "Gornje Podunavlje" under the regime of 3rd degree of protection it is forbidden to:

1) Erect industrial, agricultural and similar facilities (tourist facilities, hotel complexes, etc.) or execute works which disturb the morphological and hydrological characteristics of the terrain, destroy flora and fauna or disrupt the integrity of the surface in any other way, except for the requirements related to improvement of the natural resources status (revitalisation),

construction of hard forest paths made of natural materials, and for the drainage and irrigation systems;
2) Collect and use strictly protected species;
3) Discharge untreated wastewater or water of undetermined quality;
4) Burn reeds;
5) Change the purpose of the land, except for the revitalisation of natural habitats;
6) Afforestation of the swamp, depression or meadow;
7) Exploit mineral resources, except for the maintenance of navigable routes;
8) Open and shape landfills;
9) Construct holiday houses and vacation settlements outside the building construction areas regulated by special spatial and urban planning documents;
10) Graze cattle.

In section of the Special Reserve of "Gornje Podunavlje" which is under the regime of 2nd level of protection, beside the measures cited in paragraph 2 of this Article, it is forbidden to:
1) Clear cut, unless it is planned as a regular way of reforestation or to change autochthonous elements and groups of autochthonous species (substitution);
2) Fell trees with white-tailed eagle and black stork nests;
3) Introduce allochthonous and invasive species, except for the forest tree species (if not invasive) which are already managed under special regime;
4) Disturb the birds in their reproductive period (strutting, mating, nesting, fledging);
5) Drain Mirkovića swamp (Varoško lake), to expand the canal network around the swamp or to plough the grounds next to the swamp;
6) Hunt or fish at Mirkovića swamp, except for sanitary purposes;
7) Move the vehicles out of the routes and in the period of animal reproduction, except for the vehicles needed for protection of the reserve;
8) Ride the motor boats, except for the guard service boats;
9) Ride rowing or sailing boats in the region of old Danube waterway in the period of fish spawning, except for the guard service boats;
10) Block the migratory routes.

In the region of the Special Reserve "Gornje Podunavlje" the following has been ensured: monitoring and regulation of the quantities and quality of water in the alluvial Danube plane and maintenance of its optimal level referring to the requirement of preserving the living species and aimed at preventing the flooding of the terrain above the elevation of 84.50 mwl; forest management according to sustainable management, removal and suppression of invasive species by mechanical and selected chemical means in agreement with the authorised ministry; conservation, improvement and enlargement of natural forests elements, implementation of measures in forest management which ensure the conservation of tree trunks and parts of forest as the existing and potential spots and places for nesting of birds, especially for the white-tailed eagle and black

stork, such as breeding and sanitary measures aimed at preserving stability and health status of those elements; protection and monitoring of the status of plant and animal species, their population and habitats, preservation and improvement of flora and fauna endangered species population status; setting up of monitoring, preservation of stability and quality of the population of hunting game, planning, construction and equipping the space with infrastructure needed for hunting, fishing, forest management, tourism and recreation, in a way not to jeopardize the special values of the area; continuation of research and educational works and presentation of the protected area."

Article 4

Description of the perimeter of the Special Nature Reserve "Gornje Podunavlje" with graphic image which is printed together with the Regulation on the protection of Special Nature Reserve "Gornje Podunavlje" ("The Official Gazette of the RS", No. 45/01 and 81/08), is replaced with the new description of the perimeter of the Special Reserve Gornje Podunavlje with graphic image which is printed with this Regulation and is its constituent part.

Article 5

This Regulation shall enter into force on the eight day following its publication in "The Official Gazette of the Republic of Serbia".

05 No. 110-8322/2009
Belgrade, 17 December 2009
Government
First Vice-President of the Govt.
Deputy President of the Govt.
Ivica Dačić

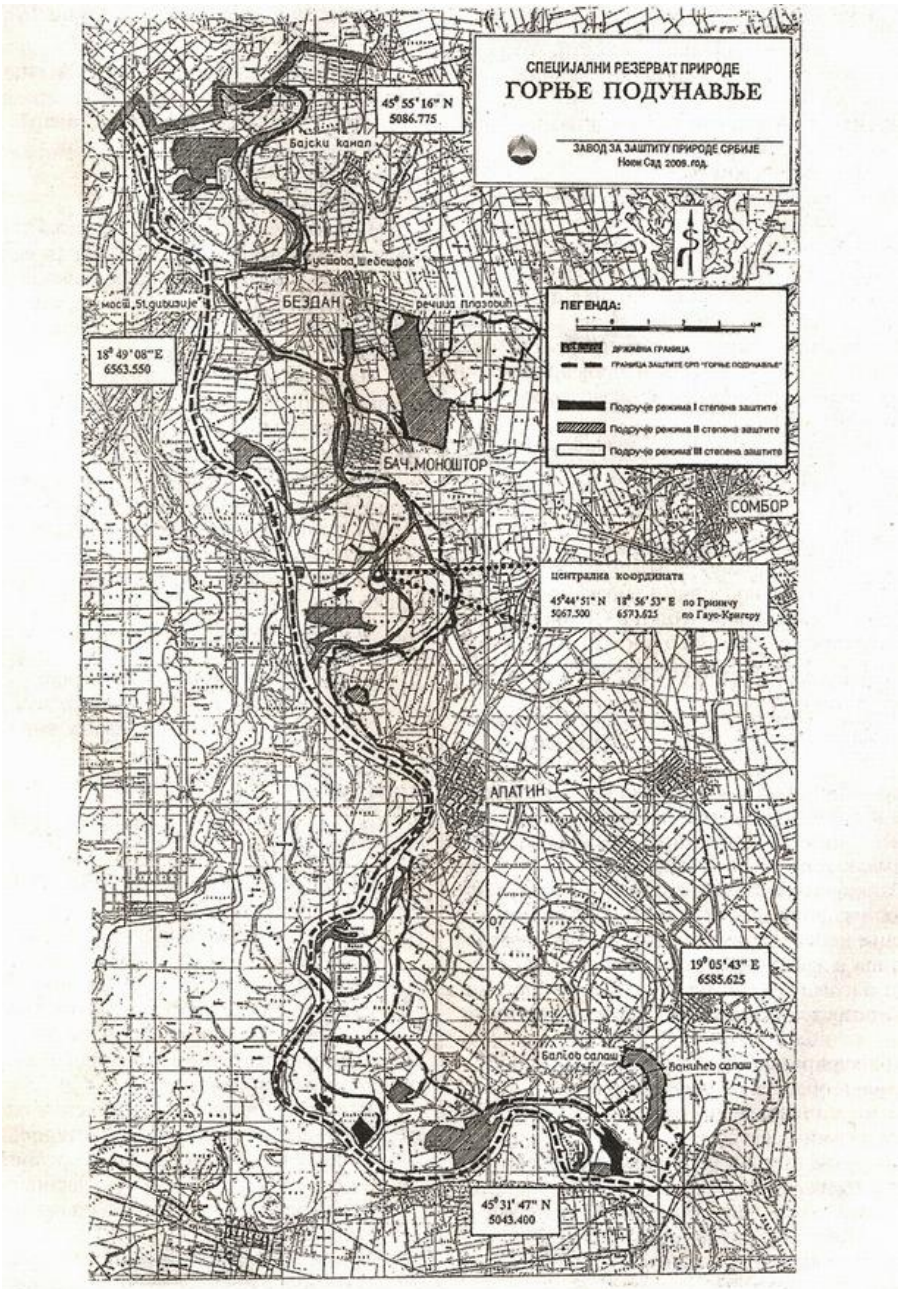
DESCRIPTION OF BORDERS OF THE SPECIAL NATURE RESERVE OF “GORNJE PODUNAVLJE”

The border starts at the middle of the Danube waterway on the state frontier between the Republic of Serbia and the Republic of Hungary at 1433 km, going north-east to the big dike of the first defence line up to the border with Hungary, and heads east along the state frontier between SR Yugoslavia and Republic of Hungary up to Bajski canal near the old watchtower – Prodor (Karapandža). The border there crosses the Bajski canal to its eastern left bank up to the secondary levee following the west leg of the secondary levee to the south, up to a point where the secondary levee joins the embankment by the left bank of the Bajski canal. From there the border still goes south along the west leg of the levee up to the dam “Šebešfok”. At “Šebešfok” dam the border breaks its course perpendicularly swerving to the west along the north leg of the paved causeway Bezdan – the Danube bridge “51st divizija” up to the junction with the first defence line embankment where the border breaks perpendicularly to the south cutting across the paved road and the Bezdan-Bečej canal, reaching the south leg of the embankment. From that point on the border continues along the secondary levee south leg to the west up to the foot of the paved road causeway of the bridge “51st divizija” – Bezdan, continuing along the east leg of that causeway to the south up to the point where the causeway, i.e. the paved road turns perpendicularly towards the Danube. From this point the border follows the secondary levee west leg beside the DTD canal left bank in the direction of south-southeast up to the junction with the secondary defence line levee near the place called “Kostina pumpa”.

From the junction point between the secondary levee and the levee of the secondary defence line the borderline of the protected nature reserve points southeast along the west and south embankment leg to the point where it joins the Big canal (Bezdan-Bečej), where it breaks perpendicularly and goes north along the east embankment leg which follows the right bank of the Big canal up to the Bezdan settlement, where it breaks perpendicularly and turns east across the Bezdan-Bečej canal, encompassing the surface of Čapljarnik and arriving to the causeway (paved road Bezdan-Bački Monoštor). There the border breaks and returns south along the west embankment leg up to the forest borderline at the forestry economy unit “Kolut-Kozara”, section 18, cutting perpendicularly across the Bezdan-Bački Monoštor road towards east, following the north and east brim of the section 18 GJ “Kolut-Kozara”, traversing the Bezdan-Bački Monoštor railroad tracks, continuing eastwards along the north side of section 11 to section 10, where it swerves northwards perpendicularly along the west brim of sections 10 and 9 up to the paved road Sombor-Bezdan, then breaking perpendicularly towards east up to the Plazović (Kiđoš) rivulet crossing to its left bank. When the border crosses to the left bank of the Plazović rivulet it proceeds south along its left bank to the northwest brim of section 30, the economy unit “Kolut-Kozara”. Further on, the border continues along the northwest and west brim of sections 30, 25, 24 and 19 to the foot of the paved road Sombor-Bezdan (to the monument dedicated to Russian combatants), and continues along the north brim of sections 19 and 20 toward east up to the west brim of section 21, cutting across

Sombor-Bezdan road, encompassing section 21 from the west, north and east, up to the east brim of section 22 where it turns south following the east brim of sections 22 and 27, then swerving westwards along the section 27 south brim, then continues along the east brim of sections 27 and 28 southwards up to section 33, where it turns southwest along the brim of sections 33 and 32 up to the Plazović (Kiđoš) rivulet, it crosses the rivulet and continues along the south brim of sections 32 and 31 up to the borderline with section 13 (Štrbac region). From that point the border swerves southwards along the section 13 east side, then to the west along the section 13 south brim, cutting across Bezdan-Sombor railroad tracks, continuing along the section 14 south brim to the Bezdan-Bečej big canal bank, crosses the canal, breaks perpendicularly northwards and goes along the secondary levee along the right bank of the canal up to the shipyard north of Bački Monoštor, where it emerges onto the secondary defence line embankment along the left side of the DTD canal. From there the border follows the foot line (west leg) of the embankment southwards up to the water protective dam on DTD canal north of Kupusina settlement, where it breaks westwards and continues along the foot (north leg) of the embankment up to the junction point with the first defence line dike located at the left bank of the Danube (camping site Vagoni). From the point where the second defence line embankment joins the first line defence dike the border proceeds southwards along the first defence line dike west leg up to the shipyard “Dunav” – Apatin, where it breaks emerging to the Danube left bank, continues along the Danube bank to 1399 km, breaking and reaching the first defence line dike, goes south along the west leg of the dike to the place “Ciglane”, where it reaches the Apatin-Bogojevo embankment. From here the border goes along the first defence line dike east leg (Apatin-Bogojevo) up to the greenhouse “Zverinjak” (section 14, GJ “Zaštićene šume”).

At the greenhouse “Zverinjak” point the nature reserve border joins the protective fencing and follows the protective fence up to the forest region of Košare (section 44) wherefrom it continues along the protective fence towards northeast (borderline of sections 44 and 40), up to the place where the forest region Košare joins the swamp (Velika bara). At that point the nature reserve border departs from the protective fence breaking perpendicularly and proceeding northwards along the west bank of the Velika bara beside the Djanićev farmstead up to Balgov farmstead. At Balgov farmstead the nature reserve border breaks perpendicularly, crosses the swamp to its east bank wherefrom the border follows the Big swamp east bank southwards up to section 49 of the forestry region Košare, where it joins the protective fence again. The nature reserve border continues along the protective fence up to the anglers’ house under the first defence line dike Apatin-Bogojevo. From the fisherman’s house the border goes on along the protective fence up to the Danube river, crosses the Danube up to its waterway and goes further upstream along the middle of the Danube river waterway up to the starting point.


СПЕЦИЈАЛНИ РЕЗЕРВАТ ПРИРОДЕ
ГОРЊЕ ПОДУНАВЉЕ
ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ
Нови Сад 2009. год.
45° 55' 16" N
5086.775
Бајски канал
БЕЗДАН
18° 49' 08" E
6563.550
ЛЕГЕНДА:
ДРЖАВНА ГРАНИЦА
ГРАНИЦА ЗАШТИТЕ СРП "ГОРЊЕ ПОДУНАВЉЕ"
Подручје режима I степена заштите
Подручје режима II степена заштите
Подручје режима III степена заштите
БАЧ, МОНОШТОР
СОМБОР
централна координата
45°44' 51" N 18° 56' 53" E по Гринчу
5067.500 6573.625 по Гауо-Кригеру
АПАТИН
19° 05' 43" E
6585.625
Балїов салаш
Бакинеў салаш
45° 31' 47" N
5043.400

ANNEX 7

Decision on Protection of the Natur Park Tikvara

Pursuant to the Article 41a, paragraph 4, of the Law on Nature Protection ("The Official Gazette of the Republic of Serbia", No. 36/2009, 88/2010 and 91/2010- correction), and Article 37 of the Statute of the Municipality of Bačka Palanka ("The official Gazette of the Municipality of Bačka Palanka", No. 24/2013), the Bačka Palanka Municipal Assembly, at the 28th session held on 26 February 2015, adopted

DECISION
ON PROTECTION OF THE NATURE PARK "TIKVARA"

Article 1

By this decision, areas of the lake Tikvara and its flooding area, Palanački rt, are put under protection of 3rd category of local protection as *the nature park* (hereinafter: Nature Park "Tikvara").

Article 2

The Nature Park "Tikvara" is put under protection in order to conserve the natural values of a dynamic complex of the alluvial area, wich is conditioned by diversity of morfological characteristics, by the dynamcs of Danube flooding, by continuity of the international ecological corrior of Danube river, by overall geological, biological and landscape diversity, by forest, grassland and water habitats, as well as for estetic, recreational and tourist purposes.

Article 3

The Nature Park "Tikvara" is located at the territory of the Bačka Palanka municipality, along the cadastral municipalities of Nova Palanka and Bačka Palanka – Grad.

The surface of the Nature Park "Tikvara" is 554,52 ha, with areas that are:
- under the 2nd protection regime (25% of the area, which is 138,85ha)
- under the 3rd protection regime (75% of the area, which is 415,67ha)

According to ownership structure, 100% of the surface, all of the 554,52ha is owned by the state.
The protected surface of the Nature Park "Tikvara" is 351,78ha.

Borders of the Nature Park "Tikvara":
Starting point is the junction of parcels 945/1, 1055 in cadastral municipalities of Nova Palanka, Opština Bačka Palanka and border stone of cadastrar municipality of Mladenovo. The border of the protectedd area goes to the east, via northern borderline of the parcel 945/1, breaking to the north, continuing on the west side of the same lot, then it turns east and via north borderline it leads to the junction ofr the parcels 945/1, 813 and 947. When going east, the border cuts parcel. 945/1 up until the border stone of cadastar municipality of Bačka Palanka – Grad. Continuing to the east, the

border goes along the northern borderlines of parcels 7432, 7218/1, 7217/1, 7215, 7214/1, 7190/1, 7188, 7160/3, 7159 and 7160/3 cadastar municipality of Bačka Palanka – Grad, up until opposit side of south-west border point of parcel 6721. Here, the border turns south-east in bow-shape way, and it goes paralell with the enbankment toe wich leads to Croatia border crossing, cutting through parcel 7160/3, 7156/13 and 7170/9. The border continues south-east via north borderline of parcels 7170/9-7156/18, then it goes north, via east borderline of parcels 7156/18-7167/1. Here, the border turns to the west, via south borderline of parcels 7167/1, 7156/5, 7147/11, 7434 up until the lot 7180 where it enters up until the west side of the asphalt edge and then it turns south, following the same edge on the west side, to the parcel 7234/17 (Danube river). The border goes 30m into the Danube river parcel, where it continues to the west, while keeping parallel distance of 30m from north borderline of parcel 7234/17 up until the line of groyn. Via that line, borderline goes west, then to the north, until it reaches the spot wich is 30m away from the northern border of the Danube river parcel. Here, the border turns west, while keeping parallel distance of 30m from north borderline of Danube river parcel, up until opposit side of west border point of parcel 7205. The border continues 400m to the west, where it turns under rhe 90 degree angle to the north until it reaches the spot wich is 30m away from the north border of the Danube river, here it goes to the west side, while keeping parallel distance of 30m from parcel 1060 cadastral municipality of Nova Palanka (Danube river) to the cadastral municipality of Mladenovo. The border turns to the north, and via borderline of cadastral municipalities goes up until it's starting point.

Description of the protection regime, as well as the description of the buffer zone is attached with this Decision and they are its constituent part.

Article 4

The objectives from the Article 2 of this Decision are implemented by:applying active and intervention messures for protection of habitat and species in order to preserve the ecosystems; planned activities and intervention measures on water quality improvement and the state of the ecosystem; improvement of functionality of the international ecological corrior of the Danube;monitoring of natural resources; conservation of natural forest communities as well as of young poplar and willow communities; leaving at least five native trees per ha, when deforesting and preserving older native tree species; establishing of buffer yones near the ponds and streams, in accordance landuse planning and conservation needs; suppression of invasive species; revitalization of natural habitats; protection of bird nesting places; planned removal of alochtonous species; ensurance of water flow through the floodplains, old river meanders, chanells, etc; popularisation and promotion of of natural values, and tourism development.

In the area under the of 2nd protection regime the following conservation and development measures are provided:

1. supstitution of clonal willow trees and other alotohnal tree species with the indigenous trees no later then the expiry of patrols;
2. Thinning and sanitation harvest with the function of preservation of natural diversity of species;
3. Selective and limited use of natural resources and controlled interventions and activities in the area if they are in line with the functions of protected area or they are closely linked with the tradition farming;
4. Establishing of educational paths.

Article 5.

In the area of the Nature park „Tikvara“ it is forbidden to:

1. widen the residental area;
2. disturb, deliberately collect or kill animal species;
3. afforest wet medows, depresions, ponds and pastures and forest clearings;
4. introduce invasive species;
5. restore and spread invasive wood species;
6. increase the area under the plantages of cloned poplars and other invasive species of trees and replace native species with invasive ones;
7. dispose biomas (leftoovers of logging and digging) on the grass and water areas, including forest clearings;
8. any activity that will have permanent negative effects on water regime off the protected area or the water qualty of the wetland habitats;
9. comercial fishing;
10. change the water migratory routes;
11. set up new floating objects on the Tikvara lake;
12. temporary or permanently dispose all kinds of dangerous waste , as well as to set up transportation routes for the waste;
13. establish feeding areas for fishing;
14. other activities in the area that are not based on sustainable use of natural resources;

In the area of the Nature park „Tikvara“ following activities are limited:

1. Change of landuse only for areas that are planned for revitalisation of natural habitats;
2. Removal of floating, immersed and coastal vegetation only in case of activities regulated by the management plan;

3. Burning of the vegetation only in case of activities regulated by the management plan;
4. Afforestation only on forest clearings, areas around recreation and tourist facillities;
5. Introduction of allochtonous species on the species that are not invasive in the Panonic biogeographic reagon ;
6. Planting off allochtonous plant species and cloned poplars in areas which are at least 15m away from forest clearings (still waters, depresions, marshes and wet medows) as well as 30m from the coast of Danube;
7. Control of forest pest species on biological and biotechnical measures, as well as chemical means acording to the law;
8. Restocking of fishpopulation on planed reintroduction of native species of fish;
9. Feeding of fish populations on controled feeding during fishing competitions;
10. Hunting on sanitation hunting and for purposes of population menagment;
11. Using of motor powerd boats only on the area of Danube and for the needs of menagment;
12. Bank regulation on improvement of functionality of the Danibe international ecological corridor;
13. Establishment of bathing areas only on the teritories predefined by planning documents;
14. Release of effluents on waste waters which parameters are below the threshold values of pollutants allowed for release in the natural recipient;
15. Construction of hotels on those objects that meet some of the valid environmental certificates, as well as for other facilities that are in function of conservation, protection and adequate promotion of nature park;

Article 6.

In the area under the 2nd protection regime in the borders of Nature park „Tikvara“, beside the prohibitions from the Article 5. paragraph 1. of this decision, it is forbbiden to perform sport fishing .

In the area that is under the 2nd protection regime in the borders of Nature park „Tikvara“ “, beside the limitations from the Article 5. paragraph 2. of this decision, following activities are limited:

1. Construction object on those objects which are in function of management of the protected area;

2. Restoration of the forest on the areas not bigger then 5 ha except for revitalisation needs as well as for restoration of pedunculate oak associations;
3. Movements of visitors and vehicles on paths and roads that are forseen for that purpose;
4. Recreational fishing in the area of lake Tikvara up to the pumping station „Sajlovac“ in the 100m wide zone from unprotected part of embankment;
5. Morphological change of the terrain on planed activities for improvement of ecological conditions of shallow water habitats and costal habitats;

Article 7.

In the locality „Veštačka sastojina močvarnog čempresa“ it is forbiden to:

1. change the composition of forest acommunities;
2. plant decorative and other plants;
3. build objects;
4. light a fire;

In the locality „Veštačka sastojina močvarnog čempresa“, with the aim of conservation and improvement, following measures will be provided:

1. Monitoring of natural resources and sientific research.
2. Sanitation harvest with the conditions and supervision of the Institute;
3. Activities aimed at preservation of forest communities and improvement of ecological conditions;

Article 8.

In the locality „Četri stabla platana“ it is forbiden to:

1. logg protected trees, cut healthy branches, damage roots and other parts of plants and any other activity which can harm their biological status ;
   build objects;
2. light a fire;
3. construct power and phone lines over the protected trees;
4. put advertising boards, metal parts and other simillar or any othe activiity which violate condition and decorative look of the trees;
5. dispose any kind of material around the trees;

In the area of region “Četri stabla platana“, with the aim ofconservation and improvement, it will be ensured that trees are under biotechnical protection previously defined by the Institute.

Article 9.

In the area that is under the 3rd protecton regime within the Nature park “Tikvara”, beside the limitation from the article 5. Paragraph 2 of this decision, following activities are limited:

1. Building and construction on objects for the purpose of tourism development and sports and recreationwhich are in line with the existing planning documents and with the application of the legal compensatory measures;
2. Sand extraction only for revitalization and maintenance of navigation routes;
3. Fishing only for recreational and sport purposes;
4. Parking of vehicles, motorbikes and bicycles only on areas which are planned for that;
5. Camping and setting up mobile object and facilities for camping only on areas which are designed, marked and signed for that purposes;
6. Buiding of mooring sites on the lake Tikvara only on the locationdefined by planning documents and with the capacity off 400 berths, for the need oforganized mooring of boat, untill a new marine outside of the protected area is built;

Article 10.

In the area of the buffer zone of the Nautre Park “Tikvara” following activities are forbiden:

1. Clear cutting of foests and planting of allochthonous species of trees in the 30m wide costal zone along the Danube;
2. Construction of industrial facilities, processing plants and other facilities as well as construction work that violate ecological or visual integrity of thearea or they are potential sources of higher level of noise, vibration and/or light disturbance of wildlife;
3. Construction works with negative impact on water regime of the protected area or on water quality of wetlands;
4. Chemical and phisical polution, establishing of dumping grounds, disposal of dangerous material etc. ;
5. Establishment of construction sites outside the defined construction area if they are not inn line with conservation objectives and sustainable use of natural resources;

6. Temporary and permanent disposal of all kind of waste material as well as transport of dangerous waste;

In the area of the buffer zone of the Nature Park “Tikvara” following activities are limited:

1. Planning and construction of objects which are potenial sources of higher level of noise, vibration and/or light disturbance of wildlife, on objects that are at least 300m away from the embankment;
2. Spatial planning to solutions which ensure continuity of wetland and forest habitats along the ecological corridor;
3. Reease of effluents on wastewater which parameters are below the threshold values of pollutants allowed for release in the natural recipient;

Article 11.

The management body of the protected area Nature Park “Tikvara” is Public Enterprise “Sportsko-Rekreativni Centar Tikvara” (the management body).
The management body has the rights and obligations , especially to: protect, improve and promote the protected area; implement the defined protection regime; develop the management plan , annual program and the rulebook for interior order and rangers services; organise the ranger services; maintain and mark the protected area; ensure conditions for undisturbed natural processes and sustainable use of protected areas; ensure control over the implementation of the conditions and measures of nature conservation; inform users of protected areas on the activities which could be carried out; participate in the process of compensation for deprivation or restriction of rights of use; issue of approvals and permissions; keep records of natural resources , real estate and human activities , actions and processes that constitute a threat and damage to protected areas and provide data about protected area to the competent institute and ministry; establish and charge fees for the use of protected areas; establish a fishing area on waters within the protected area and adopt program for management of the fishing area; in cooperation with the competent inspection and policing authorities, prevent all actions and activities that are opposite to the act of protection or pose a threat to protected areas.

Article 12

The management body develops the management plan for a period of ten years.
The management plan shall determine the manner of implementation of the protection, usage and management of the protected areas, guidelines and priorities for the protection and preservation of the natural values of the

protected area as well as the development guidelines, bearing in mind the needs of the local population.
All legal persons, entrepreneurs and individuals who perform certain activities within the boundaries of the protected area are obliged to perform their activity in accordance with the management plan.

Article 13

The management plan from the Article 12 of this Decision contains especially:

- review of the main natural and man-made values and natural resources;
- environmental evaluation of the protected areas;
- overview of activities and processes which are threatening the protected area;
- long-term objectives for conservation and sustainable development;
- analysis and evaluation of the conditions for achieving those goals;
- priority activities and measures for the protection, maintenance, monitoring and improvement of the conditions of natural and man-made values;
- priority tasks for scientific research and educational work;
- planned activities for sustainable use of natural resources, development and physical planning;
- spatial identification and the regime of land use;
- activities on promoting values of protected areas;
- studies (research), programs and planning and project documentation necessary for the implementation of objectives and activities;
- forms of cooperation and partnership with the local population and other landowners and users;
- activities and measures for implementing the plan with a defined time frame and actors and assessment performance of its implementation;
- financial and other tangible resources for the execution of delegated tasks in managing protected areas including the explanation of funding sources.
- Before the expiry of the period for which the plan was adopted the Company must submit a report to the competent authority. Report is analyzed with consideration of the implementation of the plan and the results achieved.
- Management plan is approved by the authority in charge of environmental affairs of the Bačka Palanka municipality, upon prior opinion of the Provincial Institute for Nature Protection(hereinafter Institute).
- Management plan is implemented by annual management programs. The management program is approved by the body

responsible for environmental affairs of the Bačka Palanka municipality.

- The management body is obligated to submit the report on the implementation of the annual program for the previous year and the annual management program for the coming year until the 15 of December of the current year. A report on the implementation of the management plan should be submitted at least 60 days before the expiry of the period for which the plan is adopted.

Article 14

The management body is obligated to inform the public about the process of development of the management plan. Informing the public means public consultation on the draft management plan. Public consultation is organized and implemented by the management body of the protected area and lasts 30 days.

Article 15

The management body is obligated to ensure safety and protection of protected areas according to the rulebook on interior order and ranger service (hereinafter rulebook on on interior order) adopted by the Bačka Palanka municipality.
The rulebook on interior order is drafted by the management body with the approval of the competent authority of the local government unit which has adopted the act on protection.
The rulebook on interior order determines the rules for the implementation of specified protection regime especially: rules for visitors and other users while they are visiting the area or performing their duties and activities in the protected area; rules for use of natural resources and construction areas; zones and objects with restricted access due to wildlife protection; animals and plants which are restricted from picking and collecting and rules and conditions for their use; rules and conditions for scientific research and educational activities; areas and conditions for waste disposal; waste disposal procedures in the protected areas; procedure for issuing approvals and other acts to the users; organization of a ranger services; protection of natural resources, equipment and resources necessary for maintenance; implementation of fire safety preventive measures and other natural disasters.

Article 16

The management body is obligated to inform the public on the proposal of the rulebook on interior order from the Article 15 of this Decision.
Informing the public means public consultation to the proposed draft Rulebook on interior order.
Public access is organized and implemented by the management body of the protected area and lasts 30 days.

Article 17

The management body is obligated to mark external borders and borders of the 2nd and 3rd protection regime (Localities “Veštačka sastojina močvarrnog čemoresa” and “Četiri stable platana”) in accordance to the law.

Article 18

Resources for the implementation of the management plan shall be provided from the Bčcka Palanka municipal budget, from the charges for use of the protected area, revenues generated from management body activities and other sources in accordance with the law.

Article 19

The management body is obligated to adopt an act on charges for use of natural resources in the nature park “Tikvara” and submit for approval to the Municipal Assembly of Bačka Palanka.
Act on charges for use of natural resources in the nature park “Tikvara” shall be published in the Official Journal of the Bačka Palanka municipality and in other ways determined by the management body.

Article 20

The management body is obligated to adopt a management plan from the Article 12 of this Decision within one year from the day this Decision enters into force.
The management body is obligated to adopt a rulebook on internal organization from the Article 15 of this Decision within one year from the day this Decision enters into force.
The management body is obligated to adopt Act on charges for use from the Article 19 of this Decision within one year from the day this Decision enters into force..

Article 21

Spatial and urban planning documents, forestry, hunting, fishing, water management, agricultural and other plans and programs referring to the protected area “Tikvara” will be aligned with this Decision and the management plan.

Article 22

By entering into force of this Decision, the Decision on protection of nature park “Tikvara”(“The Official Gazette of the Municipality of Bačka Palanka, no 4/1997 and 20/2009”) will cease to be valid.

Article 23

This Decision shall enter into force on the eighth day after its publication in "The Official Gazette of the Municipality of Bačka Palanka".

MUNICIPAL ASSEMBLY
BAČKA PALANKA
No: 11-501-16/2015
26. February 2015. Year
BACKA PALANKA Municipal Assembly

President of the Municipal Assembly
Mita Lačanski

Description of the borders of the protection regimes

Description of the borders of the zones with **2nd protection regime** by localities.

Locality: **Prva jama**
It is located in the Bačka Palanka municipality, cadastral municipality Nova Palanka, on the parcel no. 946/1, i.e. Water Management Company "Dunav" Bačka Palanka in department 9, clearing 1.

Locality: **System of small channels in Palanački rit**
It is located in the Bačka Palanka municipality, cadastral municipality Nova Palanka, i.e. in the forest management unit "Palanačke ade – Čibski poloj", division 1, section i, l, clearings 2,3,4,5,6,7; division 2 clearings 5,6; division 4, section b, clearings 5,6,18; division 5, clearing 14; division 6, sections b,d,g,i,j,p,n,z, clearings 10,11,2,3,4,5,1,8,12; division 8, section h; division 10, section h. Parcels that are part of this Locality are: 939, 1060 cadastral municipality Nova Palanka and 7234/17 , cadastral municipality Bačka Palanka – Grad.

Locality: **"Jezero" pond with willow trees and Tikvarski channel**
It is located in the Bačka Palanka municipality, cadastral municipality Nova Palanka, cadastral municipality Bačka Palanka –Grad, i.e. in the forest management unit "Palanačke ade – Čibski poloj" in division 3, section f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u, clearings 1,2,3,4,5,6; division 5, sections a,c,e, clearings 3,4,5,12,13; division 6, clearing 10; division 7, section a,b,c,d,e,g,h,i,k,m, clearings 1,2,3,4,5,6; division 8 clearings a,b,c,d,f,j,k,l, clerainges 1,2,3,4,5,6. Water Management Company "Dunav" division 7 section e,f, clearing 2; division 8 section section b, clearing 4. Parcels that are part of this Locality are: cadastral municipality Nova Palanka: 939, 946/1, 941, 942, 940. Cadastral municipality Bačka Palanka – city: 743, 7213/2,

7208/2, 719, 720, 7208/3, 7208/4, 7221, 7222, 7223, 7226, 7230, 7227, 7229,7228.

Locality: **Oak forest with a complex of ponds and depressions**
It is located in the Bačka Palanka municipality of, cadastral municipality Nova Palanka, i.e. in the forest management unit "Palanačke ade – Čibski poloj" in divison 1, section k; division 2 section c,d,e,f,g,h,i,j,k,l, clearings 1,2,3,4,5,6,7; division 4, section c,d,f,g,h,i,j,k,l,m,n,o,p,q,r,t,u, clearings 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19; division 5, section h,i,k,l,m,n,o,p,q,r,s,t,u,v,x,z, clearings 1,6,7,8,9,10,11,15,16; division 6, section u,v,w,x,y, clearings 6,7,9. Parcels that are part of this locality are part of 939 cadastral municipality Nova Palanka.

Third degree protection regime includes Euro-American poplar plantations in the area of the nature park "Tikvara", lake Tikvara, embankment for flood protection with forest belt in a unprotected part in the width of 50 meters from the foot of the embankment (managed by Public Water Management Enterprise "Vojvodina", respectively Water Management Company "Dunav" from Backa Palanka). In the borders of the third degree there are also two natural monuments "Veštačke sastojine barskog čempresa" and "Četiri stabla platana", separated as Localities.

Locality: **"Veštačke sastojine barskog čempresa"**
It is located in the Bačka Palanka municipality of, cadastral municipality Bačka Palanka – City on the parcel 7165 directly to the parcel 7180(road).

Locality: **"Četiri stabla platana"**
It is located in the Bačka Palanka municipality of, cadastral municipality Bačka Palanka – City on the parcels 7179/1, 7179/4,7179/5.

Buffer zone of the Natural Park "Tikvara" has two segments:

- **First segment**: border description of the buffer zone begins at the junction of parcels no. 945/1, 1055 in cadastral municipality Nova Palanka and border stone of Mladenovo cadastral municipality. Buffer zone boundaries include the north-east borders of cadastral municipality all the way to the north-west point of the borders of the parcel no. 966 in cadastral municipality Nova Palanka, turns to the East from the northern boundary line of the parcel no. 966 until the south-east point of the border of the cadastral parcels no. 1048, than it breaks on the north-east from the east border of the parcel no. 1048 until the parcel 980. Furthermore, it breaks on the south-east going through the south boundary line parcels no. 980, 979 until corner stone of the cadastral municipality Bačka Palanka – City. Furthermore it turns to the south border cadastral municipalities until the north-east point of borders of the cadastral parcels parcel no.

945/1, relatively until the border of natural resource protection, it breaks on the west and it goes along with the buffer zone border until the starting point.

- Second segment: border description of the buffer zone begins at the point of the border line parcel no. 7156/13 and 7170/9 in cadastral municipality Bačka Palanka – City that is 55m away to the west from the lower right embankment toe and the road to the border crossing with the republic of Croatia. Border goes to the east, northern border line parcel 7170/9 until the lower foot embankment, where it turns southeast, all the time following the lower foot embankment until the end of the embankment. Southwards it cuts the parcel no. 7436/3, enters the parcel no. 7234/17(river Danube) it goes along the edge of the sandy isles (Google Earth). The border turns to the west, continues along the edge of the southern borders of the sandy isles until the borders of the natural resource protection, turns to the north following the safety border until the beginning of the description point safety border of the second segment.

ANNEX 8

Decision on protection of the Natural monument Suma Junakovic

255.

Pursuant to Article 129, paragraph 1 point 2, of the Law on Environmental Protection ("The Official Gazette of the Republic of Serbia", No. 135/2004), and based on Article 43, paragraph 3, of the Law on Environmental Protection ("The Official Gazette of the Republic of Serbia", No. 66/91, 83/92, 53/93, 67/93, 48/94 and 53/95), and Article 73, paragraph 1, of the Statute of the Municipality of Apatin ("The official Gazette of the Municipality of Apatin", No. 6/02, 7/2005 and 8/2005), the Apatin Municipality Assembly, at the 9th session held on 30 September 2005, upon proposal by the Institute for Nature Conservation of Serbia, adopted

DECISION
ON PROTECTION OF THE NATURAL MONUMENT "ŠUMA JUNAKOVIĆ"

Article 1

The forest Šuma Junaković, located between the settlements Apatin and Prigrevica, is protected as a natural monument and ranked as important among important protected areas of the category III (hereinafter: Natural Monument "Šuma Junaković").

Article 2

The natural monument "Šuma Junaković" is put under protection in order to preserve old, natural grown specimens of common oak, i.e. the forest belt of oak and acacia elements around the thermal springs at the spa complex "Junaković". The forest is habitat for many animal species, particularly to birds and mammals protected as natural rarities, such as: black stork (*Ciconia nigra*) – one active nest, weasel (*Mustela nivalis*), ermine (*Mustela erminea*), badger (*Meles meles*), and game (wild boar and deer).

Article 3

The natural monument "Šuma Junaković" is located on the territory of the municipality of Apatin, K.O. Prigrevica, and is composed of two physically separated units. The Unit I comprises a forest of common oak and turkey oak northwest from the Spa "Junaković", and a forest north of the canal (cadastre lots 3665) which joins it, i.e. encompasses the cadastre lots 3669, 3668, 3665 (a part), 3667 and 3666.

The Unit II comprises the forest complex east of the Spa “Junaković”, with elements of common oak, turkey oak and acacia, i.e. cadastre lots 3662/1, 3670/3, 3661, 3660, 3659, 3658, 3657, 3656, 3655, 3654.

Total protected area is 180.045 ha, out of which 175.32 ha is state-owned, and 4.72 ha is public property.

Description of the borders of the Natural Monument “Šuma Junaković” with a graphic image is published with this Decision and is its constituent part.

Article 4

In the region of the Natural Monument “Šuma Junaković” the following measures have been established:

1) The regime of protection of the II degree encompassing forest parts of the “Zaštićene šume” economy unit: part 1 section a, clearings 2, 3, and 4, part 2 section a, part 6 section a, with surface of 58.1187 ha.

2) The regime of the III degree encompassing forest parts of the “Zaštićene šume” economy unit: part 1 section b, part 2 section b, part 6 sections b, c, d, e, and clearing 1, part 3 sections a, b, and c, part 4 sections a, b, c, d, clearing 1, and part 5 sections a, b, c and d, as well as the forest area around the “Junaković” Spa north of the canal, cadastre lots: 3667, 3666, and 3665 (part), with total surface of 121.9262 ha.

Article 5

In the whole region of the Natural Monument “Šuma Junaković”

1) It is forbidden to:
    1. Undertake activities which may deteriorate the basic features of the natural reserve;
    2. Change the purpose of the land use;
    3. Endanger or destroy the habitats of animals and plants protected as natural rarities;
    4. Execute works which may change the natural parts of the habitats;
    5. Destroy the natural rarities – individual plants, by picking, collecting, cutting or plucking;
    6. Catch, disturb, capture, kill or harm species of animals which are protected as natural rarities, to cull or destroy bird eggs, to cull or destroy bird nests or animal litters;
    7. Fell or destroy trees and shrubs and other vegetation if it endangers the forest eco system and disrupts the protection of thermal springs;
    8. Undertake clear cut of elements of autochthonous tree species – common oak and common ash;

9. Plant conifers or invasive sorts;
10. Graze or keep cattle;
11. Store lumber permanently or deposit and dispose of solid or liquid waste;
12. Erect overhead power and other lines at the territory of the natural reserve;
13. Hunt, except for hunting parties organized traditionally on certain dates and in case of a contagious disease among game (sanitary hunt);
14. Discharge of waste and unprocessed water into canals;
15. Use forest paths for public transportation;
16. Operate motor vehicles, except for the requirements of tending the natural reserve and business vehicles;
17. Parking of vehicles outside the lots allocated for the purpose;
18. Set fire outside the lots allocated for the purpose.

3) There are provisions for using the natural and cultural values in a manner which secures the protection and conservation of the area of forest eco systems and forest grounds, rehabilitation and revitalization of endangered and degraded parts of the natural reserve, development of management programmes for the populations of endangered species, ecological revitalization of a forest complex part – long-term transfers of the locust, turkey oak and American ash communities to semi-natural, i.e. natural oak forests; winter felling, clear cut on smaller surfaces, establishment of forest order, forestry works aimed at rejuvenation, conservation of stability and preservation of health status of elements, application of chemical and biological means to repel phytopathologic and entomologic diseases under special conditions, conservation of individual tree trunks of forest fruits and autochthonous species of trees and bushes, suppression of herbaceous and woody invasive species (*Acer negundo, Amorpha fruticosa, Ailanthus glandulosa, Solidago serotina, Asclepias syriaca,* and others), priority removal of woody invasive species, sustainable development of sports and recreational tourism and other development potentials in conformity to functions and developmental possibilities, landscaping of the area, education and sports-recreational trails according to a special programme; controlled movement of visitors (holidaymakers and others), presentation of popularization of natural and cultural values, inclusion of local inhabitants in planned developmental activities and their participation in overall tourism offer, culling of wild species of fungi, plants and animals in accordance with valid provisions, ‘apiculture, setting up and arrangement of feeding spots for game, scientific work and monitoring of status of natural rarities.

Article 6

In the region of 2nd degree of protection regime, it is forbidden to:

1. In the peirod between March 15 and August 15 to move or perform any work at the minimum distance of 150 m from the nest of a black stork;
2. Park vehicles;
3. There are provisions for: conservation and improvement of common oak high forests, rehabilitation and reconstruction of damaged and degraded parts of forest eco systems, development of a study on revitalization of oak

forests as a scientific and expert basis for forest rejuvenation, preservation of mixed composition of forests intensifying the share of autochthonous species and old trees, removal of vegetation in order to enlighten the common oak saplings, designing and landscaping of educational paths, controlled construction of forest roads and their traffic.

Article 7

Protection and development of the Natural Monument “Šuma Junaković” is realized according to the programme of conservation and development.

The Programme from paragraph 1 of this Article contains in particular: duties and activities of priority in implementing regimes of protection from Articles 5 and 6 of this Decision.

The Programme from paragraph 1 of this Article is adopted for the period of five years and is realized according to the annual programme containing tasks and duties to be realized in current year, dynamics of their execution, and amount of necessary funds.

The Programme, with previously obtained opinions of the municipal management bodies authorised for matters concerning forestry and water economy, urbanism, science, education and culture, is approved by the municipal managing body authorised for matters concerning environmental protection.

Article 8

The JP “Vojvodinašume” (hereinafter: manager) manages the Natural Monument “Šuma Junaković”.

Article 9

The manager, while performing the duties of protecting and developing the Natural Monument “Šuma Junaković”, secures: implementation of the stipulated protection regimes aimed at conservation and improvement of the natural reserve, the cultural, educational, informational-propaganda and other activities, enabling performance of scientific activities, adopting a mid-term and annual programmes of protection and development.

The manager submits a report on the realization of the Programme from Article 8 of this Decision by December 15 of the current year to the managing body authorised for matters concerning environmental protection.

Article 10

The manager, in performing the duties of protecting and developing the Natural Monument “Šuma Junaković”, secures the marking of the natural reserve, internal peace and order, and the ranger service in accordance to the act it adopts, upon agreement by the managing body authorised for matters concerning protection.

The Act from paragraph 1 of this Article regulates the rules for implementing the protection and development regimes, and especially: way and conditions of movement and sojourn of visitors, use of recreational and other spaces, placement of information and other signs, protection measures for the performance of scientific research activities, conditions for executing allowed activities, and special measures and limitations in implementing the protection regime.

The rules set by the Act from paragraph 1 of this Article, and other necessary information required for the implementation of the protection regime, have to be announced publicly in a proper way so that they are accessible to users and visitors.

Article 11

The funds for the protection and development of the Natural Monument “Šuma Junaković” are secured by the profit realized in performing the guardian office, from the municipal budget funds, and from other sources in accordance with the law.

Article 12

The Programme from Article 7 will be adopted by the guardian within six months upon entering of this Decision into force, and the annual programme within 90 days after this Programme enters into force.

Until the Programme is adopted the duties related to protection and development may be executed by the guardian according to a temporary programme of protection and development which is adopted within 60 days after this Decision enters into effect.

Article 13

The plans and programmes of landscaping, forestry, hunting, water economy, agriculture, and other bases and programmes covering the protected area, will be harmonized with the Spatial Plan of the Republic and the programme and regime of protection as set by this Decision.

Article 14

Upon entering of this Decision into force, the Decision of the Apatin municipal assemby No. 463-1/83-01/P of 21 April 1983 (“The Official Gazette of the Municipality of Apatin”, No. 5/1983) shall expire.

Article 15

This Decision shall enter into force on the eighth day after its publication in “The Official Gazette of the Municipality of Apatin”.

REPUBLIC OF SERBIA
AUTONOMOUS PROVINCE OF VOJVODINA
MUNICIPALITY OF APATIN
ASSEMBLY OF THE MUNICIPALITY OF APATIN
No. 011-57/05-1
30 September 2005
A P A T I N

PRESIDENT of the MA
Miodrag Bakić

ANNEX 9

Regulation on Protection of the Special Nature Reserve Karadjordjevo

REGULATION ON PROTECTION OF THE SPECIAL NATURE RESERVE "KARADJORDJEVO"

The Regulation is published in "The Official Gazette of the Republic of Serbia" # 37/97

Article 1

Part of Karađorđevo area, comprising Bukinski rit (swamp) and forest complexes of Vranjak and Guvnište, is put under protection as a protected areas of great importance, i.e. category II (hereinafter: Special Reserve "Karađorđevo").

Article 2

The Special Nature Reserve "Karađorđevo" is put under protection in order to conserve wetland forests of autochthonous willow trees and poplars, with a mosaic of forest and marshland communities abundant with rare plant (black hawthorn, sweet flag, yellow water lily) and animal species (waterfowl, white-tailed eagle, black stork, marten, otter), and with autochthonous species of game (deer, wild boar, and other).

Article 3

The Special Reserve "Karađorđevo" is on the territory of Bač, Mladenovo, and Nova Palanka municipalities, cadastral units of Bač, Mladenovo and Nova Palanka, with total surface of 2.955,3254 ha, out of which 2.954,9730 ha is state-owned, 859,45 ha is private ownership, and 0,7579 ha is owned by other proprietors.

Description of the perimeter of the Special Reserve "Karađorđevo" with a graphic image is printed with this Statute and is its constituent part.

Article 4

The regime of protection established for the Special Reserve "Karađorđevo":

1) Regime of the 2nd level of protection, comprising the region of Bukinski rit with surface of 131,68001,00 ha, with zone A distinguished for the locus of old preserved wetland forest elements and for nesting spot for white-tailed eagle, with surface of 858,1500 ha;

2) Regime of the 3rd level of protection, comprising the region of Vranjak and Guvnište, with surface of 1.638,5253 ha.

Article 5

In the zone of 2nd level of protection:

1. It is forbidden to:

1) Introduce allochthonous plant or animal species;
2) Plant Euro-American poplars;
3) Collect or use protected plant and animal species;
4) Erect facilities which are not in compliance with protection of the Special Nature Reserve "Karađorđevo";
5) Traffic of motor vehicles, except for the requirements of works concerning protection, forestry and hunting;
6) Execute works which disturb the morphological and hydrological characteristics of the protected reserve or affect the conservation of natural assets adversely;
7) Fell trees in zone A, remove the fallen trunks or clean the lower overgrowth, and in the reproductive

period (January-June), to disturb the white-tailed eagle or linger around its nest, and fishing for sport or vacation hunting;

2. The following has been provided:

1) Execution of works concerning forestry, aimed at protection and improvement of basic natural assets;
2) Fishing for sport or hunting as tourists in accordance with fishing, i.e. hunting stipulations;
3) Execution of hydro-technical works aimed at improving hydrological conditions, i.e. safeguarding the natural flooding regime and water flow through the swamp;
4) Conservation and improvement of forest elements and their composition and structure and replacement of Euro-American poplar plants with autochthonous tree species;
5) Application of adequate hunting-breeding measures for the preservation of the genetic fund of wildlife;
6) Application of selected agents in extermination of mosquitoes;
7) Expert monitoring of the status of natural values;
8) Education, information and presentation;
9) Scientific-research activities.

Article 6

In the zone of 3rd level of protection:

1. It is forbidden to execute works or activities which do not comply with conservation and improvement of the area;

2. The following has been provided:
1) Execution of activities from Article 5, paragraph 1 point 2, sub-point 1) to 4) of this Regulation;
2) Management of forests and hunting grounds in accordance with forestry, i.e. fishing stipulations;
3) Collect plant and animal species;
4) Application of selected agents in exterminating mosquitoes and protecting the forests.

Article 7

Protection and development of the Special Nature Reserve "Karađorđevo" is realized according to the Programme of Protection and Development (hereinafter: Programme).

The Programme contains in particular: the goals, tasks and activities in implementing the protection regimes from Articles 5 and 6 of this Regulation, activities concerning protection of autochthonous plant and animal species and ecosystems, improvement of game and fish fauna, regulation of water and waterway regime, and also a manner of regulating of construction terrain, protection of land, tasks in conducting scientific research, cultural, educational, information-communication and other activities, the funds required for the realization of the Programme, as well as the way of securing the funds.

The Programme is adopted for the period of five years, and it is realized by annual programmes, containing tasks and duties to be realized in the current year, dynamics of their realization and amount of required funds.

Upon obtaining opinions by the ministries responsible for forestry and water management, urban planning, science, education and culture, the approval for the Programme is granted by the ministry authorised for environmental protection.

Article 8

Realization of protective and developmental measures in the area of the Special Nature Reserve "Karađorđevo" is in charge of the Military Institution "Karađorđevo" (hereinafter: Institution).

Article 9

The Institution, performing the tasks of protection and development of the Special Nature Reserve "Karađorđevo" secures the implementation of the Programme, the stipulated regimes of protection and conservation of the natural values, scientific-research, cultural, educational, information-communication and other activities, adopts the Programme and the annual programme of protection and development.

The Institution reports on the realization of the Programme until December 15 of the current year to the ministry responsible for environmental protection.

Article 10

The Institution, performing its tasks of protection and development of the Special Nature Reserve "Karađorđevo", provides marking of the Special Nature Reserve "Karađorđevo", the internal peace and order, and the rangers service in accordance with the act it adopts and upon approval by the ministry responsible for environmental protection.

The act of paragraph 1 of this Article regulates rules for implementing the protection and development regime, and especially: the way and conditions for the movement and sojourn of visitors, the use of hunting and fishing fauna, collection of medicinal herbs, forest fruits, recreational and other public surfaces, placement of information and other signs, protection measures while performing scientific research and executing research works, performance of tourism, catering and other activities, and also the special prohibitions and restrictions for the protection regimes.

The Institution is obliged to publicise in an appropriate way the rules set in the act of paragraph 1 of this Article and other necessary information required for the realization of protection regime so that they are accessible to users and visitors.

Article 11

The funds for the protection and development of the Special Nature Reserve "Karađorđevo" are secured by the profit realized in performing the activities of the Institution, by the budget of the Republic, and from other sources in accordance with the law.

Article 12

The Programme shall be adopted by the Institution within six months since the date this Statute enters into effect, and the annual programme within 90 days since the date this Programme enters into effect.

Until the Programme is adopted, the Institution may perform the duties of protection according to the temporary programme of protection and development which is to be adopted within 60 days since the date this Regulation enters into effect.

Article 13

Urban plans and programmes of landscaping the terrain, the forestry, hunting, water economy, agricultural and other principles and programmes concerning the protected area shall be accorded with the Spatial Plan of the Republic of Serbia and with the Programme from Article 7 of this Statute.

Article 14

This Regulation shall enter into force on the eighth days since the date it is published in "The Official Gazette of the Republic of Serbia".

BORDER OF THE PROTECTED AREA

The surface established as the Special Nature Reserve "Karađorđevo" comprises of two separate natural areas, namely:

1. The area of Bukinski rit, with the regime of 2nd level of protection.

Within the regime of 2nd level of protection the zone A is distinguished as the locus of old elements of a preserved swamp forest of willow trees and poplars, and as the nesting place for the white-tailed eagle.

2. The area of Mostonge (Vranjak and Guvnište) with the regime of 3rd level of protection.

The border of the area with the regime of 2nd level of protection

The borderline of the regime of 2nd level of protection starts at the north point of Bukinski rit situated at the south exit road from Mladenovo, at the northeast point of the cadastre lot 4450 (embankment alongside the Lovrenac) of the cadastral municipality Mladenovo.

The eastern border area slopes straight down from the starting point southwards by 500 m, along the eastern edges of lots 4450, 4451 and 4283, up to the northwest point of lot 4069, where it breaks perpendicularly and it goes along the northern edge of the cited lot to the east to its northeast point. At that point at the crossroads (k.p. 4566 and 4564) the border goes further straight to southeast. Along its length of 800 m it intersects the road (k.p. 4566), goes further on along the northeast edge of lots 4096 and 4098, crosses the road (k.p. 4565), continues along the northeast edge of the lot 4102 reaching the point where the edge of the lot 4102 breaks northwards. The border follows the edge of the lot up to its northern point, i.e. the west point of the lot 4512. The borderline breaks there to northwest, follows the western edge of the lot 4266 to its northern point, where it breaks southeast, and continues to follow the northeast edge of that lot up to its eastern point. At this point the boundary bends to the south following the east line of the embankment (k.p. 4135) with a length of 400 m. At the northern point of the lot 4442, the borderline takes southeast direction following the northeast edges of the lots 4442 and 4335, up to its ultimate eastern point, which is at the same time the east borderline of the 2nd degree of protection zone. At that point the borderline bends perpendicularly and goes in a straight line southwest all the way to the Danube. In this section in a length of 3150 meters the borderline follows the east line of the lot 4335, cuts across the lot 4528, follows the east edge of the lot 4339, cuts across the lot 4529, continues to follow the east edge of the lot 4339, cuts across the lot 4536, follows the eastern edge of the lot 4347, cuts across the lot 4537, follows the eastern edge of the lot 4421, cuts across the lot 4540, follows the eastern edge of the lots 4425, 4426, and 4425 respectively, and finally, cutting the embankment (lots 4442, 4435, and 4436), reaches the bank of the Danube.

Southern border - at the south point of the zone with the regime of 2nd level of protection the borderline bends perpendicularly north-westwards and reaches the border between k.o. Mladenovo and k.o Šarengrad along the Danube bank (k.p. 4580), i.e. along the south edges of the lots 4436, 4334, and 4579. Further on, following the mentioned borderline between the cadastral municipalities, encompassing the Dunavac (k.p. 4579), the borderline extends generally in the northwest direction, until it meets again with the Danube. From this point onward the borderline of the protected area continues westwards along the Danube bank, i.e. the southern edges of lots 4315, 4314 and 4313 respectively, up to the ultimate point of the lot 4313 which is also the west point of the 2nd degree protection zone.

The western part of the borderline area continues from that point further on to the northeast in length of 1,600 meters, along the west borders of the following lots of k.o. Mladenovo: 4313, 4329, 4312, 4311, 4474, 4461, 4450, 4472, and 4473.

The northern part of the borderline area is the north edge of the lots in k.o. Mladenovo: 4472, 4473, 4471, 4467, 4466, 4463, 4456 and 4450 respectively, and it follows the east direction from the west line of the lot 4472 up to the east point of the lot 4450, i.e. to the starting point.

The borderline of the A zone within regime of the 2nd level of protection: the A zone area is located within the regime of the 2nd level of protection. The borderline of the zone A includes the following cadastral lots of k.o. Mladenovo: 4297, 4299, 4301, 4320, and 4323.

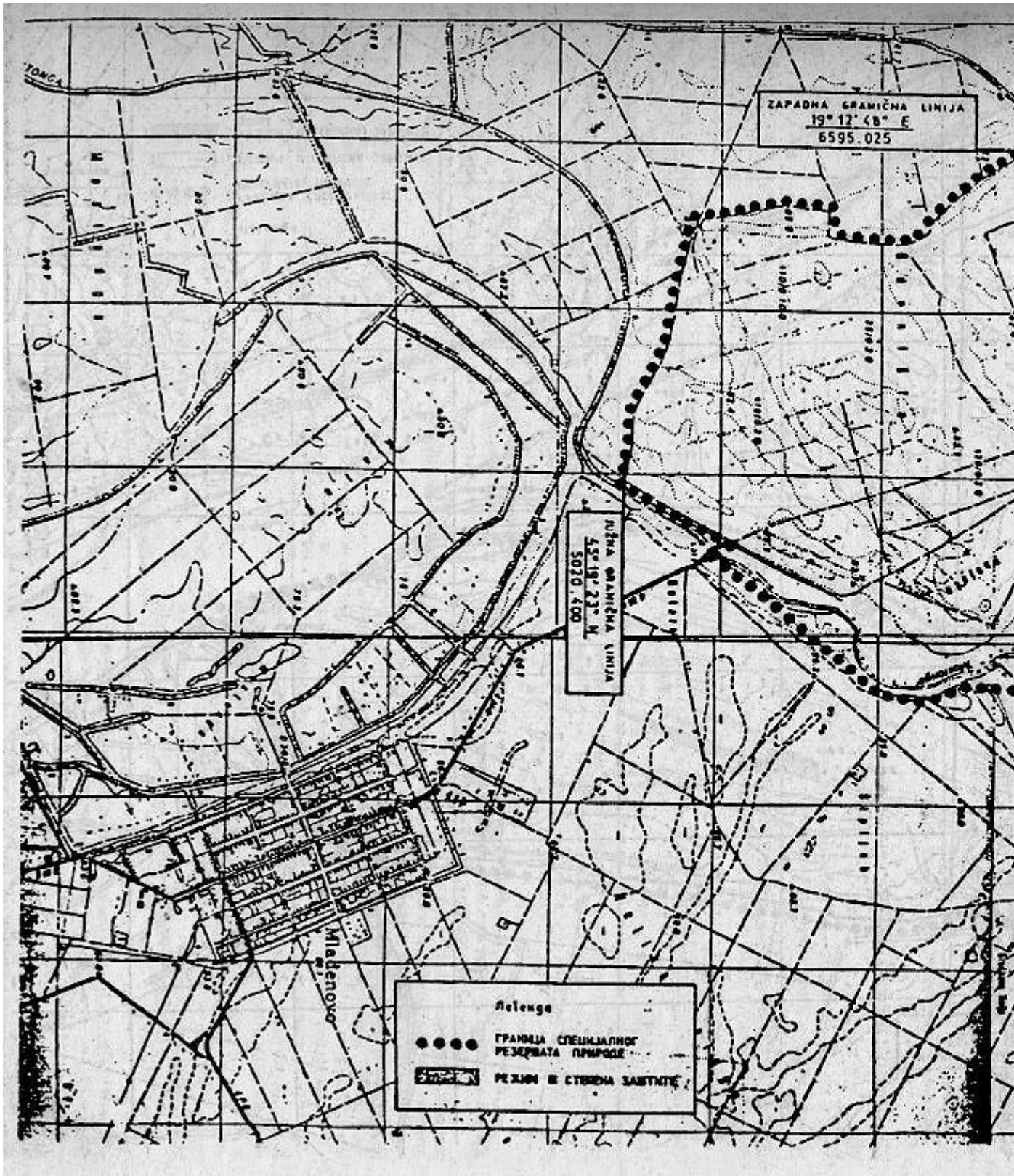
The borderline of the regime of 3rd level of protection. The borderline of the regime of 3rd level of protection starts at the north point of Mostonga (areas of Vranjak and Guvnište) located at the extreme north point of the area near the road Odžaci-Bačka Palanka, i.e. the north point of the cadastre lot 47362 of the cadastral municipality Bač**.**

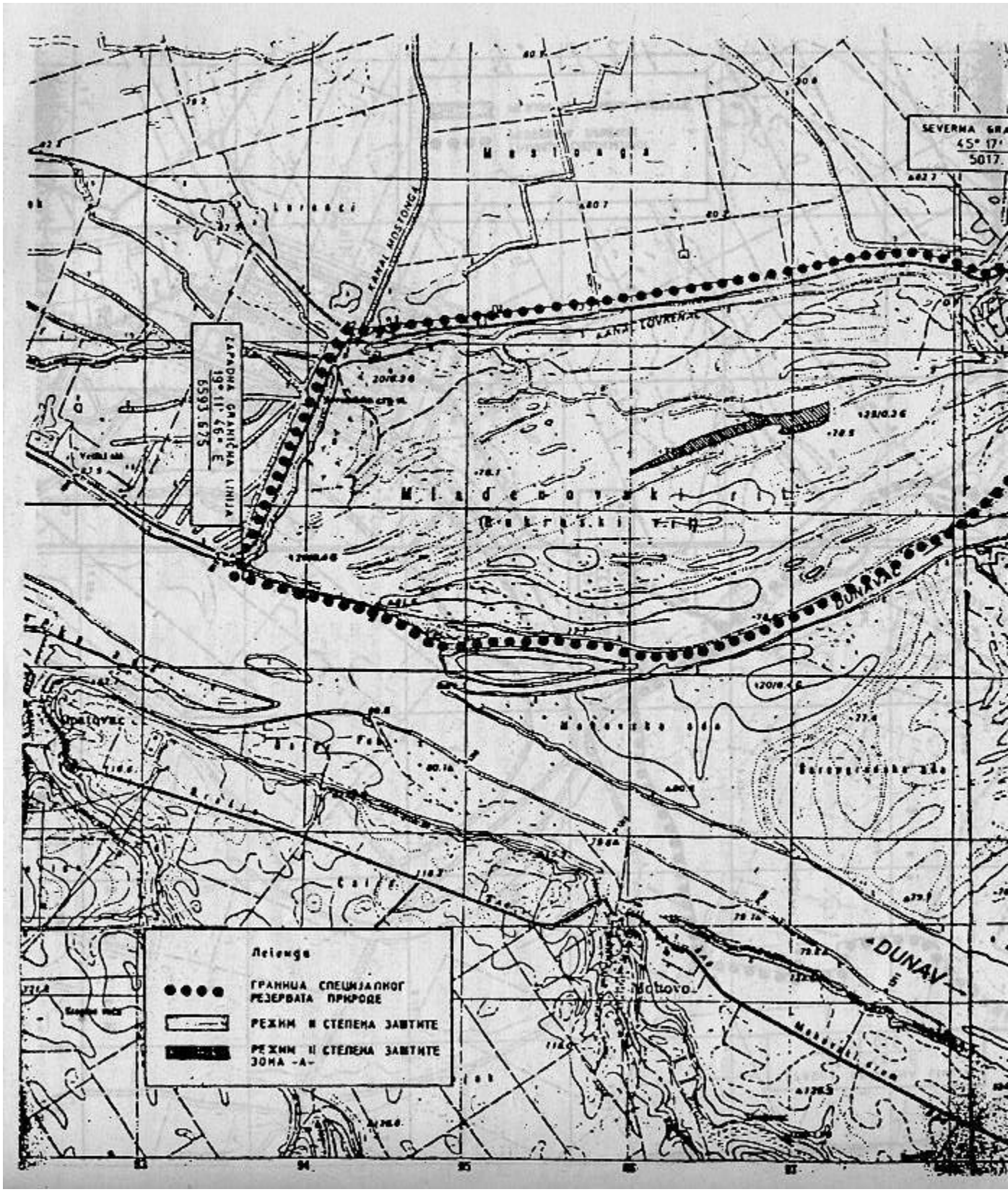
The eastern part of the area borderline goes from the starting point to southeast along the northeast edges of the following lots: 7362, 7358, 7374, 7371, and 8371 (the northern branch of the summer road), up to the eastern point of the road (lot 8371 of k.o. Bač). At that point the borderline breaks perpendicularly and following the general direction of southwest it descends 3100 metres, encompassing the eastern edges of the lots 8371, 7370, 8365, 7414, and 7417, and then the southern edges of the lots 7437, 7436 completely, and the south edge of the lot 7435 in a distance of 30 m. At the north point of the lot 7469 the borderline breaks southwards and extends first along the east edges of the following lots: 7469, 7468, 7465, 7466, then along the south edges of the following lots: 7465, 7464, and 8092 respectively, up to the south end of the lot 8092 (Mostonga canal). At that point the borderline shifts direction northwards, encompassing the west edge of the lots 8092, 7536, 7534, and 8428 up to the south point of the lot 7532.

Southern part of the borderline of the regime of 3rd level of protection starts at the above mentioned south point of the lot 7532, wherefrom the borderline descends to southwest along the southeast edges of the lots 7539, 7544, and 7545 to its south point, which is the southernmost point of the regime of 3rd level of protection zone. At that point the boundary changes direction following an arc line to the northwest and following the southern edges of the lots 7545, 7548, 7551, 7552, 7556, 7557, and 7558, reaching the southwest point of the lot 7558.

The western part of the area borderline continues heading north, encompassing the following lots, i.e. going along the western borders: 7558, 7559, 7509, 7508, 7501, and 7499 respectively, up to the northwest point of the lot 7498. At that point the borderline breaks to the northeast and follows the northern edges of the lots: 7498, 7497, 7495, 7496, and 7489 to its northeast point. Then the borderline moves generally into northern direction along the left edges of the lots 7488, 7348, and 7349 (reed patches on the right bank of Mostonga) to the north point of the lot 7349.

The northern part of the borderline area is represented by the north edges of the k.o. Bač: 5332 (reeds), 8091 (north branch of Mostonga), and 8364 (northern part of the summer road), extending from the west towards east up to the north point of the lot 7362, i.e. to the starting point.


ZAPADNA GRANIČNA LINIJA
19° 12' 48" E
6595.025
JUŽNA GRANIČNA LINIJA
45° 19' 23" N
5020.400
Mladenovo
Legenda
GRANICA SPECIJALNOG REZERVATA PRIRODE
REŽIM III STEPENA ZAŠTITE


Легенда
ГРАНИЦА СПЕЦИЈАЛНОГ РЕЗЕРВАТА ПРИРОДЕ
РЕЖИМ II СТЕПЕНА ЗАШТИТЕ
РЕЖИМ II СТЕПЕНА ЗАШТИТЕ ЗОНА -А-
ДУНАВ
КАНАЛ МОШТОНГА
КАНАЛ ЂУРЂЕВАЦ
Мостонга
Ђурђевачки рит
Младеновачки рит
Бегеч
Бачево
Ђурђевачка ада
Мошунска ада
Ђурђевачка ада
Мошунски спит

ANNEX 10

Summary Management Plan of Gornje Podunavlje Special Nature Reserve for the period 2010 to 2021

Management Plan of the Gornje Podunavlje Special Nature Reserve for the period 2010–2020

SUMMARY

The Vision of the Gornje Podunavlje SNR connects all stakeholders in securing a better future of the Reserve and the surrounding local communities. All management activities must be completely aligned with this vision, having in mind that this vision reflects the main purpose of the existence of the Reserve and the goals of its development, as well as the key management guidelines.

The Reserve will become a part of the largest European continental UNESCO Biosphere Reserve, which will stand on the frontline of the preservation of unique natural and cultural values. Their valorization, through sustainable forestry, game management and hunting, angling and tourism, is beneficial for both the region and the local communities, and they also serve for the pleasure of visitors.

The Reserve has the role of being a driver of sustainable development in the region, and the area beyond. This provides new experiences for visitors, due to the uniquness of its nature and possibilities for recreation. The Vision also underlines the educational function of the Reserve.

There are three milestone goals foreseen for the long-term sustainable management of the Reserve:

1. Preservation: to preserve the landscape and biological diversity and cultural heritage,
2. Permanent increase of education and recreational activities: promotion of the importance of conservation of natural values and cultural heritage, together with the enjoyment of pristine nature and other specificities of the Reserve,
3. Empowering local communities: strenghtening cooperation initiated with local communities regarding the sustainable use of natural resources, with the aim of developing the regional economy, securing revenues for local inhabitants and new job creation.

The long-term goals of conservation, safeguarding, development and sustainable use are:

1. Conservtion of the Danube floodplain and all its basic features
2. Inventory of flora and fauna, mapping of threatened plants and habitats
3. Monitoring natural values
4. Habitat restoration
5. Active conservation of key species and habitats
6. Defining threats, mitigation or eliminating their consequences
7. Validation and improvement of autochtonous natural values – application of active measures of ecosystem conservation, remediation and restoration of valuable habitats, reintroduction of rare or endangered species
8. Preservation of landscapes characteristics of the area
9. Provision of sustainable use of natural resources: forestry, game management, hunting, tourism, recreation

10. Alignment of the permitted use of natural resources with the conservation and preservation needs of the protected area, and development of the principles of sustainable use
11. Cooperation within the national and international protected area networks and development of optimal practices in protected area management; presentation of natural values of national significance
12. Establishment of visitor and research centres
13. Harmonization of the tourism, recreational, cultural and educational components with the needs of the local communities.

The priority activities and measures of conservation, maintenance, monitoring and improvement of natural and cultural values include:

1. Revision of the Decree on Conservation of Gornje Podunavlje SNR
2. Technical equipping of the guard service
3. Development of nature-friendly tourism and the necessary related infrastructure
4. Inventarization of flora and fauna, mapping of species and habitats
5. Monitoring of key species and related habitats
6. Active efforts to combat invasive species
7. Restoration of wetlands – reestablishment of contact between the river and the old river arms though project work and by increasing open water surfaces at the following sites: Karapandža, Široki Rit, Monoštorski Rit – northern side, Bestrement, Štrbac and Košare
8. Active bird conservation through conservation measures in fragmented autochtonous forest stands and preservation of individual trees necessary for breeding
9. Improvement of all means of cooperation with other users of the area and local communities on development of eco-tourism and promotion of the Reserve
10. Presentation and popularization of natural values of the area

ANNEX 11

Management program of the angling area of Gornje Podunavlje Special Nature Reserve for the period 2012 -CC0CR6SV

Management program of the angling area of Gornje Podunavlje SNR for the period 2012–2020

SUMMARY

The permitted fish quota per species is based on the annual increase of the fish populations.

On the basis of testing catches and experience from other similar areas in Vojvodina, it can be assumed that the annual production of this angling area is approximately 680 kg/ha, if the total surface of the water, comprised of the old Danube sleeves, backwaters and canals is approx. 3204 ha (when the water level measures 380 cm at the measuring station at Apatin). With this, taking into account the 1568 ha of the course of the Danube River, the calculation is that the annual production of fish biomass is 3,245,000 kg. The total annual production of autochthonous fish species is 2,276,000 kg, and the permitted catch per species is: 36,368 kg for Carp, 10,136 kg for Catfish, 30,444 kg for Asp, 132,635 kg for Bream, 7,018 kg for Barbel and 34,308 kg for Zander.

The permitted daily catch is: 179 kg of Asp, 780 kg of Bream, 41 kg of Barbel, 214 kg of Carp, 16 kg of Pike, 60 kg of Catfish and 202 kg of Zander.

The total foreseen revenues generated by the management of the angling area (issuance of licences and concessions) ranges between RSD 2,474,000 and 4,787,500. The total foreseen expenditures of the management of the angling area (management of spawning sites, management of banks, catch of invasive species, costs of guards, fish introduction, equipment, information panels, management of vessels and marina, costs of experts, costs of management planning, taxes) are between RSD 5,739,440 and 8,682,400.

ANNEX 12

Summary Management Plan of Tikvara Nature Park
for the period 2010 to 2014

Management plan of Tikvara Nature Park for the period 2010–2014

Contents

I Introduction
1. Basic values and characteristics of Tikvara Nature Park
2. Tourism possibilities in Tikvara Nature Park
3. Starting points for management and conservation planning in Tikvara Nature Park

II Development and conservation goals for Tikvara Nature Park

III Programme of conservation and development measures
1. Organization of management
   1.1. Organization and equipping
   1.2. Design of plans, managements plans, programmes and projects
   1.3. Relationships with resource and land users
   1.4. Information and the information system
   1.5. Cooperation
2. Conservation and the use of natural values
   2.1. Forests
   2.2. Fish fauna
3. Conditions and procedures to mitigate activities that are a cause of threat to the natural and other values of Tikvara Nature Park
4. Scientific research and expert activities
5. Cultural and educational activities
6. Development activities
7. Eco-marketing
8. Maintenance and equipping of the protected area
9. Financing
10. Preconditions for implementation of the management plan

SUMMARY

The development and conservation goals for Tikvara Nature Park in the planning period are:

- Monitoring the status of all natural values according to the defined conservation regime
- Active conservation of ecosystems, remediation and restoration of valuable habitats
- Harmonization of the permitted use of natural resources (forestry, game management, angling), balancing sport and tourism activities with the conservation and protection needs of the protected area, and development of sustainable development and wise use principles
- Complete activation of the tourism and recreation potential and development of special types of tourism in cooperation with the local communities
- Implementation of remediation and restoration measures aimed at maintaining spatial planning and technical conditions for the conservation of natural values with more of less pronounced changes caused by degradation
- Support to development of the fundamental functions of the protected area for the needs of scientific research, cultural, educational, informative, marketing, sport and

recreation, tourism and other activities in line with the sensitivity and capacity of the area, improving the promotion, presentation and popularization of Tikvara Nature Park

- Design of programmes, projects and studies that are conservation oriented, maintenance and the use of natural values and land with the elimination of possible negative influences to the protected area
- Increase the degree of technical equipping and human resources in the structures of the site manager entrusted with the conservation, development and maintenance of Tikvara Nature Park

ANNEX 13

General Plan for the Management of Forests
in north Backa Forestry Division

General Forest Management Plan for the North Bačka Forestry Division

(This is the forestry area covering forests in the territories of the City of Sombor, and the Municipalities of Apatin, Odžaci, Subotica, Kanjiža, Senta, Mali Iđoš, Bačka Topola, Ada and Kula

SUMMARY

The total surface area is 23,746.30 ha (23,558.92 ha of state-owned forests and 187.38 ha of private forests).

Planned works include the following activities:

1. Natural regeneration of Locust
2. Natural regeneration of White Poplar
3. Natural regeneration of American Ash
4. Regeneration by dissemination cutting – Ash
5. Regeneration by dissemination cutting –Pedunculate Oak
6. Regeneration by dissemination cutting – Black Pine
7. Forestation of Pedunculate Oak by seeding
8. Forestation by Locust
9. Forestation by White Poplar
10. Forestation by clone poplar
11. Forestation by Willow
12. Complete semination cutting – ash
13. Complete semination cutting – Pedunculate Oak
14. Complete semination cutting – Black Pine
15. Filling in by Pedunculate Oak
16. Filling in by Locust
17. Filling in by White Poplar
18. Filling in by Poplar Clones
19. Filling in by willow
20. Total cutting of lower stratas in forests by machines
21. Decomposition of turf
22. Collection of a tree-waste
23. Ploughing
24. Superficial shallow cultivation
25. Weeding (by hand)
26. Lighting of juvenile trees by hand
27. Lighting of juvenile trees by machines
28. Destruction of weeds by herbicides
29. Cultivation of land by hand and powdering
30. Cutting of branches
31. Cultivation between rows
32. Cleaning in natural stands
33. Protection of forests against plant diseases
34. Protection of forests against diseases caused by insects
35. Protection of forests against game
36. Protection of forests against cattle
37. Protection of forests against rodents

38. Fencing

Plan of forest utilisation

Main yield

	Main yield					
	I	II	total	I	II	total
	ha	ha	ha	m^3	m^3	m^3
Total	2409.80	2005.53	4415.33	663757	583492	1247249

Previous yield

	Surfaces for selective cutting	Yield of selective cutting
	ha	m^3
Total	1604.01	39442

Total revenues

	I	II	Total	I	II	total
Main	ha	ha	ha	m^3	m^3	m^3
Previous	2409.80	2005.53	4415.33	663,757	583,492	1,247,249
Total			1604.01			39,442
						1,286,691

ANNEX 14

Species list

Supporting document (5) Species list

List of most important vascular plants in proposed UNESCO Mura-Drava-Dunav Biosphere Reserve (strictly protected species in Serbia, species on IUCN Red Lists listed as NT, VU, EN and CR, species on Appendix I of Bern Convention). Where common name is not widely used, it lacks in this list. Species are listed in alphabetical order.

Scientific name	Common name
Achillea asplenifolia	Yarrow
Adonis vernalis	False Hellebore
Allium angulosum	Mouse Garlic
Allium atroviolaceum	Blue-purple Garlic
Anacamptis pyramidalis	Pyramidal Orchid
Artemisia pontica	Roman Wormwood
Artemisia santonicum	-
Arum orientale	Eastern Arum Lillie
Aster linosyris	Goldilocks Aster
Aster sedifolius	Michaelmas Daisy
Aster tripolium	Salt Aster
Beckmannia eruciformis	Slough Grass
Blackstonia acuminata	-
Callitriche palustris	Spiny Water Starwort
Cardamine parviflora	Sand Bittercress
Carex acuta	Acute Sedge
Carex serotina	Little Green Sedge
Carex stenophylla	-
Centaurea sadlerana	Sadler's Knapweed
Cephalanthera damasonium	White Helleborine
Cephalanthera longifolia	Sword-leaved Helleborine
Cerastium subtetrandrum	-
Cirsium brachycephalum	Alkaline Thistle
Colchicum autumnale	Autumn Crocus
Crataegus nigra	Black Hawthorn
Cyperus glomeratus	-
Cyperus longus	Long Paper Sedge
Dactylorhiza incarnata	Early Marsh Orchid
Doronicum hungaricum	-
Eleocharis acicularis	Needle Spikerush
Epipactis helleborine	Broad-leaved Helleborine
Epipactis palustris	Marsh helleborine
Eranthis hyemalis	Winter Aconite
Erysimum cheiranthoides	Treacle-mustard
Hippuris vulgaris	Common Mare’s Tail
Hottonia palustris	Water Violet
Hypericum elegans	-
Iris spuria	Blue Iris

Lepidium cartilagineum	-
Leucojum aestivum	Loddon Lilly
Limosella aquatica	Water Mudwort
Limonium gmelinii	Salt Marsh Statice
Lycopodium annotinum	Stiff Clubmoss
Nuphar lutea	Yellow Water Lilly
Nymphaea alba	White water lilly
Orchis laxiflora subsp. *Palustris*	Green-winged Meadow Orchid
Orchis morio	Green-winged Orchid
Orchis purpurea	Lady Orchid
Peplis portula	-
Peucedanum officinale	Hog's fennel
Pholiurus pannonicus	
Plantago schwarzenbergiana	Schwarzenberg's Plantain
Plantago tenuiflora	Narrow-flowered Plantain
Potamogeton trichoides	Hair-like Waterweed
Prunus fruticosa	Dwarf Cherry
Ranunculus lateriflorus	-
Ranunculus lingua	Tongue-shaped Spearwort
Ranunculus ophioglossifolius	Snake-*tongue* Spearwort
Salvia austriaca	Austrian Sage
Salvinia natans	Floating Fern
Saxifraga bulbifera	-
Scilla autumnalis	Prospero Autumnale
Sedum caespitosum	-
Spergularia maritima	Greater Sea-spurry
Suaeda maritima	Annual Seablite
Thelypteris palustris	Marsh Fern
Trapa natans	Water Chestnut
Urtica kioviensis	-
Utricularia australis	Southern Small Bladder
Utricularia vulgaris	Common Small Bladder
Ventenata dubia	Wiregrass
Veronica spicata L. subsp. *Incana*	Spiked Speedwell
Viola persicifolia	Fen Violet

List of most important freshwater fish in proposed UNESCO Mura-Drava-Danube Biosphere Reserve. Species are listed in alphabetical order.

Scientific name	Comon name
Abramis brama	Common Bream
Abramis ballerus	Blue Bream
Acipenser nudiventris	Bastard Sturgeon
Acipenser ruthenus	Sterlet
Alburnus alburnus	Common Bleak
Amiurus nebulosus	Brown Bullhead
Aspius aspius	Asp
Carassius auratus auratus	Silver Goldfish

Carassius auratus gibelio	Crucian Carp
Chalcalburnus chalcoides	Danube Bleak
Cobitis taenia	Spined Loach
Cottus gobio	European Bullhead
Ctenopharyngodon idella	Grass Carp
Cyprinus carpio	Carp
Esox lucius	Pike
Gymnocephalus cernuus	Ruffe
Hypophthalmichthus nobilis	Bighead Carp
Hypophthalmichthys molitrix	Silver Carp
Lepomis gibbosus	Pumpkinseed Sunfish
Leuciscus idus	Ide
Lota lota	Burbon
Micropterus salomoides	Largemouth Bass
Misgurnus fossilis	European Weatherfish
Pelecus cultratus	Sabre Fish
Perca fluviatilis	Perch
Pseudorasbora parva	Stone Moroko
Phoxinus phoxinus	Minnow
Rhodeus sericeus amarus	European Bitterling
Rutilus rutilus carpathorosicus	Common Roach
Rutilus pigus virgo	Pigo
Scardinius erythrophthalmus	Common Rudd
Silurus glanis	Catfish
Stizostedion lucioperca	Zander
Tinca tinca	Tench
Umbra krameri	Mudminnow
Vimba vimba	Vimba Bream
Zingel zingel	Common Zingel
Zingel streber	Streber

List of amphibians in proposed UNESCO Mura-Drava-Dunav Biosphere Reserve.Species are listed in alphabetical order.

Scientific name	Common name
Bombina bombina	European Fire-bellied Toad
Bufo viridis	European Green Toad
Hyla arborea	Tree Frog
Pelobates fuscus	Common Spadefoot Toad
Pelophylax (Rana) kl. Esculentus	Edible Frog
Pelophylax (Rana) lessonae	Pool Frog
Pelophylax (Rana) ridibundus	Marsh Frog
Rana dalmatina	Agile Frog
Triturus cristatus	Northern Crested Newt
Triturus dobrogicus	Danube Crested Newt

List of reptiles in proposed UNESCO Mura-Drava-Dunav Biosphere Reserve.Species are listed in alphabetical order.

Scientific name	Common name
Coronella austriaca	Smooth Snake
Dolichopis caspius	Caspian Whipsnake
Emys orbicularis	European Pond Turtle
Lacerta agilis	Sand Lizard
Lacerta viridis	European Green Lizard
Natrix natrix	Grass Snake
Natrix tesselata	Dice Snake
Podarcis muralis	Wall Lizard
Zamenis longissimus	Aesculapian Snake

List of most important regularly occurring birds in proposed UNESCO Mura-Drava-Dunav Biosphere Reserve.Species are listed in alphabetical order.

Scientific name	Common name
Accipiter gentilis	Northern Goshawk
Accipiter nisus	Eurasian Sparrowhawk
Acrocephalus arundinaceus	Great Reed-warbler
Acrocephalus schoenobaenus	Sedge Warbler
Acrocephalus scirpaceus	Eurasian Reed-warbler
Aegithalos caudatus	Long-tailed Tit
Alauda arvensis	Eurasian Skylark
Alcedo atthis	Common Kingfisher
Anas acuta	Northern Pintail
Anas clypeata	Northern Shoveler
Anas crecca	Eurasian Teal
Anas penelope	Eurasian Wigeon
Anas platyrhynchos	Mallard
Anas querquedula	Garganey
Anas strepera	Gadwall
Anser fabalis	Bean Goose
Anser albifrons	Greater White-fronted Goose
Anser anser	Greylag Goose
Ardea cinerea	Grey Heron
Ardea purpurea	Purple Heron
Ardeola ralloides	Squacco Heron
Asio flammeus	Short-eared Owl
Asio otus	Long-eared Owl
Athene noctua	Little Owl
Aythya ferina	Common Pochard
Aythya nyroca	Ferruginous Duck
Aythya fuligula	Tufted Duck
Botaurus stellaris	Great Bittern
Bucephala clangula	Common Goldeneye

Buteo buteo	Common Buzzard
Buteo rufinus	Long-legged Buzzard
Carduelis carduelis	European Goldfinch
Carduelis cannabina	Eurasian Linnet
Carduelis chloris	European Greenfinch
Casmerodius albus	Great Egret
Calidris alpina	Dunlin
Calidris ferruginea	Curlew Sandpiper
Calidris minuta	Little Stint
Calidris temminckii	Temminck's Stint
Charadrius dubius	Little Ringed Plover
Chlidonias hybridus	Whiskered Tern
Chlidonias leucopterus	White-winged Tern
Chlidonias niger	Black Tern
Ciconia nigra	Black Stork
Ciconia ciconia	White Stork
Circus aeruginosus	Western Marsh-harrier
Circus cyaneus	Northern Harrier
Circus pygargus	Montagu's Harrier
Coccothraustes coccothraustes	Hawfinch
Coracias garrulus	European Roller
Corvus corax	Common Raven
Corvus corone	Carrion Crow
Corvus frugilegus	Rook
Corvus monedula	Eurasian Jackdaw
Coturnix coturnix	Common Quail
Cuculus canorus	Common Cuckoo
Delichon urbica	Northern House-martin
Dendrocopos major	Great Spotted Woodpecker
Dendrocopos medius	Middle Spotted Woodpecker
Dendrocopos minor	Lesser Spotted Woodpecker
Dendrocopos syriacus	Syrian Woodpecker
Dryocopus martius	Black Woodpecker
Emberiza citrinella	Yellowhammer
Emberiza schoeniclus	Reed Bunting
Erithacus rubecula	European Robin
Falco cherrug	Saker Falcon
Falco subbuteo	Eurasian Hobby
Falco tinnunculus	Common Kestrel
Falco vespertinus	Red-footed Falcon
Ficedula albicollis	Collared Flycatcher
Ficedula hypoleuca	European Pied Flycatcher
Fringilla coelebs	Chaffinch
Fringilla montifringilla	Brambling
Galerida cristata	Crested Lark
Garrulus glandarius	Eurasian Jay
Hirundo rustica	Barn Swallow
Egretta garzetta	Little Egret

Fulica atra	Common Coot
Gallinago gallinago	Common Snipe
Grus grus	Common Crane
Haliaeetus albicilla	White-tailed Eagle
Himantopus himantopus	Black-winged Stilt
Ixobrychus minutus	Little Bittern
Jynx torquilla	Eurasian Wryneck
Lanius collurio	Red-backed Shrike
Lanius excubitor	Northern Grey Shrike
Lanius minor	Lesser Grey Shrike
Larus canus	Mew Gull
Larus michahellis	Yellow-legged Gull
Larus ridibundus	Common Black-headed Gull
Limicola falcinellus	Broad-billed Sandpiper
Limosa limosa	Black-tailed Godwit
Locustella fluviatilis	Eurasian River Warbler
Locustella luscinioides	Savi's Warbler
Luscinia luscinia	Thrush Nightingale
Luscinia megarhynchos	Common Nightingale
Luscinia svecica	Bluethroat
Melanitta fusca	White-winged Scoter
Mergellus albellus	Smew
Mergus merganser	Common Merganser
Mergus serrator	Red-breasted Merganser
Merops apiaster	European Bee-eater
Miliaria calandra	Corn Bunting
Milvus migrans	Black Kite
Milvus milvus	Red Kite
Motacilla alba	White Wagtail
Motacilla flava	Yellow Wagtail
Muscicapa striata	Spotted Flycatcher
Netta rufina	Red-crested Pochard
Numenius phaeopus	Whimbrel
Nycticorax nycticorax	Black-crowned Night-heron
Oriolus oriolus	Eurasian Golden-oriole
Panurus biarmicus	Bearded Parrotbill
Parus caeruleus	Blue Tit
Parus major	Great Tit
Parus palustris	Marsh Tit
Passer domesticus	House Sparrow
Passer montanus	Eurasian Tree Sparrow
Platalea leucorodia	Eurasian Spoonbill
Plegadis falcinellus	Glossy Ibis
Pernis apivorus	European Honey-buzzard
Perdix perdix	Grey Partridge
Phalacrocorax carbo	Great Cormorant
Phalacrocorax pygmeus	Pygmy Cormorant
Phasianus colchicus	Common Pheasant

Philomachus pugnax	Ruff
Phoenicurus ochruros	Black Redstart
Phoenicurus phoenicurus	Common Redstart
Phylloscopus trochilus	Willow Warbler
Phylloscopus collybita	Common Chiffchaff
Pica pica	Black-billed Magpie
Picus viridis	Eurasian Green Woodpecker
Picus canus	Grey-faced Woodpecker
Podiceps cristatus	Great Crested Grebe
Podiceps nigricollis	Black-necked Grebe
Porzana parva	Little Crake
Porzana porzana	Spotted Crake
Pyrrhula pyrrhula	Eurasian Bullfinch
Prunella modularis	Hedge Accentor
Rallus aquaticus	Water Rail
Recurvirostra avosetta	Pied Avocet
Regulus ignicapillus	Firecrest
Regulus regulus	Goldcrest
Remiz pendulinus	Eurasian Penduline-tit
Riparia riparia	Sand Martin
Saxicola rubetra	Whinchat
Saxicola torquata	Common Stonechat
Sterna albifrons	Little Tern
Sterna hirundo	Common Tern
Streptopelia turtur	European Turtle-dove
Tachybaptus ruficollis	Little Grebe
Tadorna tadorna	Common Shelduck
Tringa erythropus	Spotted Redshank
Tringa glareola	Wood Sandpiper
Tringa hypoleucos	Common Sandpiper
Tringa nebularia	Common Greenshank
Tringa ochropus	Green Sandpiper
Tringa stagnatilis	Marsh Sandpiper
Tringa totanus	Common Redshank
Sitta europaea	Wood Nuthatch
Somateria mollissima	Common Eider
Serinus serinus	European Serin
Sylvia atricapilla	Blackcap
Sylvia borin	Garden Warbler
Sylvia communis	Common Whitethroat
Sylvia curruca	Lesser Whitethroat
Sylvia nisoria	Barred Warbler
Strix aluco	Tawny Owl
Sturnus vulgaris	Common Starling
Troglodytes troglodytes	Winter Wren
Tyto alba	Barn Owl
Turdus iliacus	Redwing
Turdus merula	Eurasian Blackbird

Turdus philomelos	Song Thrush
Turdus pilaris	Fieldfare
Turdus viscivorus	Mistle Thrush
Upupa epops	Eurasian Hoopoe
Vanellus vanellus	Northern Lapwing

List of most important regularly occuring mammals in proposed UNESCO Mura-Drava-Dunav Biosphere Reserve.Species are listed in alphabetical order.

Scientific name	Common name
Barbastella barbastellus	Barbastelle
Canis aureus	Golden Jackal
Capreolus capreolus	Roe Deer
Castor fiber	Eurasian Beaver
Cervus elaphus	Red Deer
Crocidura suaveolens	Lesser White-toothed Shrew
Crocidura leucodon	Bicolored Shrew
Dama dama	Fallow Deer
Eptesicus serotinus	Serotine Bat
Erinaceus roumanicus	Northern White-breasted Hedgehog
Felis silvestris	Wild Cat
Lepus europaeus	Common Hare
Lutra lutra	Fish Otter
Martes martes	Pine Marten
Martes foina	Beech Marten
Meles meles	European Badger
Miniopterus schreibersii	Common Bent-winged Bat
Muscardinusavellanarius	Hazel Dormouse
Mustela erminea	Stoat
Mustela eversmanii	Steppe Polecat
Mustela nivalis	Least Weasel
Mustela putorius	European Polecat
Myotis mystacinus	Whiskered Bat
Myotis brandtii	Brandt's Bat
Myotis emarginatus	Geoffroy's Bat
Myotis nattereri	Natterer's Bat
Myotis bechsteinii	Bechstein's Bat
Myotis myotis	Mouse-eared Bat
Myotis blythii	Lesser Mouse-eared Bat
Myotis daubentonii	Daubenton's Bat
Myotis dasycneme	Pond Bat
Myoxus glis	Edible Dormouse
Neomys anomalus	Mediterranean Water Shrew
Nyctalus noctula	Common Noctule
Nyctalus leisleri	Lesser Noctule
Odocoileus virginianus	White-tailed Deer
Ovis musimon	Mouflon
Pipistrellus pipistrellus	Common Pipistrelle

Pipistrellus pygmaeus	Pigmy Pipistrelle
Pipistrellus nathusii	Nathusius's Pipistrelle
Pipistrellus kuhlii	Kuhl's Pipistrelle
Plecotus austriacus	Grey Long-eared Bat
Plecotus auritus	Brown Long-eared Bat
Rhinolophus ferrumequinum	Greater Horseshoe Bat
Sorex minutus	Eurasian Pigmy Shrew
Sorex araneus	Common Shrew
Sus scrofa	Wild Boar
Talpa europaea	European Mole
Vespertilio murinus	Particoloured Bat
Vulpes vulpes	Red Fox

ANNEX 15

List of main bibliographic references

Annex 15. Main references published from the period between 1990 and 2016. Only in exemptional cases older references are presented

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ANNEX 16

Endorsement letter Vojvodinašume public Enterprise

VOJVODINAŠUME

Public Enterprise "VOJVODINAŠUME"
21131 Petrovaradin, Preradovićeva 2
tel/fax: + 381 21/431-144; 6431-139
accounts: 310-2870-42; 345-5668-64; 335-10521-20;
265-2010310003850-51; 160-109543-83; 355-1099947-33
TIN:101636567; ID:08762198; ERVAT:132716493

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

Doc. No. 1632
25th April 2016
Petrovaradin

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

We believe that the establishment of the "Bačko Podunavlje" Biosphere Reserve, as one of the last remaining pristine riverine ecosystems along the river Danube, would in the best way represent our region among other UNESCO/MAB globally important areas. The Biosphere Reserve, which integrates cultural and biological diversity, encourages cooperation and involvement of local communities, as a way forward to achieving the sustainable development principles.

Despite the intensive preparatory process of Serbian nomination of the "Bačko Podunavlje" Biosphere Reserve which Public Enterprise "Vojvodinašume" was active member, we need to emphasize several important objections of the nomination preparation process and nomination itself:

- PE "Vojvodinašume" challenges offered zoning solution - even we found common acceptable solution for questionable issues at the end they haven't be incorporated in final nomination version. This calls into question purpose/intent of public participation process.
- Absence of appropriate and common national public hearing of the final nomination proposal e.g. absence of the consistent view of all interested groups (stakeholders).
- Proposed zoning solution doesn't provide sustainable forest and hunting management.

Despite above named arguable issues we would like to inform you that the Public Enterprise "Vojvodinašume" generally supports the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia.

Yours sincerely,

Marta Takač
Director of PE "Vojvodinašume"

ANNEX 17

Endorsement letter Morović Military Institution

РЕПУБЛИКА СРБИЈА
МИНИСТАРСТВО ОДБРАНЕ
ВОЈНА УСТАНОВА "МОРОВИЋ"
Инт.бр. 1795-2
Датум : 17. 05. 2016. године
МОРОВИЋ (Сремска Митровица)

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

We believe that the establishment of the "Bačko Podunavlje" Biosphere Reserve, as one of the last remaining pristine riverine ecosystems along the river Danube, would in the best way represent our region among other UNESCO/MAB globally important areas. The Biosphere Reserve, which integrates cultural and biological diversity, encourages cooperation and involvement of local communities, as a way forward to achieving the sustainable development principles.

Therefore, the Military institution Morović, Special Nature Reserve Karadjordjevo strongly supports the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia.

REPRESENTATIVE DIRECTOR
major
Miroslav Blagojević, dipl. ecc.

deliver to:
- Adress vritten above
- Institute for nature protekcion, Novi Sad

ANNEX 18

Endorsement letter Tikvara Sport and Recreation Centre

JP SRC "TIKVARA" Bačka Palanka
Šetalište Milana Janića 5
Telefon: 021/6041-333, 6043-083,
Fax: 021/751-789

mail: tikvarasrc@mts.rs
mail: srcdirektor@gmail.com

PIB: 100496557
Matični broj: 08165327
Tekući račun: 840-29945845-16
840-746641-32
Park prirode 840-2720741-67

22.04.2016.

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

We believe that the establishment of the "Bačko Podunavlje" Biosphere Reserve, as one of the last remaining pristine riverine ecosystems along the river Danube, would in the best way represent our region among other UNESCO/MAB globally important areas. The Biosphere Reserve, which integrates cultural and biological diversity, encourages cooperation and involvement of local communities, as a way forward to achieving the sustainable development principles.

Therefore, the JP SRC "Tikvara" Bačka Palanka, strongly supports the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia.

Yours sincerely,
Darko Božović
General Manager

ANNEX 19

Endorsement letter Ministry of Agriculture and Environmental Protection

Republic of Serbia
MINISTRY OF AGRICULTURE AND ENVIRONMENTAL PROTECTION
No. 037-04-8/2016-06
Date: 22.04.2016.
Belgrade

Date: 22.04.2016.

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

Ministers responsible for environmental protection in Austria, Croatia, Hungary, Serbia and Slovenia signed in March 2011 a Ministerial Declaration to join their individual protected riverine areas and to establish a UNESCO Transboundary Biosphere Reserve to protect their shared nature and wildlife along the Mura, Drava and Danube rivers. This agreement was based on the initial initiative of Croatia and Hungary and a respective agreement signed in 2009. As contribution to the initiative and already established biosphere reserves in Hungary and Croatia, the preparation of the national nomination dossier for "Bačko Podunavlje" Biosphere Reserve was organized in Serbia.

The Ministry of Agriculture and Environmental Protection whole heartedly endorses the national nomination of the "Bačko Podunavlje" Biosphere Reserve as a step towards protecting Europe's pristine riverine ecosystems. We will further support the process of establishing the Biosphere Reserve as it harmonizes conservation of biological and cultural diversity, encourages strong involvement and cooperation of local communities and is aligned with the principles of sustainable development.

Yours sincerely,

State Secretary, Prof. Zoran Rajić, PhD

Pokrajinski zavod za zaštitu prirode
N/R Biljana Panjković
Radnička 20a
21000 Novi Sad

ANNEX 20

Endorsement letter Provincial Secretariat for Urban planning,
Constr. and Env. Protect

Republic of Serbia
Autonomous Province of Vojvodina
PROVINCIAL SECRETARIAT FOR URBAN PLANNING, CONSTRUCTION AND ENVIRONMENTAL PROTECTION
Bulevar Mihajla Pupina 16, 21000 Novi Sad
T: +381 21 487 47 19 F: +381 21 456 238
ekourb@vojvodina.gov.rs | www.ekourb.vojvodina.gov.rs

NUMBER: 130-sluzbeno-58/2016 DATE: 21. April 2016

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

Ministers responsible for environmental protection in Austria, Croatia, Hungary, Serbia and Slovenia signed in March 2011 a Ministerial Declaration to join their individual protected riverine areas and to establish a UNESCO Transboundary Biosphere Reserve to protect their shared nature and wildlife along the Mura, Drava and Danube rivers. This agreement was based on the initial initiative of Croatia and Hungary and a respective agreement signed in 2009. As contribution to the initiative and already established biosphere reserves in Hungary and Croatia, the preparation of the national nomination dossier for "Bačko Podunavlje" Biosphere Reserve was organized in Serbia.

We would like to inform you that the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia is strongly supported by the Secretariat of Urban Planning, Construction and Environmental Protection of Vojvodina Province. We will continue to support the initiative of establishing the Biosphere Reserve, which treasures not only natural and cultural heritage, but as well cooperation and stakeholder involvement as an important pillar of achieving the sustainable development principles.

Yours sincerely,

Provincial Secretary

Slobodan Puzović, Ph.D

ANNEX 21

Endorsement letter City of Sombor

Republic of Serbia
Autonomius Province of Vojvodina
City of Sombor
M A Y O R
Ref. number:3-6/2016-II
Date:21.04.2016
Sombor

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

Ministers responsible for environmental protection in Austria, Croatia, Hungary, Serbia and Slovenia signed in March 2011 a Ministerial Declaration to join their individual protected river in areas and to establish a UNESCO Trans boundary Biosphere Reserve to protect their shared nature and wildlife along the Mura, Drava and Danube rivers. This agreement was based on the initial initiative of Croatia and Hungary and a respective agreement signed in 2009. As contribution to the initiative and already established biosphere reserves in Hungary and Croatia, the preparation of the national nomination dossier for "Bačko Podunavlje"Biosphere Reservewas organized in Serbia.

We would like to inform you that the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia is strongly supported by City of Sombor. We will continue to support the initiative of establishing the Biosphere Reserve, which treasuresnot only natural and cultural heritage, but as well cooperation and stakeholder involvement as an important pillar of achieving the sustainable development principles.

Yours sincerely,

Saša Todorović, mayor of City of Sombor

ANNEX 22

Endorsement letter Municipality of Apatin

Republic of Serbia
Autonomous Province of Vojvodina
MUNICIPALITY OF APATIN
President of the Municipality of Apatin
Number: 337-8/2015-II
Date: 20.04.2016.
APATIN

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

We believe that the establishment of the "Bačko Podunavlje" Biosphere Reserve, as one of the last remaining pristine riverine ecosystems along the river Danube, would in the best way represent our region among other UNESCO/MAB globally important areas. The Biosphere Reserve, which integrates cultural and biological diversity, encourages cooperation and involvement of local communities, as a way forward to achieving the sustainable development principles.

Therefore, the the Municipality of Apatin strongly supports the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia.

Yours sincerely,

President of the Municipality of Apatin

Dr Živorad Smiljanić

ANNEX 23

Endorsement letter Municipality of Odzaci

Republic of Serbia
Autonomous Province of Vojvodina
Municipal Administration of Odžaci
Number: 03-4-56/ 2016
Dated: 12/05/2016.

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

We believe that the establishment of the "Bačko Podunavlje" Biosphere Reserve, as one of the last remaining pristine riverine ecosystems along the river Danube, would in the best way represent our region among other UNESCO/MAB globally important areas. The Biosphere Reserve, which integrates cultural and biological diversity, encourages cooperation and involvement of local communities, as a way forward to achieving the sustainable development principles.

Therefore, the Municipality of Odžaci strongly supports the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia.

Yours sincerely,

Mayor of the Municipality

Dušan Marijan

ANNEX 24

Endorsement letter Municipality of Bač

Republic of Serbia
Vojvodina province
The Municipality of Bač
Mayor's office

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

Date: 21.04.2016.

Ref.No.020-6-124/2016-III

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

We believe that the establishment of the "Bačko Podunavlje" Biosphere Reserve, as one of the last remaining pristine riverine ecosystems along the river Danube, would in the best way represent our region among other UNESCO/MAB globally important areas. The Biosphere Reserve, which integrates cultural and biological diversity, encourages cooperation and involvement of local communities, as a way forward to achieving the sustainable development principles.

Therefore, the Municipality of Bač strongly supports the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia.

Yours sincerely,

Dragan Stašević
Mayor

ANNEX 25

Endorsement letter Municipality of Bačka Palanka

REPUBLIC OF SERBIA
AUTONOMOUS PROVINCE OF VOJVODINA
MUNICIPALITY OF BAČKA PALANKA
PRESIDENT OF BAČKA PALANKA
MUNICIPALITY
BAČKA PALANKA
Number: I-016-3/ 2016-157
DATE:26.04.2016.

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

We believe that the establishment of the "Bačko Podunavlje" Biosphere Reserve, as one of the last remaining pristine riverine ecosystems along the river Danube, would in the best way represent our region among other UNESCO/MAB globally important areas. The Biosphere Reserve, which integrates cultural and biological diversity, encourages cooperation and involvement of local communities, as a way forward to achieving the sustainable development principles.

Therefore, the Municipality of Backa Palanka strongly supports the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia.

Yours sincerely,

The Mayor

of the Bačka Palanka Municipality

Aleksandar Djedovac

ANNEX 26

Endorsement letter Vode Vojvodine public water management company

PUBLIC WATER MANAGEMENT COMPANY VODE VOJVODINE NOVI SAD
21000 Novi Sad, Bulevar Mihajla Pupina 25
phone. +381 21- 4881-888 & fax. +381 21 - 557- 353
www.vodevojvodine.co.rs, www.vodevojvodine.com
e-mail: office@vodevojvodine.co.rs, office@vodevojvodine.com

II – 100/33
Date: 05/05/2016.

Director, Division of Ecological and Earth Sciences
Secretary, Man and the Biosphere (MAB) Programme
1, rue Miollis,
Paris 75732 Cedex 15
France

LETTER OF SUPPORT FOR THE NOMINATION OF "BAČKO PODUNAVLJE" UNESCO/MAB BIOSPHERE RESERVE

We believe that the establishment of the "Bačko Podunavlje" Biosphere Reserve, as one of the last remaining pristine riverine ecosystems along the river Danube, would in the best way represent our region among other UNESCO/MAB globally important areas. The Biosphere Reserve, which integrates cultural and biological diversity, encourages cooperation and involvement of local communities, as a way forward to achieving the sustainable development principles.

Therefore, Public Water Management Company Vode Vojvodine Novi Sad strongly supports the establishment of "Bačko Podunavlje" Biosphere Reserve in the Republic of Serbia.

Yours sincerely,

Mirko Adžić
General Manager of PWMC Vode Vojvodine

ANNEX 27

Photo and video material

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Bureau de l'Information du Public

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Reference:

1. Anglers in the morning mist @Boris Erg
2. Beehive_SNR Gornje Podunavlje @Boris Erg
3. Bodrog fest in Bački Monoštor 1_Traditional costumes of Šokci minority @Boris Erg
4. Bodrog fest in Bački Monoštor_Traditional costumes of Šokci minority @Boris Erg
5. Lutra lutra_European otter_SNR Gornje Podunavlje @Boris Erg
6. Nuphar lutea_Yellow Waterlily_SNR Gornje Podunavlje@ Boris Erg

1. a) I the undersigned, copyright-holder of the above mentioned photo(s) hereby grant to UNESCO free of charge the non-exclusive right to exploit, publish, reproduce, diffuse, communicate to the public in any form and on any support, including digital, all or part of the photograph(s) and to licence these rights to third parties on the basis of the rights herein vested in UNESCO

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   b) The photo(s) is/are in no way whatever a violation or an infringement of any existing copyright or licence, and contain(s) nothing obscene, libellous or defamatory.

Name and Address: Boris Erg
Sanje Živanovića 12
11000 Beograd

Date: 28.08.2013.
Signature:

(sign, return to UNESCO two copies of the Agreement and retain the original for yourself)

Mailing address: 7 Place Fontenoy, 75352 Paris 07 SP, Direct Telephone: 00331 – 45681687
Direct Fax: 00331 – 45685655; e-mail: photobank@unesco.org; m.ravassard@unesco.org

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Photothèque de l'UNESCO
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Reference:

1. Traditional hand craft_ Reed knitting @UG Podunav
2. Traditional hand craft_Blacksmith @UG Podunav
3. Traditional hand craft_Clay stove @UG Podunav
4. Traditional hand craft_Fishnet knitting @UG Podunav
5. Traditional hand craft_Wicker basket @UG Podunav
6. Traditional hand craft_Wooden boat @UG Podunav

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2. I certify that:

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   b) The photo(s) is/are in no way whatever a violation or an infringement of any existing copyright or licence, and contain(s) nothing obscene, libellous or defamatory.

Name and Address: UG Podunav
Ivana Gorana Kovačića 34
25272 Bački Monoštor, Serbia

Date: 28.08.2013

Signature: Dejan Mitić

(sign, return to UNESCO two copies of the Agreement and retain the original for yourself)

Mailing address: 7 Place Fontenoy, 75352 Paris 07 SP, Direct Telephone: 00331 – 45681687
Direct Fax: 00331 – 45685655; e-mail: photobank@unesco.org; m.ravassard@unesco.org

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Photothèque de l'UNESCO
Bureau de l'Information du Public

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Reference:

1. Cervus elaphus_Red deer_during maiting season in SNR Gornje Podunavlje @Jaroslav Pap
2. Tipycal natural habitats in SNR Gornje Podunavje @Jaroslav Pap
3. Cervus elaphus_Red deer_swimming_SNR Gornje Podunavlje @Jaroslav Pap
4. Nymphaea alba_European White Waterlily_SNR Gornje Podunavlje @Jaroslav Pap
5. Cervus elaphus_Red deer_SNR Gornje Podunavlje @Jaroslav Pap
6. Platalea leucorodia_Eurasian Spoonbill_SNR Gornje Podunavlje @Jaroslav Pap
7. Haliaeetus albicilla_White-tailed Eagel_SNR Gornje Podunavlje @Jaroslav Pap
8. Ciconia ciconia_White stork and Haliaeetus albicilla_White-tailed Eagel_SNR Gornje Podunavlje @Jaroslav Pap
9. Ciconia nigra_Black stork_SNR Gornje Podunavlje @Jaroslav Pap
10. Various bird species in a pond_SNR Gornje Podunavlje @Jaroslav Pap

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   c) The name of the photographer will be cited alongside UNESCO's whenever his/her work is used in any form.

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   b) The photo(s) is/are in no way whatever a violation or an infringement of any existing copyright or licence, and contain(s) nothing obscene, libellous or defamatory.

Name and Address: Jaroslav Pap
Kraljevića Marka 57/13
21000 Novi Sad

Date: 26.08.2013
Signature

(sign, return to UNESCO two copies of the Agreement and retain the original for yourself)

Mailing address: 7 Place Fontenoy, 75352 Paris 07 SP, Direct Telephone: 00331 – 45681687
Direct Fax: 00331 – 45685655; e-mail: photobank@unesco.org; m.ravassard@unesco.org

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Photothèque de l'UNESCO
Bureau de l'Information du Public

AGREEMENT GRANTING NON-EXCLUSIVE RIGHTS

Reference:

1. Alcedo athis_Kingfisher_SNR Gornje Podunavlje @Szilard Kovacs
2. Birds on water in SNR Gornje Podunavlje @Szilard Kovacs
3. Ciconia nigra_Black stork chicks in nest_SNR Gornje Podunavlje @Szilard Kovacs
4. Crna bara_Black pond in SNR Gornje Podunavlje @Szilard Kovacs
5. Danube Sandbar_SNR Gornje Podunavlje @Szilard Kovacs
6. Fisherman in SNR Gornje Podunavlje @Szilard Kovacs
7. Nymphaea alba_European White Waterlily_underwater photo_SNR Gornje Podunavlje @Szilard Kovacs
8. Sunset in SNR Gornje Podunavlje @Szilard Kovacs
9. Sus crofa_Wild boar_femail with offspring_SNR Gornje Podunavlje @Szilard Kovacs

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   b) These rights are granted to UNESCO for the legal term of copyright throughout the world.

   c) The name of the photographer will be cited alongside UNESCO's whenever his/her work is used in any form.

2. I certify that:

   a) I am the sole copyright holder of the photo(s) and am the owner of the rights granted by virtue of this agreement and other rights conferred to me by national legislation and pertinent international conventions on copyright and that I have full rights to enter into this agreement.

   b) The photo(s) is/are in no way whatever a violation or an infringement of any existing copyright or licence, and contain(s) nothing obscene, libellous or defamatory.

Name and Address: Szilard Kovacs
Đorđa Magaraševića 50
21000 Novi Sad

Date: 29.08.2013.
Signature :

(sign, return to UNESCO two copies of the Agreement and retain the original for yourself)

Mailing address: 7 Place Fontenoy, 75352 Paris 07 SP, Direct Telephone: 00331 – 45681687
Direct Fax: 00331 – 45685655; e-mail: photobank@unesco.org; m.ravassard@unesco.org

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Photothèque de l'UNESCO
Bureau de l'Information du Public

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Reference:

1. Video "Living with Nature", 2007, director Srđan Đuranović

2. Video Gornje Podunavlje, 2004, director Srđan Đuranović

1.a) I the undersigned, copyright-holder of the above mentioned video(s) hereby grant to UNESCO free of charge the non-exclusive right to exploit, publish, reproduce, diffuse, communicate to the public in any form and on any support, including digital, all or part of the video(s) and to licence these rights to third parties on the basis of the rights herein vested in UNESCO

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c) The name of the author/copyright holder will be cited alongside UNESCO's whenever his/her work is used in any form.

2. I certify that:

a) I am the sole copyright holder of the video(s) and am the owner of the rights granted by virtue of this agreement and other rights conferred to me by national legislation and pertinent international conventions on copyright and that I have full rights to enter into this agreement.

b) The video(s) is/are in no way whatever a violation or an infringement of any existing copyright or licence, and contain(s) nothing obscene, libellous or defamatory.

Name and Address: Srđan Đuranović
ĆIKA STEVINA 1-14
NOVI SAD, 21000

Date: 26.08.2013
Signature:

Đuranović

(sign, return to UNESCO two copies of the Agreement and retain the original for yourself)

Mailing address: 7 Place Fontenoy, 75352 Paris 07 SP, Direct Telephone: 00331 – 45681687
Direct Fax: 00331 – 45685655; e-mail: photobank@unesco.org; m.ravassard@unesco.org

ANNEX 28

Tourists offers leaflets

ANNEX 29

Biosphere reserve coordinating councile and stakeholder forum ToR

1. BIOSPHERE RESERVE COORDINATING COUNCIL

TERMS OF REFERENCE

1.1 Roles and Responsibilities

i. The Biosphere Reserve Council is the body responsible for coordinating the management of the Biosphere Reserve on behalf of the constituent government agencies, municipalities and other stakeholders.

ii. The main purpose of the Council is to enable the relevant national and local bodies, 'acting jointly', to fulfil their commitments to the Biosphere Reserve.

iii. As required by the 1995 UNESCO Seville Strategy and the Statutory Framework for Biosphere Reserves, the Council will develop a vision and strategy for the Bačko Podunavlje Biosphere Reserve and will prepare and implement policies to support its functions of conservation, sustainable development, research, monitoring and education.

iv. The Council will seek to champion the interests of the Bačko Podunavlje Biosphere Reserve and its communities, promoting the identity and profile of the area.

v. The Council will facilitate and coordinate the implementation of the Biosphere Reserve Strategy, monitor progress in achieving its objectives, policies and work programmes and periodically review and update the Strategy.

vi. The Council, through a host body (Institute for Nature Conservation of Vojvodina Province), will provide policy guidance to a core team of staff (protected area management authorities: Vojvodinašume Public Enterprise, Tikvara Sport and Recreation Centre and Morović Military Institution) to provide administrative and professional support to its work.

vii. The Council will co-operate with the owners and managers of the core area of the Biosphere Reserve to ensure that management policies and activities are, so far as possible, complimentary and mutually supportive whilst respecting their rights as owners.

viii. The Council will establish and maintain effective working relationships with relevant bodies at the national, regional and local levels where these can contribute to the achievement of the objectives of the Bačko Podunavlje Biosphere Reserve.

ix. The Council will seek to ensure that the Biosphere Reserve is managed in accordance with national and international policy and guidelines.

x. The Council will seek to influence and support the activities of communities and agencies beyond the borders of the Biosphere Reserve so that these contribute to the achievement of Biosphere Reserve objectives.

xi. The Council will advise local authorities and other relevant agencies on the financial and staffing resources required for effective Biosphere Reserve management and will seek additional funds, including external financing, to assist in delivering projects and initiatives identified within the Biosphere Reserve Strategy.

xii. The Council will have the ability to manage budgets for which it has been granted funds.

xiii. The Council will advise on an annual work programme for the Biosphere Reserve management authorities, which have overall responsibility for the management of core and buffer zones.

xiv. The Council will establish (and agree Terms of Reference for) a Stakeholder Forum in each of the five municipalities and other management and governance structures that it deems necessary for the effective performance of its functions, including Working Groups.

xv. The Council will be guided by the deliberations and views of these Stakeholder Forums in the five municipalities when determining policies, strategies and plans for the Biosphere Reserve. In the event of making a decision that is contrary to the consensus or majority view of the Stakeholder Forums, the Council will provide the Forum (via its Chairperson) with a written explanation of the rationale behind its decision.

xvi. The Council will prepare and publish an annual report of its activities for distribution among all interested parties.

1.2 Membership

i. The Bačko Podunavlje Biosphere Reserve Council will comprise representatives from the following sectors and respective organisations/bodies:

Sector	Organization
Municipality administration	Municipality administration Hunting grounds manager Guard service for agriculture Fish farm owners
Local communities	Local communities in all settlements
Agriculture	Farmers' Associations Agricultural companies Agricultural fields guarding service Fish farm owners

Recreation	Organizations of dwellers in weekend settlements and owners of cottages Angling clubs
Business clusters	Private entrepreneur associations Tourist agencies
Civil sector	Environmental NGOs Bee-keeper NGOs Community development NGOs Rural development NGOs Women NGOs
Hunting	Hunting grounds managers

ii. The Chairperson (Biosphere Reserve Coordinator) will be selected from the staff of the Institute for Nature Conservation of Vojvodina Province. The term of office for the Chairperson will be three years, serving for a maximum of two terms.

iii. Experts may be co-opted by the Council to inform and advise members regarding specific topics on the agenda of meetings. They may not vote.

iv. The Council will seek to reach decisions entirely through consensus. A vote will be taken only when absolutely necessary. The Chairperson will have a casting vote.

v. The Council should meet regularly three times per year. Dates for these meetings should be identified several months ahead. Additional Council meetings may be held at the discretion of the Chairperson, as required.

vi. All members of the Council should be asked to sign a 'Membership Accord' which sets out the role of individual members and the way in which they will be expected to contribute to the work of the Partnership. A copy of the 'Membership Accord' is attached at the end of this Annex at the end of this section.

vii. All new Council members should be offered, and would be expected to attend, an induction course covering the governance and management of the Biosphere Reserve. All Council members should be offered the opportunity to attend training events (held

at least annually) on issues that are relevant to the future management of the Biosphere Reserve.

viii. Council members representing an organisation or interest group(s) will be required to provide an annual statement of the steps they have taken to consult with the members of that organisation or interest group(s) and the opportunities that they have provided for those organisations or interest groups to feed in to the work of the Council.

ix. Council members should be required to attend a minimum number of meetings within a set period. If they fail to attend for three consecutive meetings, the organisation that they represent should be asked to nominate an alternative person to sit on the Council.

x. Any Council member may submit items to the Biosphere Reserve Co-ordinator or Council Chairperson for consideration by the Council. The Chairman, in consultation with the Biosphere Reserve Co-ordinator, will decide whether such items are appropriate for inclusion in the agenda of a Council meeting or may be considered in other ways.

xi. Where possible, Council papers (preferably including a summary) for Council meetings should be circulated electronically to enable members to forward/circulate the full papers or the summary to colleagues within their organisation. This should all take place at least three weeks prior to the Council meeting to give others an opportunity to provide feedback to their representative.

1.3 Financial Procedures

i. The Council is not a legal entity and, therefore, will have no executive financial function.

ii. The funding requirements of the Council will form part of a Business Plan for the Biosphere Reserve management authorities, updated annually on a three year rolling programme. The Business Plan will distinguish between: 'core costs' (i.e. costs associated with the establishment and running of the management authorities, which will be resourced by protected area management and the Institute for Nature Conservation of Vojvodina Province as coordinator of the Council); and 'project costs' (i.e. costs associated with the implementation of projects and initiatives which contribute to the delivery of the Biosphere Reserve Management Plan).

iii. It is anticipated that 'project costs' will largely be funded through the partner organisations represented on the Biosphere Reserve Council.

1.4 General Terms of Reference for Working Groups

i. Working Groups are temporary, embryonic groups that should be considered task and finish groups unless they can demonstrate a need for their continuance. Continuation of a Working Group beyond three years must be with the consensus of the Biosphere Reserve Council for a specific duration.

ii. The first task of any Working Group should be to establish its work load, priority tasks and determine a time-limited programme.

iii. Each Working Group shall elect a Chairperson from within the group who shall report back to the Council.

iv. Each Working Group may, on a long- or short-term basis, co-opt people who are not part of the regular Council, but who have experience or resources to contribute to the objectives of the Group.

v. Each Working Group will meet as often as necessary, but must present a report at each of the Council meetings.

vi. Any resource requirements should be agreed with the Council.

vii. The Institute for Nature Conservation of Vojvodina Province will provide a secretariat for the Working Groups and assist in convening meetings.

Annex

Bačko Podunavlje **Biosphere Reserve Council Membership Accord**

As a member of the Bačko Podunavlje Biosphere Reserve Biosphere Reserve Council, I undertake:

- to promote the three functions of the Bačko Podunavlje Biosphere Reserve: conservation, sustainable development and education;
- to champion the Council's vision for the Bačko Podunavlje Biosphere Reserve and its communities, as set out in the Mura-Drava-Danube Strategy;
- to contribute knowledge, expertise and experience to the work of the Council;
- to promote, support and play a full and active part in the work of the Council in fulfilling its 'Roles and Responsibilities' as set out in the Council's 'Terms of Reference';
- to assist the Council in achieving an independent and apolitical profile in the performance of its functions; and
- to attend Council meetings whenever possible and, if I am no longer able to attend meetings on a regular basis, to step down from the Council or, with the agreement of the Council Chairperson, to seek another representative from within my organization to take my seat on the Council.

Signed .....

Date .....

2. BAČKO PODUNAVLJE BIOSPHERE RESERVE STAKEHOLDER FORUMS TO BE ESTABLISHED IN EACH OF THE FIVE MUNICIPALITIES

DRAFT TERMS OF REFERENCE

2.1 Roles and Responsibilities

i. To act as a reference group to advise the Bačko Podunavlje Biosphere Reserve Council on the development and implementation of strategic aims and objectives of policies, strategies and plans, including the management plan, regarding the Bačko Podunavlje Biosphere Reserve.

ii. To provide a consultative forum to facilitate two-way communication between the Bačko Podunavlje Biosphere Reserve Council and other bodies and organisations which have an interest in the proposed Biosphere Reserve.

iii. To provide a forum for discussion on landscape and biodiversity conservation, cultural and historic heritage conservation, research and education, and the sustainable development of agriculture, forestry, non-timber forest products, recreation and tourism, particularly as these relate to the social and economic interests of those who live and/or work in the Bačko Podunavlje Biosphere Reserve.

iv. To promote a closer liaison and understanding between the various interest bodies and organisations which have an interest in the proposed Biosphere Reserve.

v. In their role as advisor, the Forums shall have regard to the general duty of protected area managers to manage Bačko Podunavlje Biosphere Reserve in accordance with (a) the provisions of the Decrees on the Conservation and (b) the Statutory Framework of the World Network of Biosphere Reserves, particularly with respect to Article 3 (Functions) and Article 4 (Criteria).

2.2 Principles

i. The Forums will consider strategic/significant issues only and will not be asked to consider detailed operational or management matters, except where they may have significant strategic or policy importance.

ii. Members of the Forums may propose items for discussion at future meetings.

iii. The Forums will be a truly consultative body and its advice and views will be sought in advance of matters being considered by the Biosphere Reserve Council. It will not be used merely as a rubber stamping exercise or to endorse decisions already taken.

iv. Each Forum will be chaired by an independent person who is able to command the respect of the many groups having an interest in the Bačko Podunavlje Biosphere Reserve. The Chairperson will be invited as an observer to meetings of the Biosphere Reserve Council in order to represent the interests of and to present the views of the Forums.

v. Meetings of the Forums will be open to the public. Members of the public may ask a question or make a statement about any matter on the agenda by prior agreement with the Chairperson.

vi. The Forums will be directly accountable to the Biosphere Reserve Council and a record of its meetings will be received by the Council.

vii. In addition, the advice or comments of the Forums will be reported by its Chairperson to the Biosphere Reserve Council and taken into account in the decision-making process.

viii. The Forums will meet three times per year, as scheduled in advance, and as part of the Council's regular cycle of meetings, and on other occasions as required.

ix. Each Forum, through the facilitation of its Chairperson, will aim to reach a consensus on matters for determination or endorsement by the Council. Any member dissenting from the consensus view may request that the views of the interest group they represent be recorded and reported to the Council for further consideration.

x. In exceptional circumstances, where no clear consensus can be reached among Forum members, voting may take place. All members, including substitutes, may vote with the exception of the Chairperson who does not have a vote.

xi. The role of the Forums will be exclusively advisory.

xii. All members of the Stakeholder Forums, including the Chairperson, will undertake their role in a voluntary capacity (i.e. without payment).

2.3 Membership

i. The Chairperson of each Forum will be an independent statesman who is appointed by the Biosphere Reserve Council through an open selection process, based on public advertisement of the position.

ii. The Chairperson will be appointed for a term of three years and, at the discretion of the Council, may serve for a maximum of two terms.

iii. The balance of the membership will fairly and equitably reflect the three main functions of the Biosphere Reserve, as specified in Article 3 of the Statutory Framework (conservation of biodiversity, learning and research, and sustainable development).

iv. The membership will fairly and equitably reflect the various interest groups in the Bačko Podunavlje area which do not have direct representation on the Coordinating Council itself, and will give due weight to those interest groups with large membership.

v. Persons who are already members of the Bačko Podunavlje Biosphere Reserve Council will not be eligible for Forum membership.

vi. The membership will be of sufficient size to ensure that all the various interest groups are adequately represented and there is sufficient experience and knowledge of the various issues relating to the management of the Biosphere Reserve, but will not be so large as to become unwieldy.

vii. The Forums will comprise representatives of the various categories of interest groups which have an interest in the Bačko Podunavlje area.

viii. Members will be appointed to the Forums by the nominating groups themselves. Where groups are unable or unwilling to decide upon a person to represent them, the matter will be referred to the Chairperson of the respective Forum and the Chairperson of the Council for determination.

ix. Groups/organisations will be entitled to appoint named substitutes to attend meetings in the event that their representative is unable to attend.

x. The nominating organisations will be invited to review their membership every three years, and in so doing will be invited to consider the member's attendance record and the extent to which s/he has liaised with and reported back to the organisations which s/he represents.

xi. The Chairpersons of the Forums may delete organisations from the lists of interest groups where they cease to exist, and add successor and new organisations where appropriate. However, any wide-ranging review of the membership or list of nominating organisations must be reported to and agreed by the Council.

xii. The Chairperson and Vice-Chairperson of the Council may attend meetings of the Forums, but only in an observer capacity. They may provide factual information but not vote or express their views on any matters for determination.

xiii. The Management authorities of protected areas within the Bačko Podunavlje Biosphere Reserve will attend meetings of their respective Forum to present reports and answer questions.

xiv. The Forums may, in respect of any particular matter, invite other persons or representatives of other organisations to attend particular meetings in order to contribute to discussions, but they may not vote on any matters for determination or contribute to any consensus view.

2.4 Secretariat

i. The Stakeholder Forums will be serviced by the local authorities, i.e. City of Sombor, and the Municipalities of Apatin, Odžaci, Bač and Bačka Palanka, in cooperation with protected area management authorities and the Biosphere Reserve Coordinator (Council Chairperson) who will be responsible for the following arrangements:

- agreeing the date and venue of Forum meetings in consultation with the Council and Forum Chairpersons;
- agreeing the agenda of Forum meetings in consultation with the Forum Chairpersons and distributing it at least three weeks in advance; and
- recording the minutes of Forum meetings and, once approved by the Forum Chairperson, distributing them to Forum members, and making them readily available via a website dedicated to the Biosphere Reserve.

2.5 Amendments

i. Any amendments to the Terms of Reference, Principles and Membership of the Forums, (other than changes to individual changes to the lists of nominating groups as set out in paragraph 2.3.xi), must be agreed by the Bačko Podunavlje Biosphere Reserve Council following consultation with the Forum Chairperson and the Forum itself.

ANNEX 30

European Charter for Sustainable Tourism Certificate
for Gornje Podunavlje

Certificate

EUROPARC FEDERATION

EUROPEAN CHARTER FOR SUSTAINABLE TOURISM IN PROTECTED AREAS

The European Charter is a contribution to Agenda 21, the sustainable development programme of the United Nations agreed at Rio de Janeiro in 1992.

Its aim is the promotion of sustainable tourism in protected areas, particularly in nature and national parks. Tourism in these areas should be both nature and landscape friendly, meet the needs of visitors and the local population, and contribute to the economic development of the region.

Prerequisites for adherence to the European Charter are: an analysis of the current situation in all fields relating to tourism, the elaboration of a strategy and the formulation of an action plan for the forthcoming five years by the respective park.

The European Charter attaches particular importance to the continuing integration of all players concerned with tourism in the drafting and implementation of tourism policy.

The Park´s commitment

Special Nature Reserve "Gornje Podunavlje" commits itself to following the principles of the European Charter for Sustainable Tourism in Protected Areas and to the implementation of the agreed strategy and action plan.

Dipl. Ing. of Forestry Marta Takač
Director of Public Enterprise
"Vojvodinašume" Petrovaradin

Recognition by EUROPARC

Special Nature Reserve "Gornje Podunavlje" fulfils the requirements for adherence to the European Charter for Sustainable Tourism in Protected Areas. The award is valid for five years.

Ignace Schops
President, EUROPARC Federation

Brussels, Belgium 2014

ANNEX 31

Strategy for Sustainable Tourism
in the Special Nature Reserve Gornje Podunavlje

STRATEGY FOR SUSTAINABLE TOURISM IN THE SPECIAL NATURE RESERVE GORNJE PODUNAVLJE



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The text of the strategy is the result of fieldwork, research, meetings and consultations within the Forum which also adopted this Strategy as a valid document for future development of sustainable tourism.

SNR Gornje Podunavlje, Sombor, 2014.

PREFACE

Sustainable tourism is a positive approach to the development of this field which aims to decrease the tension and disruption that results from the interaction between tourism commerce, visitors, the environment and local communities. It is an approach which includes a long term concept of development of natural and man-made resources. It is not a concept of anti-development, but rather insists that the limits of development be recognized. Sustainable tourism is a paradigm for the development of tourism in protected areas. Protected areas are important tourist destinations. The principles of sustainable tourism help planners and managers to organize their spaces as small sustainable tourist destinations. Visits to national parks and other protected areas are on the rise all throughout the world and as such, it is important that a strategic approach to these activities be taken.

The strategy for the development of sustainable tourism in the Special Nature Reserve Gornje Podunavlje, above all, reflects the efforts made by the Manager of the protected area to conceptualize and initiate the development of tourism in a manner that will not degrade the natural and cultural resources. The strategy insists on the cooperation and recognition of all stakeholders, which, after all, is the only way to achieve sustainable development of tourism. To that end, before the drafting of the document itself, several meetings and consultations were held with the current and potential actors in the protection of nature and development of tourism. More precisely, the text of the strategy is the result of fieldwork, research, meetings and consultations within the Forum which also adopted this Strategy as a valid document for future development of sustainable tourism.

The Special Nature Reserve Gornje Podunavlje is the first protected area in Serbia to undertake the task of applying for Charter Area status by the European Charter for Sustainable Tourism in Protected Areas. The Manager of the protected area expects the status of a Charter Area to be used as a tool to achieve the ecological, socio-cultural and economic goals of this destination. In the future, it is expected that the entire areas will be declared a part of the UNESCO Transboundary Biosphere Reserve Mura-Drava-Danube (TBR MDD). Considering that international protection statuses attract a larger number of tourists, it can be expected that proper organization of the destination will contribute to better utilization of all tourism resources.

1. INTRODUCTION

The Special Nature Reserve Gornje Podunavlje is located in the northwestern part of Vojvodina and Serbia. It extends along the left bank of the Danube and encompasses a number of meanders, stagnant tributaries and canals, as well as wetland, swamp, meadow and forest ecosystems resulting from the constant influence of the river. The total area of the Special Nature Reserve is 19,648 hectares.

Given the potential and current effect of the local population on the protected area, as well as the effect of the protected area on the local population, the area analyzed within this strategy, along with the Special Nature Reserve Gornje Podunavlje, also encompasses the settlements that surround and share a border with the Special Nature Reserve. Those include: Bački Breg, Kolut, Bezdan, Bački Monoštor, Kupusina, Apatin, Svilojevo and Sonta. Sombor – the administrative seat of the West Bačka District and a town of great significance in the management of the Gornje Podunavlje area – was also added to this group of settlements.

The Special Nature Reserve Gornje Podunavlje has been analyzed and studied several times over the past ten years from the perspective of tourism development and the protection of nature. This is evidenced by the numerous projects and plans developed in these areas. Just like in a number of other destinations in economically less developed regions and countries, this protected area is faced with a number of challenges. How realistic is it to expect that a correlation in the management of protection and tourism makes this region, made up of the territory of one municipality and one town, more successful, ecologically more advanced and better for the life of the local population?

Based on the research that was conducted, the following advantages have been identified which can help make Gornje Podunavlje more competitive:

- good location, including all of the possibilities offered by the fact that it is a border region;
- well-preserved state of natural characteristics of the wetlands along the bank of the Danube making this area exceptionally valuable in the sense of tourist valorization.
- well-preserved local architecture and ambient units the villages surrounding the Special Nature Reserve, as well as the presence of material and non-material folklore heritage.
- multiculturalism and the presence of several peoples and ethnic groups who have lived together in these areas for centuries.
- interest of the local population, manager and local institutions in the development of tourism.

The Special Nature Reserve Gornje Podunavlje represents one of the last well-preserved wetlands of the floodplains in Serbia. Similar to the case with a number of other protected areas, this natural region is jeopardized by activities taking place around it. Some of the commercial activities have been developed over centuries (farming, animal husbandry, fishing, timber

harvesting). During the past ten years, there has been increased interest in the potential for development of tourism.

In order to avoid the chaotic development of tourism and the harmful effects on the ecosystems and local culture, it is necessary to take a certain strategic approach. The goals and vision of tourism must be harmonized with the natural resources and needs of the local population. One of the possible avenues for achieving the goals of sustainable tourism is the European Charter for Sustainable Tourism in Protected Areas. This charter would support the manager of SNP Gornje Podunavlje in protecting the natural and cultural value of the region through the development of this area, providing a high quality experience in all aspects of tourism, forming new and high quality tourism products and implementing a system for monitoring the effects on the environment.

Most importantly, during the initial phase of tourism development, the European Charter for Sustainable Development of Tourism in Protected Areas would launch an initiative for achieving better communication between all interested parties for the development of tourism in the area. Chief among those are: the manager of the protected area, local self-governments, municipal tourist organizations and the local communities with their representatives.

Despite past expectations, tourism has still not reached the optimum level of development in Gornje Podunavlje. The status of a protected area at the national level, as well as the international statuses: Ramsar Site, IBA (Important Bird Area), IPA (Important Plant Area), PBA (Prime Butterfly Area), and, in the foreseeable future, UNESCO Transboundary Biosphere Reserve Mura-Drava-Danube (TBR MDD), represent a great opportunity for the development of tourism throughout the entire region. Rural ecotourism should especially be highlighted. The charter would be the primary guarantee for sustainability for each of the segments of tourism and all tourism activities.

2. THE EUROPEAN CHARTER FOR SUSTAINABLE TOURISM IN PROTECTED AREAS

The European Charter for Sustainable Tourism in Protected Areas is a practical management tool for ensuring that tourism development in Europe’s protected areas is sustainable. The Charter is awarded by the Europarc Federation, an umbrella organization of protected areas across 37 European countries.

The underlying aims of the Charter are:

- to increase awareness of, and support for, Europe’s protected areas as a fundamental part of our heritage that should be preserved for, and enjoyed by, current and future generations;
- to improve the sustainable development and management of tourism in protected areas, which takes account of the needs of the environment, local residents, local businesses and visitors.

These aims are elaborated in a set of ten principles, which are to:

- involve all those implicated by tourism in and around the protected area in its development and management;
- prepare and implement a sustainable tourism strategy and action plan for the protected area;
- protect and enhance the area's natural and cultural heritage, for and through tourism, and protect it from excessive tourism development;
- provide all visitors with a high-quality experience in all aspects of their visit;
- communicate effectively to visitors about the special qualities of the area;
- encourage specific tourism products which enable discovery and understanding of the area;
- increase knowledge of the protected area and sustainability issues amongst all those involved in tourism;
- ensure that tourism supports and does not reduce the quality of life of local residents;
- increase benefits from tourism to the local economy;
- monitor and influence visitor flows to reduce negative impacts.

3. ANALYSIS OF THE AREA AND POTENTIALS

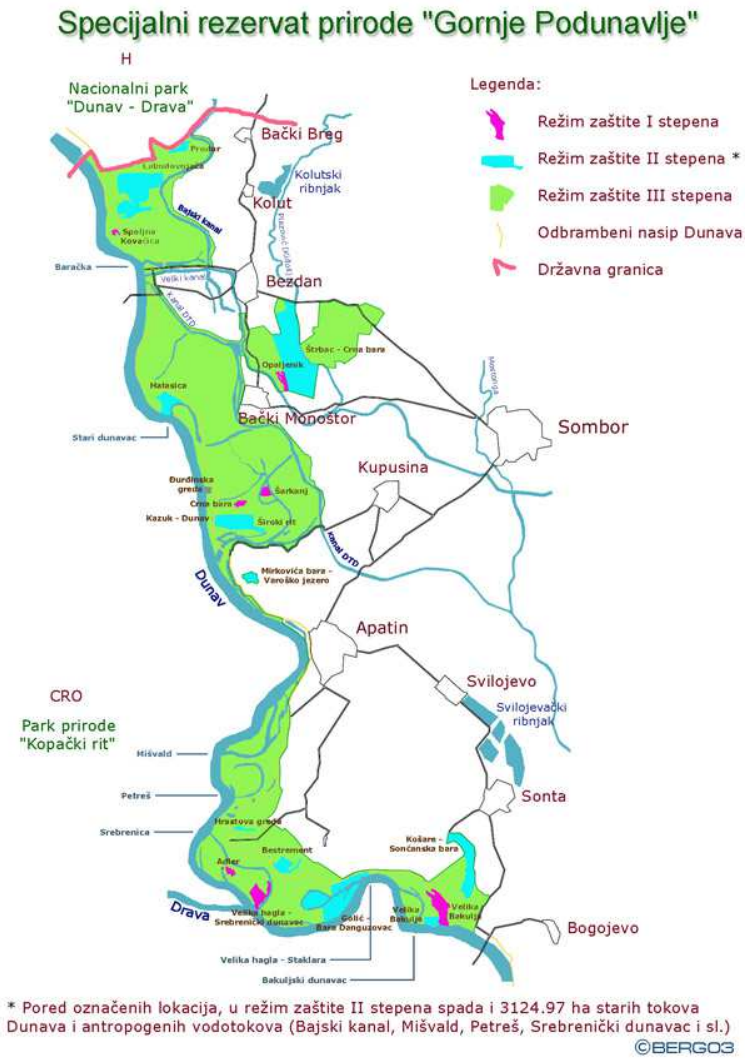
3.1. Geographic Location and Borders of the Area That is the Subject of the Strategy

Gornje Podunavlje is located between 45° 31' 47'' and 45° 55' 16'' north latitude and 18° 49' 08'' and 19° 05' 43'' east longitude.

The Special Nature Reserve Gornje Podunavlje is of an irregular and extended shape, in the direction of north-south The northern border of this protected natural resource is also the national border between Serbia and Hungary. The western border is formed by the Danube River. The southern border is also formed by the Danube River which, following the confluence with the Drava, flows in and east-west direction. Na krajnjem jugoistoku Gornje Podunavlje doseže do granice između opština Apatin i Odžaci, nedaleko od mosta između Bogojeva (Srbija) i Erduta (Hrvatska). The eastern border, through its course of direction, is the greatest contributor to the deviation from straight extended shape. Not in a single sector is it even close to parallel with the course of the Danube, i.e. with the western border. The deviation is the greatest near the settlements of Bezdan and Bački Monoštor, between which the Gornje Podunavlje area runs. Within the sector of the town of Apatin, the territorial continuity ends, i.e. it runs exclusively along the left bank of the Danube.

The Special Nature Reserve and its surrounding areas are well connected to regional and local roadways. The most significant are those which connect Novi Sad with Sombor, through Bački Petrovac and Odžak, as well as the Novi Sad – Vrbas – Kula – Sombor regional road. The Special Nature Reserve is connected to international route E-75 through several different roads.

This area also includes three border crossings, two into Croatia (Bezdan and Bogojevo) and one into Hungary (Bački Breg).



Map 1 Geographic Location and Borders of the Special Nature Reserve Gornje Podunavlje

The location of the Special Nature Reserve Gornje Podunavlje, bordering with the Kopački Rit Nature Park (Croatia) and the Danube-Drava National Park (Hungary), is of special importance for the protection of nature and the potential development of tourism. These protected areas are a part of a unique natural region of floodplains which is one of the largest in Europe and because of this its significance is indisputable. Activities related to the protection of the UNESCO Transboundary Biosphere Reserve Mura-Drava-Danube (TBR MDD), which

would encompass all three protected areas with their extended surroundings, began with the declaration of the status of Biosphere Reserve in Croatia and Hungary. International statuses for protection of nature make attractive destinations for tourists, both due to the natural and cultural potential, as well as the significance of those statuses in forming an overall image.

3.2. Protection of Gornje Podunavlje and the Status of Planning Documentation

Gornje Podunavlje is protected as a Category I natural resource. Protection of the area and its natural resources dates back to 1955 when the Bureau for the Protection of Nature passed the resolution on the protection of the Monoštor Forests as they were habitats for the White-tailed Eagle and Black Stork. Eight years later, the Municipality of Sombor passed the decision to place portions of mixed stands of poplars, white poplars, willows and other types of trees in the area of the Monoštor swamp (600 hectares) under protection as a strict nature reserve. The municipality also, at the proposal of the Provincial Bureau for the Protection of Nature, passed the decision on the protection of the Monoštor Forests as a strict nature reserve (74.93 hectares). Parallel with that, 6.06 hectares of forest were protected as a natural landmark. In 1987, the Municipality of Apatin placed the Bestrement area (9.63 hectares) under protection as a reserve for maintaining the stock of rare and endangered plant and animal species.

Based on the opinion of researchers from the Provincial Bureau for the Protection of Nature, the Municipalities of Sombor and Apatin passed the decision on the formation of the Regional Park Gornje Podunavlje in 1982. Following extensive research and fieldwork in 2001, Gornje Podunavlje was declared a special nature reserve.

Gornje Podunavlje has been recognized with several international protection statuses. Due its well known ornithological value, this natural resource under the name of “Gornje Podunavlje or Monoštor”, was registered as an Important Bird Area (IBA) in 1989. In 2007 it was designated as a Ramsar Site. Gornje Podunavlje was registered as an Important Plant Area in 2007. In September 2013, Gornje Podunavlje was nominated together with the surrounding areas as the UNESCO Transboundary Biosphere Reserve Mura-Drava-Danube (TBR MDD). Finally, the Special Nature Reserve is a part of the European Green Belt. The European Green Belt is a pan-European initiative that encompasses 22 countries with the purpose of creating an ecological network along the former Iron Curtain which emphasizes the importance of connecting biodiversity conservation and sustainable rural development. The goal of the European Green Belt is to integrate the needs of the local community and nature conservation through cross-border cooperation. Furthermore, the European Green Belt unites the countries of Europe including those that are members of the European Union, those that are candidates and those that are neither.

The Special Nature Reserve Gornje Podunavlje, since its designation in July 2001, has been managed by PE Vojvodinašume from Petrovaradin. For the purpose of ensuring its long term preservation and protection, a ten-year management plan and annual management programs have been developed which detail the following activities of the manager:

- drafting of planning documentation;
- maintaining, overseeing and monitoring the condition of the nature reserve;
- working in cooperation with beneficiaries and interest groups;
- protection and preservation of natural resources;
- protective measures and utilization of natural resources;
- development activities;
- scientific research activities;
- cultural, educational, tourist and recreational activities;
- project activities;
- organizing and equipping the area with infrastructure;
- international cooperation.

The documents and plans related to conservation and the use of the resources of this area for tourism are as follows:

- Tourism Development Strategy of the Republic of Serbia, Horwath Consulting – Zagreb, Faculty of Economics – Belgrade, 2005, 2006.
- Vojvodina Tourism Marketing Strategy, Secretariat for Commerce, Autonomous Province of Vojvodina, Novi Sad, 2009.
- Feasibility Study for the Development of Ecotourism in Protected Natural Resources, with special consideration of Ramsar Sites, Department for Geography, Tourism and Hotel Management, Provincial Secretariat for Environmental Protection and Sustainable Development, Novi Sad, 2011.-
- Master Plan for the Tourist destination Gornje Podunavlje, Scientific Research Center, Faculty of Economics, Belgrade, 2007.
- Regulation on the Protection of the Special Nature Reserve “Gornje Podunavlje”, Official Gazette of the Republic of Serbia, No. 45, 2001.
- Spatial Plan of the Republic of Serbia 2010 – 2014 – 2021, Ministry of the Environment and Spatial Planning, Republic Agency for Spatial Planning, Belgrade 2010.
- Regional Spatial Plan of the Autonomous Province of Vojvodina until 2020, Bureau for Urbanism of Vojvodina, Novi Sad, 2012.
- Spatial Plan of the Special Purpose Area Special Nature Reserve Gornje Podunavlje, Bureau for Urbanism of Vojvodina, Novi Sad, 2012.

Confirmation of the support for development of tourism can also be found in a number of projects realized during the past several years in this area. Some of the more significant ones include:

- Culture and Nature for a Higher Quality of Life – a comparative analysis of the legal and regulatory framework related to the area of tourism, IPA – cross-border cooperation with

Hungary, the Agency for Development of Small and Medium Enterprises – Town of Sombor, 2006;

- Placement of tourist signs in Sombor, Provincial Secretariat for Commerce, Municipality of Sombor, 2007;
- Tradition for the Future – rural tourism (project goals are social and cultural development of Baranja in Croatia and Bačka in Serbia, as well as sustainable management of the natural and cultural resources through the development of rural tourism), IPA – cross-border cooperation with Croatia, Municipality of Apatin, 2011 – 2013.

3.3. Natural Characteristics of the Special Nature Reserve Gornje Podunavlje

The natural region of the Special Nature Reserve Gornje Podunavlje at its core, represents a well-preserved floodplain that runs along the bank of the Danube. This protected area encompasses Apatin swamp, Monoštor swamp and Karapandža. The value of the ecosystems of Gornje Podunavlje is reflected in the fact that they represent one of the few preserved natural regions in the primarily agrarian environment of West Bačka.



Figure 1 Apatin swamp in the southern part of the Special Nature Reserve Gornje Podunavlje
Photo: L. Lazić

The Special Nature Reserve extends over loess terraces and an alluvial plain. The loess terraces are less prevalent in the Štrbac forest. The geological composition consists primarily of diluvial drylands, swamp, and overlying loess deposits. The average elevation is around 90 m.

The alluvial plain is 3-4 m lower than the relief unit in which the geological composition consist primarily of overlying loess, sand, alluvial gravel, sands, clays and mud. The microrelief of this unit is exceptionally dynamic with the remains of old waterways, as well as hills and depressions along the banks. Together they represent a significant part of the local geological heritage.



Figure 2 Autochthonous marsh forest under the flood wave of the Danube
Photo: V. Stojanović

The area has a continental climate with warm summers and cold winters. According to the multi-year averages from the nearby meteorological station, the lowest temperatures are recorded in January (-1.6ºC), and the highest are in July (21.1ºC). The average annual air temperature is 10.7ºC. The weather in Gornje Podunavlje is especially pleasant during the spring, autumn and summer months.

The hydrological characteristics represent one of the fundamental natural phenomena of Gornje Podunavlje. The Danube provides the entire region with its fundamental traits. The high waters during regular annual flooding are of great importance to the entire Special Nature Reserve and especially for the ecosystems of Apatin swamp. The Special Nature Reserve has a large number of meanders resulting from the complex hydrological activity of the large river. The most significant are: Bajski Canal, Baračka, Monoštorski Dunavac, Petreški Dunavac, Srebrnički and Staklarski Dunavac. The Plazović River flows through the northeastern part of the Special Nature Reserve, through the Štrbac Forest, where it features important ecological and aesthetic attributes. Lastly, the large number of lakes and swamps give Gornje Podunavlje, in the hydrological sense, its final regional form. The recreational and touristic significance of these

hydrological characteristics have been confirmed numerous times. These are considered the favorite locations of numerous hikers, fishermen, hunters, athletes and, more recently, ecotourists.

The intertwined wetland, swamp, meadow and forest ecosystems contribute to the building of a significant mosaic of various vegetation forms. Within the exceptional floral richness, the dendroflora has the most significant influence because half of the total area of the Reserve is covered in forest. The most significant species are the English oak (*Quercus robur*), white poplar (*Populus alba*), black poplar (*Populus nigra*), white willow (*Salix alba*), narrow leaved ash (*Fraxinus angustifolia*) and the European white elm (*Ulmus laevis*). These forests are also known as marsh forests and represent important autochthonous forest communities. Individually, the following species of flora should be mentioned and highlighted: water violet (*Hottonia palustris*), mare's tail (*Hippuris vulgaris*), winter aconite (*Eranthis hyemalis*), blue iris (*Iris spuria*) and the greater spearwort (*Ranunculus lingua*).



Figure 3 Red deer *(Cervus elaphus)*
Photo: J. Pap

The characteristic flora and vegetation play a major role in creating good conditions to support the life of a large number of animal species. Chief among them are: the red deer (*Cervus elaphus*), wild boar (*Sus scrofa*), white-tailed eagle (*Haliaeetus albicila*) and black stork (*Ciconia nigra*). With the richness of the water and numerous water surfaces, the ichthyofauna is also quite diverse. In the past, the wildlife have been utilized in the development of hunting tourism, for which Gornje Podunavlje is well known, as well as sport fishing which has yet to

reach an optimal level of development as a segment of tourism. The utilization of wildlife for the purpose of developing ecotourism is still in its inception.

3.4. Social Characteristics in the Surroundings of the Special Nature Reserve Gornje Podunavlje

In the surroundings of the Special Nature Reserve there are nine settlements of which seven are villages and two are towns. The village settlements are Bački Breg, Kolut, Bezdan, Bački Monoštor, Kupusina, Sonta, and Svilojevo. The two towns are Sombor and Apatin.

There are a total of 83,111 residents living in the villages and towns around the Special Nature Reserve Gornje Podunavlje. Depopulation, like in other areas of Serbia, is a fundamental demographic problem. The number of residents in the settlements around Gornje Podunavlje is falling. The ethnic structure of the population is quite diverse and is one of the primary demographic and cultural characteristics of this region. In this area there are around 20 separate peoples and ethnic groups. The largest in numbers are Serbs, Hungarians and Croats. The ethnic diversity is the result of a number of colonizations which took place in this area during the past several centuries depending on the changing rulers and national borders.

Table 1 Changes in the number of residents in settlements around the Special Nature Reserve Gornje Podunavlje

	1948	1953	1961	1971	1981	1991	2002	2011
Bački Breg	2 ,244	2 ,218	2 ,045	2 ,006	1 ,770	1 ,585	1 ,388	1 ,140
Kolut	2 ,927	2 ,877	2 ,597	2 ,148	1 ,866	1 ,710	1 ,710	1 ,327
Bezdan	6 ,691	6 ,681	6 ,813	6 ,427	6 ,085	5 ,472	5 ,263	4 ,623
Bački Monoštor	4 ,555	4 ,636	4 ,560	4 ,590	4 ,432	4 ,205	3 ,920	3 ,485
Kupusina	3 ,200	3 ,146	3 ,133	3 ,036	2 ,694	2 ,500	2 ,356	1 ,952
Svilojevo	1 ,750	1 ,917	1 ,785	1 ,667	1 ,490	1 ,278	1 ,364	1 ,219
Sonta	7 ,181	6 ,981	6 ,821	6 ,508	6 ,313	5 ,990	4 ,992	4 ,331
Apatin	13 ,195	14 ,465	17 ,191	17 ,565	18 ,320	18 ,389	19 ,320	17 ,411
Sombor	33 ,613	33 ,632	37 ,760	44 ,100	48 ,454	48 ,993	51 ,471	47 ,623
Total	75 ,356	76 ,553	82 ,705	88 ,047	91 ,424	90 ,122	91 ,784	83 ,111

Village settlements began to take shape after the colonization during the mid-18th century. They were built up mainly according to the orthogonal principle in which street intersect at a right angle. Even today, examples of the traditional architecture have been preserved in which two types of houses are dominant. The first type follows along with the depth of the yard (so-called house in a ditch), and with the second type the front faces the street (so-called house along the road). Decoration of facades follows along with the cultural and artistic trends of the times in which they emerged (baroque, classicism, secession…). Valuable examples of folklore

architectures are still preserved in a number of villages. The following villages particularly stand out: Bački Breg, Bezdan, Bački Monoštor, Kupusina and Sonta.



Figure 4 Traditional construction in villages around the Reserve Gornje Podunavlje
Photo: L. Lazić

In Sombor, as the largest town in this region, the heritage of civil society is quite noticeable. The morphology of the downtown area is quite specific when compared to other towns in the area. The old town was held within a four-walled fortress surrounded by a trench. During the 18th century, when the strategic position of the location lost its importance, the trench was filled in and in its place four large roads were built – the so-called wreath. Still today they surround the heart of the old town. The most important architectural features of Apatin are concentrated in the main street. They were once mostly private houses inhabited by residents of Apatin in the past, and as such living in this street was considered a status symbol. The clinker bricks used to build many of the houses were also used in the construction of numerous buildings in Budapest and Vienna, which speaks to its quality and the fact that Apatin was once a center of commerce.

In the villages around the Special Nature Reserve, there are 41 protected cultural landmarks of exceptional, great and general significance. The cultural self-awareness of the local population is reflected in the opening of ethno-houses in Bezdan, Bački Monoštor, Kupusina and Sonta, with the primary task of nurturing traditional culture and customs. Almost all of the villages hold local festivals and events. Some have even been celebrated for several decades (e.g. the Grape Ball in Sonta). Within the Reserve itself and in the surrounding areas, there is a large

number of monuments to the technological culture which documents the management of water throughout the entire region.

3.5. Economic Characteristics and Employment of the Local Population

One of the greatest problems in the region is the lack of commercial and economic activity, especially when compared to the parameters and indicators from the 1980s before the wars and conflicts that took place throughout the former Yugoslavia. The economic conditions are also made worse by the high percentage of unemployment.

The dominant commercial activities in the region are agriculture and industry. The largest number of people are employed within these sectors. Agriculture has thrived thanks to the Chernozem which is one of the most fertile soils in this part of Europe. The most common cultivated crops are: wheat, corn, sunflowers and sugar beets. Farming is much better organized than animal husbandry which is mostly of an extensive character and occurs along the embankments of the Danube in select marshes. Among the numerous canals and distributaries lie the remains of former agricultural-economic farms (e.g. the large farm near Sonta). Under the conditions of a socialist economy, they were giants. Now, they have very little significance at all. Animal husbandry is much less developed than farming and in the past 20 years the share of this branch within the total agricultural production has fallen significantly. Many farms were shuttered during that period.

The massive agricultural potential could be transformed into a concept of sustainable agriculture, which would improve the quality of the environment and satisfy the demand for healthy food. With this in mind, the river deposits, which traditionally provide a successful harvest of fruits and vegetables (e.g. around the village of Kupusina), are especially important. The marsh areas, especially in the alluvial terrace, have great importance in the development of animal husbandry. Animal husbandry, through the details from the traditional way of life, can also be presented to tourists, for example, in the marshes around Sonta, Sviljovo and Sombor. The opportunity for development in agriculture, regardless of whether it involves small farms or large corporations, must be equal for everyone.

The largest industrial centers are Sombor and Apatin. During the period of transition, many enterprises which were once large companies within the socialist economy were shuttered. Some others survived, but under the conditions of transformation, ownership changed from public hands to private.

The primary conditions for economic and social development in this area must be the protection of nature, primarily through the preservation of the flood plains and the flooding regime in the Apatin and Monoštor swamps, and then through the preservation of important marshes in the alluvial plain of the Danube and on the loess terrace. Proper management of the entire area could provide new possibilities for the local population through sustainable development of tourism and agriculture. That process should include all stakeholders, including the manager of the protected area, the local and regional government, agricultural producers,

tourist organizations, the non-government sector and others. Some agricultural products could also be successfully marketed through the development of tourism (e.g. grains, honey from Gornje Podunavlje, Sombor cheese…).

3.6. Analysis and Valorization of Tourism Potentials

The natural tourism potentials are linked to the fact that Gornje Podunavlje is one of the few remaining and well preserved floodplains along the banks of the Danube. The basic tourism potentials are related to the hydrological characteristics and biodiversity of this region. The recreational characteristics of the region have been used by the local population for decades. Now it is necessary for this potential to be linked with the extended contractive zone.

Table 2 Natural Tourism Potentials of Gornje Podunavlje

Relief	Climate	Hydrography	Plant and Wildlife
Micro relief forms contribute to a dynamic region, but their real value to tourism can be viewed through the diverse plant and wildlife.	Represents an important prerequisite for taking part in tourism activities, but is not a tourism potential.	Of great importance for the development of tourism and one of the most significant potentials of Gornje Podunavlje. *Key resources:* Danube, Bajski Canal, Baračka, Veliki Bački Canal, Plazović, Monoštorki Dunavac, Kupusinski Dunavac.	An essential phenomenon of Gornje Podunavlje of crucial importance for the development of tourism. *Key resources:* Large game, ornithofauna, ichthyofauna, forest ecosystems, wetland meadows.
Assessment: *	Assessment: *	Assessment: ***	Assessment: ***

*important ** very importance *** of exceptional importance

Wetland habitats have attracted people since the earliest times because they are suitable for settlement and for supporting life. Human settlements in the area around the Special Nature Reserve have been found to exist as early as the Neolithic Era. Numerous peoples, cultures and states have risen and fallen in this area leaving behind an exception cultural footprint which in the sense of tourism is of great significance. This, above all, can be found in the village settlements with their valuable folklore heritage and local culture, the primary characteristic of which is multiculturalism.

Table 3 Cultural Tourism Potentials of Gornje Podunavlje

Ambient Units	Cultural Landmarks	Technological Cultural Structures	Folklore and Non-material Heritage
Parts of village settlements still possess original characteristics of significant importance for the ethnographic architecture of this region. Individual streets in Bački Breg, Bezdan, Bački Monoštor, Kupusina and Sonta are of special interest. The heart of the town of Sombor is surrounded by a wreath made up of four streets. It is enriched by the architectural heritage from various time periods in the style of baroque, classicism, eclectic, secession and modern. The main street in Apatin is an ambient unit consisting of houses of well-off residents. Its characteristics have preserved the identity of the town.	In the villages around the Reserve there are 41 protected cultural landmarks. Orthodox Christian and Roman Catholic churches with historical, artistic and spiritual significance for the residents that built them are of special importance. Most cultural landmarks are located in Sombor and Apatin. This list contains the houses of well-off residents, administrative buildings, churches and sacral monuments.	In several locations throughout the Reserve and in the surrounding areas there are important hydrotechnical structures which provide a record of the multi-century tendency towards water management and controlling waterways (Šebešfok and Kenđija near Bezdan, Mostonga near Sombor, Kupusina Station)	Multiculturalism in the region is reflected in the unique diversity of folklore. Hungarian, Croatian and Serbian folklore are especially visible. Ethno houses signify the presence of traditional culture and art. Of great importance for the local communities are the local festivals and events (Bodrog Fest in Bački Monoštor, Grape Ball in Sonta, Fisherman Nights in Apatin).
Assessment: **	Assessment: **	Assessment: *	Assessment: ***

*important ** of great importance *** of significantly great importance

3.7. Lodging and Accommodations

Accommodation capacities for tourism in the Special Nature Reserve and within its direct vicinity follow the dynamic and trends of tourism development of the entire region. Up until ten

years ago, the typical and only type of accommodations were hotels in the town of the region (Sombor and Apatin). Following the designation as a Special Nature Reserve and a number of educational activities and development programs for rural and ecotourism, the trend towards renting out rooms and lodging in village households began to emerge. In recent times there has been talk of renting out weekend cabins both in the Reserve and in its surrounding areas. This has helped to make this natural region much more accessible to visitors with less income.



Figure 5 Rural Tourism Household in Bački Monoštor
Photo: V. Stojanović

Currently, hotels and pensions are located exclusively within the towns. In Sombor there is the Hotel Andrić, as well as several villas which are structured as hotel lodging (Kronić, Beli Dvor, Tamara). In Apatin there is the Banja Junaković Pension, as well as the Čarda Zlatna Kruna Inn. Lodging primarily intended for mariners is provided within the Apatin Marina. Near Sombor there is lodging with a unique old farm ambient which depicts the tradition of past times (Dida Hornjak Farm). Lodging in rural tourism households is available in Bački Monoštor. Information about this type of lodging is also provided by the Tourism Info Center in Bački Monoštor. Weekend cabins can be rented out in attractive natural locations (Kenđija, Opaljenik). Within the borders of the Special Nature Reserve, lodging is available in hunting cabins on the Kozara hunting grounds and in Apatin swamp. Right on the border of the Special Nature Reserve, not far from Apatin, Camp Budžak has been set up which also provides lodging from April until October (Table 3).

Table 4 Structure of Lodging Capacities in the Special Nature Reserve Gornje Podunavlje and its Surrounding Areas

Area	Type of Lodging	Number of Structures	Number of Rooms	Number of Beds	Market Segment
Special Nature Reserve Gornje Podunavlje	Hotels	-	-	-	-
	Pensions	-	-	-	-
	Village Households	-	-	-	-
	Farms	-	-	-	-
	Hunting Cabins	2	12	23	Hunters
	Campgrounds	-	-	-	-
	Marinas	-	-	-	-
Town of Sombor (area outside of the Special Nature Reserve)	Hotels	1	12	27	Business people
	Pensions	7	80	209	Business people, foreign tourists, domestic tourists
	Village Households	7	20	40	Couples, families with children
	Farms	1	3	6	Couples, families with children
	Hunting Cabins	-	-	-	Hunters
	Campgrounds	1	-	60	Students, couples with children
	Marinas	-	-	-	-
Municipality of Apatin (area outside of the Special Nature Reserve)	Hotels	-	-	-	-
	Pensions	5	161	333	Business people, foreign tourists, domestic tourists
	Village Households	2	5	13	Couples, families with children
	Farms	1	3	5	Couples, families with children
	Hunting Cabins	-	-	-	Hunters
	Campgrounds	1	-	-	Couples with children, special interest groups (bicyclists)
	Marinas	1	8	16	Mariners
Total		29	304	732	-

3.8. Segments of Tourism and Tourism Activities

Based on the analysis of the aforementioned potentials, it has been determined that there is an opportunity for the development of tourism in the following areas:

1. Ecotourism
2. Rural tourism
3. Cultural tourism in towns
4. Fishing and hunting
5. Excursions and field trips
6. Sports and recreation tourism
7. Spa tourism
8. Gastronomy

Table 5 Order of Priorities for Segments of Tourism

Ecotourism	***
Rural tourism	***
Cultural tourism in towns	**
Fishing and hunting	**
Excursions and field trips	***
Sports and recreation tourism	*
Spa tourism	*
Gastronomy	***

*medium; **high; ***exceptionally high

Ecotourism – The floodplain of the Apatin swamp, with the distributaries of the Monoštor swamp and Karapandža, represents one of the primary potentials for the development of tourism in Vojvodina and Serbia. Here one can see the opportunity in developing a number of thematic educational-ecological routes dedicated to the study of nature and its conservation, which is already the case. The Karapandža educational trail covers runs through the Karapandža area and extends for three kilometers. It is equipped with educational signs and rest areas. The Štrbac educational trail is two kilometers long and presents the diversity of its ecosystems. It is equipped with informational signs and an observation post at the Šarkanj swamp. The Bestrement educational trail is three kilometers long and passes through ecologically rich habitats of this part of the Apatin swamp. These trails are visited by 500 tourists annually and that is far below their potential capacity for tourists. Typically, visitors are university students, primary and secondary school students and couples enjoying the nature.



Figure 6 Ecotourism on the Štrbac Educational Trail
Photo: V. Stojanović

The most common tourism activities include: observing nature, studying important ecosystems and habitats, studies on vegetation, birdwatching, observing wildlife and participating in volunteer camps.

In order to improve this segment of tourism, it is necessary to renovate the existing structures of the ranger's cottage at Karapandža in the visitors center, which is already underway. The location of Štrbac has much more potential than what has been utilized up until now. For example, a new ecological-tourism trail should be developed around the revitalized Sakadoš swamp. Finally, the tourism advertising program should be improved and a new image must be created.

Rural tourism – Village settlements in hinterland of the Special Nature Reserve have a good disposition for the development of rural tourism. Similar offerings are already available in Bački Monoštor. Annually, this village is visited by 300 tourists who are interested exclusively in rural tourism. The preserved architectural-ethnographic units, traditional customs and special events represent a good foundation for this segment of tourism. The tourism value of villages is also found in the potentials provided by the natural environment. An especially attractive form of tourism can be found on the farms outside of Sombor and a good example of well organized ethno and rural tourism is the Dida Hornjak Farm which provides visitors with delicious gastronomic offerings.

An important component of rural tourism is the special events and festivals held in villages. Bački Monoštor organizes the Bodrog Fest which openly supports the protection of the

Special Nature Reserve Gornje Podunavlje. Mika's Days in Bački Breg are dedicated to tamburica music and the legendary musician Mika Ivošev Kuzma. The Grape Ball has been held in Sonta since 1928. It is the most significant village cultural event during the entire year and is well known for the wedding of the duke and duchess where a traditional Šokac wedding is presented. Each year the event is visited by around 300 people.

However, the general assessment is that rural tourism is still in its infancy. There is a lack of quality lodging, the population is insufficiently educated in the business of rural tourism and there is a low degree of inclusion of accompanying resources (e.g. cultural landmarks, natural resources, lack of thematic cultural trails).

Cultural Tourism in Towns – Sombor and Apatin have a long tradition of civil society. Sombor was the administrative center of the former Bačko-Bodoroške District, and thanks to that function as well as the enterprising nature of its residents, it left a visible mark on the culture of the extended Bačka area. The history of Apatin is most closely linked with the colonization of Germans. Since the 18th century, the town has developed as a center for various vocations and then as a center for industry. The main street in the town is a good example of the small town architecture at the end of the 19th and beginning of the 20th century.



Figure 7 Special Tourism Event Sombor Kettle in Sombor
Photo: L. Lazić

When staying in Sombor, tourists most often visit the building of the former District Officer in which paintings of the Battle at Senta are on display, the largest oil paintings on canvas in the country. Museums and galleries attract a large number of visitors who decide to come to Sombor. Among them are some of the most important cultural institutions in Serbia.

Among them are the Milan Konjović Gallery, Sava Stojkov Gallery in Preparandija and the Sombor Town Museum. The offering is rounded out with guided tours, informational centers, souvenir shops and special tourist events.

Apatin holds the Fisherman Nights which is one of the most well known tourist events in Serbia. Within the framework of that event, the town holds a number of sports competitions and cultural programs. The Sombor Kettle draws around 2,000 visitors each July who cook stew in the town square with a rich program of entertainment.

Fishing and Hunting – Gornje Podunavlje is traditionally known as a destination for hunting tourism. This segment of tourism is at a much higher level compared to the others and the one in which the most has been invested up until now. The results were most visible up until the crisis in the 1990s. The hunting cabins in Gornje Podunavlje are visited by 180 hunters annually who collectively stay for a total of 650 nights.

Fishing is considered a recreational activity by the local population, but until now it has not ranked high as a serious area for tourism. There are several fishing points all along the Danube and its distributaries.

Excursions and Field Trips – Excursions completely reveal a destination's potential to tourists. The large concentration of natural and cultural potential allows the tourism organizers of Gornje Podunavlje to organize these types of tourism programs. Furthermore, Gornje Podunavlje could be included as a part of multi-destination trips on the regional and national level. The themes of these trips could be quite diverse (protected areas, folklore of the plains, unique gastronomy, architectural heritage).

One-day tours of the main natural and cultural attractions (natural locations, ethno houses, village households) are common. Most often the groups come from Belgrade and Novi Sad. In the future, greater focus should be placed on developing an advertising campaign for multi-day excursions and expansion of the contractive zone.

Sports and Recreation Tourism – Preserved nature and a healthy environment will help with the development of sports tourism in Gornje Podunavlje in the areas (embankments, distributaries, lakes, forest trails) which differ greatly from the environments encountered by tourists in the everyday lives. The typical tourism activities include: utilizing various sports facilities and equipment, schools for various disciplines in sports, competitions, tournaments, recreational sporting activities, youth sports education.

This segment of tourism has been invested in the least and its output is small. Several locations in the region are suitable for development of sports tourism, including: locations under Class III protection and outside of the Special Nature Reserve – embankments, shoreline of distributaries, shoreline of the Danube, shoreline of the Great Bački Canal, Apatin, Sombor.

Spa Tourism (Health/Wellness) – Health tourism would provide tourists with the opportunity to receive the proper therapy according to the health problems, while wellness programs would provide tourists with the opportunity to maintain their good health. These types of programs and segments of tourism could significantly improve the final image of tourism in Gornje Podunavlje. Services from this segment of tourism have until now been provided in

Banja Junaković. The most common activities include: health services, professional services on a daily basis, fitness, use of thermal mineral pools, wellness services in hotels.

Unfortunately, this segment of tourism is often reduced down to just "healing tourism", so the statistics on the number of "tourists" was unrealistic, despite the excellent potential.

Gastronomy – Gastronomy serves as form of support for the aforementioned segments of tourism. It is an integral component of what makes Vojvodina well known. The richness of the culinary skill is an important component of the culture and tourism for all of Vojvodina as well as the Gornje Podunavlje region. A special trait of the gastronomy of this region is the aforementioned multiculturalism because it has been influenced by Serbian, Šokac, Hungarian and German cuisine.

The gastronomic offering is readily available to tourist taking part in rural tourism in Bački Monoštor and on farms. One can sample traditional specialties which are not available in other regions, including: guineafowl soup, dumplings, ravioli, strudel… One of the best examples of gastronomy can be found at the Dida Hornjak Farm near Sombor.

One of the unique traits of Gornje Podunavlje is the huts along the Danube and its distributaries. Just along the Danube there are around ten. They offer fish specialties, including: spicy fish stew, fish stew with homemade noodles, pike pörkölt, fried perch… Along with domestic guests, visitors to these restaurants also include Croats and Hungarians.

As a special offering, in the future there should be festivals and thematic days dedicated to specific agricultural products or traditional food for the purpose of enriching the overall tourism offering. Trails inspired by gastronomic flavors represent a great potential. This type of offering could be established for the local huts and farms.

3.9. Influence of Tourism on the Environment

The area within the borders of the Special Nature Reserve Gornje Podunavlje and its surrounding areas have been under the influence of humans and their activities for centuries. Agriculture, as one of the oldest activities, results in the clearing of native ecosystems and transforming them into cultivated surfaces. In recent times, the significant pressure in this area has resulted in land reclamation and regulation of waterways. The draining of wetland habitats was especially prevalent in the Monoštor Swamp, but also in other areas where due to the rising of the embankment, the entire marsh area was untouched by the flood wave of the Danube. The regulation of flow of the Danube was especially common at the beginning of the 20th century for the purpose of regulating ship routes.

If considered from the perspective of tourism development, then one can conclude that the influence of these activities on the ecosystems is almost nonexistent. Tourism as an activity in Gornje Podunavlje is still in its infancy. The number of tourists and their activities do not put nature in jeopardy. The especially relates to the parts of the Special Nature Reserve which are most attractive to tourists (Karapandža, Štrbac, Apatin Swamp) and which are fenced in, so movement around the Reserve is not possible without the presence of employees. There is a

somewhat greater influence in the zone of weekend settlements (greater freedom of movement, motor vehicles, boats…). Here the people (hikers and recreationalists) are present in greater numbers and their movements are difficult to monitor and as such a greater amount of negligence has been observed in the form of garbage being deposited along the banks of the river. Unfortunately, negligence in the form of unauthorized disposal of trash has also been observed in the fishing areas.

3.10. Managing Tourism Activities

The content of the tourism offering, considering the spatial undertaking of this Strategy, could be divided into two groups, those being: (a) the Special Nature Reserve and (b) its surrounding areas, primarily the inhabited areas.

The Town of Sombor and the Municipality of Apatin have established tourist organizations tasked with organizing and promoting tourism. Both make significant reference to the Special Nature Reserve Gornje Podunavlje, its resources and the content that it offers as a destination. The tourist organization within the Special Nature Reserve itself is in large part under the influence and control of the manager of the protected area (Vojvodinašume). This institution has developed tourism activities and programs which are offered and promoted through its website. Additionally, the job of being a guide and organizing tourist walks along educational trails is responsibility of the manager of the protected area. Two of three such locations are fenced in (Karapandža and Bestrement), so unauthorized movement in these areas is limited, while in one (Štrbac), movement is allowed only when accompanied by a guide which is indicated on the informational signs at the entry to this part of the Special Nature Reserve. In this manner, the control of visitors is under the strict supervision of the manager and that being in the ecologically very sensitive areas.

The basic tourism offerings in the Special Nature Reserve include the previously mentioned educational trails and hunting cabins as well as the Kozara hunting camp and the Apatin Swamp. These areas are primarily located within the fenced in area of the Special Nature Reserve. There are also the fishing areas, huts (restaurants), weekend cabins and weekend settlements. The most popular fishing areas in West Bačka are located in the Special Nature Reserve Gornje Podunavlje. Here protective measures have been implemented for the fishing area which prevent unwanted pressure on the ecosystem. As a special type of hospitality offering with a recognizable cuisine, huts are opened primarily outside of inhabited areas, along roads and often in the vicinity of the river. Most of these facilities operate around Bezdan, Kupusina and Apatin. Weekend cabins and weekend settlements have been constructed so people can spend their free time outside of their regular environments. In the past, these structures were built in several locations. Weekend settlements are primarily located on the banks of the river, distributaries and canals. They are primarily found in the northern part of the Special Nature Reserve. The largest settlements are around Bezdan – Baračka and on the Bajski Canal – Kenđija. On the section along the Danube between Bezdan and Apatin, there are also several

more of these settlements (Daraži Fok, Vagoni). Finally, bicycle paths along the Danube round out the offering within the Reserve (EuroVelo 6).



Figure 8 Sombor and Apatin, as important towns in West Bačka, have an important place within the tourism offering of Gornje Podunavlje, but are also important from the perspective of tourism management.
Photo: V. Stojanović

In the surrounding settlements, as a segment of the offering, there are also museums, galleries, special events and hotel accommodations. The tourism-informational centers provide all necessary information (Sombor, Apatin, Bački Monoštor). It is simpler to manage possible influences here because as a part of the tourist destination, this area is not ecologically sensitive.

4. MARKET

As a segment of tourism, ecotourism is often classified with other segments of tourism based on nature, including segments of alternative tourism. However, the International Society for Ecotourism composed a report in 2005 (with amendments in 2006) on the power of the global ecotourism market. Some of the trends indicated the following:

- Ecotourism/tourism based on nature grew three times faster in 2004 than global tourism observed as a whole (World Tourist organization, 2004);
- Tourism based on nature sees growth of 10% to 12% annually on the international market (European Commission, 2004);
- The mass tourism market is in the mature phase. In contrast to that, experiential tourism, which encompasses ecotourism, tourism based on nature and heritage, as well as cultural tourism, adventure tourism, rural tourism and tourism based on communities, falls into the sector for which very rapid growth is expected in the coming period (World Tourist organization, 2001);

- The United Nations Environment Programme (UNEP) and Conservation International have determined that the greatest expansion in tourism is occurring in or around the remaining global nature areas;
- Environmentally friendly tourism achieves 20% to 30% growth annually. That is a significantly higher rate of growth compared to tourism viewed as a whole, where the annual growth rate is 9% (ICUN, 2008).

In Europe, the following trends have been observed:

- 20% to 30% of tourists are aware of the need for and importance of sustainable tourism;
- 10% to 20% of tourists look for “green” options;
- 5% to 10% of tourists demand “green” vacations;
- In Germany, 65% of tourists (39 million people) expect ecological quality and 42% (25 million people) "think that it is especially important to find environmentally friendly accommodations".
- Around half of tourists in Great Britain indicated that they would likely travel with a "company that has a code of ethics that guarantees good working conditions, environmental protection and supports local benefaction in tourist destinations".

The Special Nature Reserve Gornje Podunavlje with its surrounding areas, according to the realized turnover, represents a tourist destination in its initial phase of development. The total number of tourists amounts to 16,000 annually. These tourists collectively stay for a total of 61,000 nights. From that number, just 180 hunting tourists stay within the territory of the Special Nature Reserve. The others mostly find their accommodations in Sombor and Apatin. Among them, most are domestic tourists.

What is the current situation in terms of the potential market for Gornje Podunavlje?

Of great significance in the initial phase of development of tourism is the potential of the domestic market and the analysis of the habits of potential domestic tourists. For the purposes of composing the “Feasibility Study for the Development of Ecotourism in the Protected Natural Resources of Vojvodina”, a research questionnaire was distributed during the period of January/February 2011 (electronically and in paper form). The sample was composed so that the polled individuals would include those of different genders, ages, levels of education and careers. The sample consisted of individuals from all parts of the Autonomous Province of Vojvodina.

Responding to the question of **whether they consider natural resources to be tourist destinations**, a large percentage, 87%, said that they did consider natural resources to be a destination for tourism. Only 8% of those polled felt that protected natural resources were not attractive tourist destinations and 5% of those polled did not have an opinion regarding this question. Viewed according to demographics, there were no differences noticed in the responses of those polled, meaning all demographics shared relatively the same opinions. Very positive results were obtained from the question *would you visit any protected natural resources*, where

99% gave a positive response and just 1% said they had no opinion. All demographics shared the same opinion.

During the polling, it was asked **which is the strongest resource due to which potential tourists would visit a protected natural resource**. Those polled were offered several resources which they evaluated on the basis of their affinity towards that resource. On the Likert scale from 1 to 5 all of those polled evaluated the strength of the resources and for each resource the mean value was calculated (arithmetic mean). The motives for visits ranged from 4.4 (highest value) to 3.2 (lowest value). The dominant resource for a visit was the relaxing atmosphere which is present in a protected natural resource, with a mean grade of 4.4. Next came scientific-educational motives (mean value 4.0), meaning the possibility of learning something about nature and its protection during a visit to such a destination and for such places to be utilized for the organization of field trips and excursions. Somewhat lower grades were received for the motive of enjoying oneself in nature (3.6) and the motive of untouched nature (3.5), while the possibility of one's stay contributing to the protection of nature and recreation as a motive came in last place (mean values of 3.3 and 3.2).

4.1. Harmonizing the Positions of the Local Population with the Market

One of the vital elements of ecotourism and tourism in protected areas is the inclusion of the local population and local communities. This type of tourism must be paired with the social and economic life of the community. The process should be carried out directly, through the distribution of earned incomes, employment and, most importantly, through the control of development.

Public opinion polls, seminars and educational programs, during which the positions of the local populations were recorded, were conducted several times over the past ten years in the region of Gornje Podunavlje. The most significant are:

- **Establishing ecotourism as a tool for improving transboundary management of the Lower Drava and Danube River confluence in Croatia, Hungary and Serbia-Montenegro, Blue Danube and WWF International – DCP, 2006.**
  During the realization of this project, educational programs were held and contact was made with the local communities in Bački Monoštor, Kupusina and Sonta.
- **Training employees in village tourism, Ministry of Trade, Tourism and Service and the Department for Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad, 2007.**
  The program was held in Bački Monoštor for the Vojvodina cluster and along with learning opportunities also encompassed the researching of the opinions of the local population regarding rural tourism. As a result of the project the notes for rural tourism were published.

- **SY_CULTour: Synergy of Culture and Tourism – using cultural potentials in less developed rural areas, Department for Geography, Tourism and Hotel Management; Faculty of Sciences, Novi Sad, 2011-2014.**
  During the realization of this project, two-day seminars and talks with representatives of the local population were held in July 2012 (Sombor) and March 2013 (Apatin).



Figure 9 Educating the Local Population in Bački Monoštor on Rural Tourism and Ecotourism
Photo: L. Lazić

The first public opinion polling of the local population was conducted in 2003 and 2004 in the settlements surrounding the Special Nature Reserve which led to the following indicators. More than 90% of the population feels that the rational use of natural resources can contribute to prosperity in an economic and wider societal sense. 60% of those polled feel that these types of areas have a strong potential for tourism, but that they are not sufficiently utilized. Regarding the question of whether they would, if the opportunity presented itself, be included in the tourism presentation of the Special Nature Reserve and its surrounding areas or enter the tourism business, 88% said they would.

The most recent polling and talks held in July 2012 and March 2013 confirm the willingness of the local population to get involved in rural and ecotourism. Of particular interest are activities and engagement of women's organizations in the area of making souvenirs, presentations of ethnographic values and the willingness to become more seriously involved in the tourism business.

5. SWOT ANALYSIS

Based on the analysis of the potentials and market, the strengths, weaknesses, opportunities and threats for ecotourism and the sustainable development of Gornje Podunavlje are presented in Table 3. The analysis of the area as a tourist destination is the result of meetings and talks within the working group of local stakeholders (Forum) who helped to form the analysis with their suggestions and proposals. The SWOT analysis is aimed at creating future solutions in the development of sustainable tourism and serves as a stimulus for rising out of the current situation in which this destination is still not properly formed as a location for tourism.

Table 6 SWOT analysis of the tourist destination Gornje Podunavlje

Strengths	**Weaknesses**
• Suitable geographic and border position (in accordance with the idea that bordering regions become more important tourist destinations). • Well connected to nearby traffic ways and settlements around the Special Nature Reserve, as well as to neighboring countries. • Well preserved and diverse nature (floodplains, forests, wetland meadows, marshes…). • Importance of plant and wildlife species for which this area is well known (English oak, white and black poplar, deer, white-tailed eagle, black stork). • Confirmation of the recreational and tourism potential of nature (water sports, fishing, hunting, ecotourism). • Original and preserved material and non-material heritage of local cultures. • Multiculturalism in the settlements which surround the Special Nature Reserve. • Hospitable population. • Rich gastronomic offering. • Thermal mineral pools (Junaković,	• Small extent of tourism development. • Lack of newly created tourism attractions and locations. • Lack of professionally shaped tourism products. • Lack of services content in attractive locations (visitors centers, non-accommodation spending). • Lack of docks and tie offs set up for tourism on rivers, canals and distributaries. • Insufficient recognition of Gornje Podunavlje as a tourist destination on the national and international market. • Lack of and insufficient quality of lodging capacities (in towns, villages, natural environment). • Small scope of tourism infrastructure, especially that which would be intended for alternative tourism (ecotourism). • Insufficient organization of village settlements for the needs of tourism development. • Unconvincing tourism marketing campaigns and insufficient representation in the media.

Bezdan). • International protection statuses (IBA, Ramsar, IPA, MaB currently in the process). • Determination of the manager (Vojvodinašume) to develop tourism and improve the tourism offering. • Construction and organization of a visitors center in Karapandža and Bestrement, as well as the transformation of neglected forest service buildings into facilities for tourism. • Catamaran for the development of tourism on the Bajski Canal. • Defined bicycle paths EuroVelo 6 and Pannonian Peace Trail. • Positive view of local population towards the environment. • Presence of municipal tourist organizations (Sombor and Apatin) which work on tourism development programs. • SNR Gornje Podunavlje website and the presentation of all its valuable attributes. • Tourism offering based on ecotourism (educational trails, thematic walks). • Adopted strategy for the development of tourism in the municipalities of Sombor and Apatin and the Spatial Plan for Special Purpose Areas. • Presence of the marina in Apatin as a guarantee for easier access to destinations from the river. • Support of agriculture (healthy food).	• Insufficient cooperation between all stakeholders (institutions for the protection of nature, tourist organizations, local citizens organizations, individuals). • Small and insufficient scope of financial resources intended for investing in tourism. • Lack of personnel in new segments of tourism and tourism activities (e.g. tourist guides in ecotourism). • Local population is poorly informed regarding conservation and tourism. • Lack of developed trade offering intended for tourists (souvenirs). • Manager of the Special Nature Reserve does not have a service of organizing tourism with employees educated in tourism management.
Opportunities	**Threats**
• Recreational tourism potential of the extended surroundings of Podunavlje	• Lagging behind more competitive destinations and losing the market.

and Vojvodina. • Determination of local, provincial and republic level authorities to protect this region as a special nature reserve. • Possibility of integration, creating a united protected area and tourist destination with the Kopački Rit Nature Park (Croatia) and the Dunav-Drava National Park (Hungary). • UNESCO Transboundary Biosphere Reserve Mura-Drava-Danube (TBR MDD). • Possibility of presenting old trades and traditional products (agricultural products, souvenirs). • New jobs and rise in the standard of living. • Shift in trends on the tourism market where alternative tourism becomes more important. • Connecting with professional organizations (bicyclists, photographers, ecological movements…). • Tourism as a factor in the protection of nature is gaining importance. • Good cooperation between the manager and institutions of higher learning and science. • Presence of agriculture as a traditional activity and the possibility of establishing a connection between ecology, agriculture and tourism. • Increase in the number of project in which tourism is recognized as an opportunity for the region and its surroundings. • Possibility of using experiences from other regions that have already	• Lack of financial support. • Devastation of the natural and cultural areas due to the development of commerce and the loss of space for development of tourism. • Poaching of animals and fish. • Lack of domestic and foreign investment in the field of developing sustainable ecotourism. • Economic crisis in which tourism is the first to experience negative consequences. • Corruption as a consequence of poverty and unregulated social relations. • Decreased growth and stagnation of the achieved turnover of tourists due to a crisis or other reasons. • Possible political tensions on the extended regional and international level. • High degree of unemployment and the trend of young and educated people moving away. • Poor legislation with a small degree of support for development of tourism, especially rural tourism.

navigated this part of the path towards development of tourism. • Starting negotiations with the European Union, considering the fact that the region lies on the border. • Use of pre-accession funds. • Activities in the non-government sector and contribution to the field of conservation and the development of tourism. • Unique promotions and tourism advertising campaigns. • Training individuals from the local community to work as tourist guides.	

6. STRATEGIC DIRECTIVES FOR FUTURE DEVELOPMENT OF TOURISM IN GORNJE PODUNAVLJE

6.1. Vision

The strategy for tourism in the Republic of Serbia acknowledges the central identity of Vojvodina with the slogan: “Watery treasure, a Pannonian pleasure”. This implies that its main tourism product is the rivers and lakes, and that as a cluster it is connected with nature. Through the form of personalization, Vojvodina is, among other things, an admirer of water, hospitable and creative. Its symbol is the Danube. The short analysis clearly indicates that the characteristics of Vojvodina as a tourist destination can be easily recognized in the area of Gornje Podunavlje. The vision should be built off of these bases.

Vision statement:

Gornje Podunavlje is a tourist destination in which nature and people live in harmony, where coexistence is based on the preservation of all plant and wildlife species, mutual respect, cooperation and ensuring a prosperous future for the local population.

6.2. Mission

Mission statement:

In the coming period it is necessary to work on making Gornje Podunavlje a recognizable tourist destination in which the goals of conservation and the development of tourism are harmonized and complimentary. The tourism offering of the Special Nature Reserve and the surrounding areas must recognizable, content rich and innovative tourism products with an emphasis placed on ecotourism and rural tourism. The activities of an active vacation in nature, learning about nature, enjoying nature and active participation in village life and events must especially be distinguished. The organization of the area as a tourist destination must be improved while the tourism signs should meet the needs of the tourists. Cooperation between the stakeholders must be at a high level and must function in the interest of the local communities

6.3. Image

Gornje Podunavlje still lacks the image of a tourist destination, despite significant advances which have been reached during the past ten years following the designation as a special nature reserve. The solution for building an image can be found in the excellent position of the entire region, the Danube Basin character, diversity of the ecosystems within a small area, as well as the multiculturalism and folklore of the local population. The persistent presentation of these potentials would help to better position Gornje Podunavlje on the tourism market. A tourism advertising campaign could and would have a significant role in presenting the new image. It must illustrate Gornje Podunavlje as small romantic destinations, organized for tourism with natural and cultural areas that tourists gladly return to.

Building the image of a tourist destination for Gornje Podunavlje will represent a serious task, because the destination is at the beginning of its tourism development and positioning. In order for the image to be formed, the area of Gornje Podunavlje should be seen and conceptualized as a tourist destination in which:

- nature, ecosystems and biodiversity represent the basis of the offering;
- cultural resources are adequately protected and through the forming of tourism guidebooks;
- the relaxing atmosphere creates the basis for enjoyment;
- the manager must take an active role in building the link between conservation and tourism;
- the local population must respect and protect nature and the environment of the destination (without wildlife and fish poaching, with a high level of knowledge of ecological and aesthetic attributes of the entire region) and in doing so send a clear message regarding the determination towards sustainable ecotourism;

- a high quality tourism offering (tourism products in which the interpretive value is on the level of the task, organized destination, tourist satisfaction), represents a guarantee based on which tourists will gladly return;
- tourism workers and entrepreneurs perform their job responsibly;
- the tourism business has understanding for environmental protection, including the protection of nature and cultural landmarks;
- the safety of tourists is not a question;
- tourism products are innovative, modern and in harmony with the capacities of the environment;
- the organization of the area corresponds to modern eco-destinations;
- the local population has to opportunity to use the content intended for tourists;
- tourism content corresponds to the demands and interests of various generations from the youngest to the oldest;
- tourism content can be adapted for individuals with special needs;
- hospitality and tourism facilities respect the norms of ecologically acceptable business practices, while their organization and aesthetic value preserve the traditions of the area, and
- finally, it is a destination in which, along with the previously recognizable tourism locations, has a location for discovering new similar areas for the purpose of achieving even and uniform development that does not put significant pressure on the ecosystems.

The primary foundations for building the new image of Gornje Podunavlje can be presented in the following manner:

- **Experience of Nature Based on Biodiversity** The importance of biodiversity in this relatively small area has been confirmed through a number of international protection statuses (IBA, IPA, Ramsar, MaB). Plants and wildlife, including entire ecosystems, allow for this area to be enjoyed in a different manner than other destinations in the extended surroundings.
- **The Danube – the main street of Europe.** The tourism experience linked to the Danube provides a number of possibilities through the development of sailing, sports, recreation and ecological-tourism research. The significance of the Danube to tourism is in the river's exceptional potential and as the main focus of the image it is present in numerous European regions. A component of this segment is the numerous canals and distributaries that are connected to the river.
- **Rural pastoral views, revealing multiculturalism.** At the center of this stage are the picturesque Bačka, Danube Basin villages between the distributaries and canals, with the specific physiognomy of baroque bell towers and small houses featuring traditional

architecture. Viewed integrally, the greatest cultural identity is contained in the presence of several peoples and ethnic groups.



Figure 10 Ethno Houses in Kupusina. Multiculturalism through the presentation of ethnographic heritage must remain the main focus of the image of Gornje Podunavlje
Foto: V. Stojanović

- Heritage and pictures of civil society. Towns rich in heritage and culture on various levels – architecture, cultural institutions, mentality... At the center of this stage are the stories of the events, families, well-off residents and famous personalities who give the enjoyment of the area a new sense.

6.4. **Selection of the Primary Strategic Bases**

The research that was conducted, along with the contact with the local population and institutions that are important for the protection of nature and development of tourism, led to several important strategic bases.

1. **The determination towards tourism in harmony with the environment:**
   Within the process of the development of tourism, which implies the introduction of new tourist locations, tourism products and offerings; all actors must be aware of the sensitivity of the ecosystems and nature in the Special Nature Reserve Gornje Podunavlje. A special approach must be taken to develop the institutions of the manager

as the specifically responsible for the concept of sustainable tourism. It is based on innovative tourism products, the use of the concept of carrying capacity, codes of ethics and monitoring (indicators of sustainable tourism).

2. **Determination towards tourism that the local population understands and participates in:**

A scenario in which the local population does not participate in or contribute to conservation management and the development of tourism does not meet the standard for sustainable development. The population of all seven village settlements and two towns must be included according to the principle of (1) interactive participation or (2) self-initiative and association. In the first case, the population takes part in joint analyses, development of an action plan and the creation of local organizations. In the second, the population takes action independent from external factors. External institutions are necessary only for obtaining advice.

3. **Cooperation of all stakeholders:**

This strategic basis is the key to success for the development of sustainable tourism. It is a process in which the manager of the protected area primarily cooperates with the representatives of the local population, tourist organizations and local authorities. Additionally, it is a process in which all actors share the joint vision for development of tourism and in which the problem of conflicting viewpoints will be resolved harmoniously.

4. **Integrated management of tourism at the level of the entire region:**

In the past, the Municipality of Apatin and the Town of Sombor mostly worked separately on the development of tourism. Considering that they are connected by the Special Nature Reserve Gornje Podunavlje, which is also their main tourist attraction, it is necessary to integrate tourism through joint management activities, advertising campaigns and monitoring. For this reason, it is important that the name Gornje Podunavlje be used for marketing the municipalities of Sombor and Apatin as tourist destinations. The management strategy should include the concept of public-private partnership.

5. **Linking with neighboring tourist destinations in Croatia and Hungary:**

The status of UNESCO Transboundary Biosphere Reserve Mura-Drava-Danube (TBR MDD), in addition to being significant for the protection of the nature on the banks of the

large river, is also important for the quality of the tourism offering. Linking with the protected areas and tourist destinations in neighboring countries opens new possibilities. The diversity of natural and cultural resources in that case is even greater and would allow the area to compete better on the European market than it could as small and divided protected areas.

6. **Well thought-out tourism development that is confirmed through the application of sustainability indicators:**

The application of indicators for sustainable tourism represents a guarantee for the sustainability of the destination Gornje Podunavlje. The indicators for sustainable tourism must be selected according to the type of destination and type of tourist activity. They must integrate the set of indicators for (1) destinations with natural areas and ecologically sensitive locations and (2) destinations with traditional local communities.

6.5. Integral goals

The integral goals of the development of tourism in Gornje Podunavlje include the preservation of natural resources and biodiversity, nurturing the cultural value of the villages and towns in the surrounding areas, optimal tourist satisfaction and benefits for tourism for the local population. In order to achieve this, it is necessary to reposition and change the current understanding, move towards market trends and develop a new image. On the basis of this type of scenario, specific sector goals for the development of tourism have been defined which can be classified into three groups:

1. **Economic goals:**

- **Tourism as a stimulus for commercial development and economic diversification** – increasing the number of tourists; opening new accommodation capacities and improving the quality of the offering within those that already exist;
- **Increase employment** – creating new jobs wherever possible (guides, custodians in ethno houses, entertainers, ecological educators…) and training the local tourism guides, creating souvenirs and marketing them in ethno houses and visitors centers;
- **Increase investments** – insisting on local authorities creating the conditions in which an interest will be shown in investing in the area of ecotourism;
- **Complementary and strong bonds between nature, agriculture and tourism** – possibility of marketing agricultural products within the hospitality facilities and as products that tourists are unable to purchase elsewhere (e.g. honey, jam, grain products…); development of rural and eco-rural tourism; popularization of agriculture through development of tourism on farms; popularization of traditional agricultural products (e.g. Sombor cheese); culinary and traditional specialties;

- **Constantly increasing the quality of services** – implementing norms and standards, certification of local services in cooperation with institutions of higher learning and science.
- **Development of new and innovative tourism products** – tourist destinations can be successful only if new products are constantly being developed;
- **Economic indicators of sustainable tourism** – the number of total collective nights stayed, ration or stays compared to capacity, seasonal character of turnover.

2. Economic goals:

- Protection of nature and biodiversity - synchronizing tourist activities and sensitive locations, small groups of ecologically aware tourists in sensitive locations, popularization of conservation through tourism products (trails featuring rare plant species, birdwatching, photo safari), volunteer camps for the most ambitious tourists - protectors (preserving the wetland habitats, e.g. in the location of Štrbac and in the Monoštor Swamp).



Figure 11 Ecological education in the location of Bestrement
Photo: V. Stojanović

- **Preserving original regional characteristics** – introducing a standard for educational-interpretive value (informational signs, thematic trails like those in the location of Štrbac, the presence of tourist guides, investments in printing materials which are in accordance with the norms of ecological publications), visitors centers, schools in nature with

thematically and conceptually similar the one in Baračka, affirmation of other locations within the ecological education, educating the local population on regional characteristics.

- **Preserving and preventing pollution of waterways** - the harmonization of all activities with the water protection management (preventing movements during periods of high sensitivity of ecosystems, boats on electrical motor drives); construction of piers and fishing points where permitted.
- **Rational use of energy** – application of a program to conserve energy according to the accepted standards, especially in hospitality facilities (e.g. according to the example of the project Hotel Energy Solution, WTO).
- **Preventing aesthetic degradation of the area (both natural and cultural resources)** – including experts in the tourism development program from the area of protecting nature and cultural landmarks, education of the local population, the role of local authorities.
- **Indicators for sustainable tourism** – the number of plant and wildlife species before and during the realization of tourism, the aesthetic assessment of resources from tourists (questionnaires), carrying capacity, zoning ("honey pot", the number of tourists who arrive by public transportation, air and water quality, noise.

3. Socio-cultural goals:

- **Rise in the quality of life** – a rise in the living standard through the development of tourism, introducing tourism content and infrastructure provide lift in the village with a new sense (tourism infrastructure is also used by the local population – structures for recreation, pools, visitors centers, bicycle rentals, boats).
- **Additional education and higher cultural standards** – teaching people to be hospitable in the hospitality business and tourism (professional hospitality and not "simplification").
- **Recognizing the positive relation towards other cultures** - creating a unique tourism offering for cultural tourism with neighboring regions in Hungary and Croatia (paths towards peace and reconciliation between peoples).
- **Nurturing the local identity** – tourism programs and new tourists as the critical mass of the public necessary for cultural programs, performances and festivals (Bodrog Fest, Apatin Fisherman Nights, the Grape Ball, Tradition for the Future, Danube Day), a feeling of local pride, highlighting the multiculturalism through the introduction of new tourism products and festivals.



Figure 12 Nurturing customs and traditions must be one of the key goals of sustainable tourism. Grape Ball event in Sonta.
Photo: V. Stojanović

- **Developing general security** – protective measures for tourists and local population (stop crime, drugs, prostitution, abuse of women and discrimination of minority groups).
- **Preserving the pastoral Bačka Danube Basin villages** – fulfill the standards defined in spatial plans, construction of tourism facilities in the local architectural style, new construction harmonized with old and traditional structures, preserving exterior appearances.
- **Preserving the cultural identity of the towns** – implementing the measures prescribed by the Provincial Bureau for Protection of Cultural Landmarks to prevent devastation.
- Protection of cultural landmarks – introducing protected cultural landmarks to the new tourism program, reviving content and historical context, reviving historical stories through new guidebooks (baroque churches, famous families, industrial heritage, vocations…), hiring experts from the fields of cultural landmark protection, ethnology and art history.

6.6. Specific Goals

Goal 1: Preserve the rich biodiversity in Gornje Podunavlje by using ecotourism as a means for sustainable development of tourism and conservation.

(complete works on the construction of a visitors center at Karapandža; organize and maintain two trails, Šarkanj Swamp and Semenjača Swamp and lookout point in the location of Štrbac and provide regular maintenance; organize and maintain the location of Bestrement; promote the natural potentials of the Special Nature Reserve through an annual thematic press tour – journalists and tourism agencies.)

Goal 2: Contribute to the economic and cultural revitalization of villages and employment of the local population through the enrichment and improvement of the current offering, communal and tourist organization of villages, improvement of the conditions of accommodations.
(educate the local village residents with lodging capacities or hold at least two rural and ecotourism workshops with 20 participants on the topic of: sustainable tourism, organization of tourism offerings, standards with examples of best practices; linking with at least three local (eco and ethno) events and festivals with the tourism offering of the Reserve; research the conditions for establishing a souvenir brand and products with the Gornje Podunavlje designation (branding), e.g. forest honey and honey from giant goldenrod, marinated smoked bream, ground paprika, handmade wooden clogs; select and create the official souvenir of Gornje Podunavlje – black stork, deer.)

Goal 3: Include the towns in the tourism offering and contribute to their cultural revitalization.
(inform the owners of accommodations and hospitality facilities of the principles of sustainable tourism, affirmation of local history and pride through education and local guided routes intended for the local population.)

Goal 4: Develop fishing tourism according to the criteria of sustainable tourism.
(compose a list of alternative tourist accommodations (weekend cabins, huts, fishing houses…) for fisherman; set up a minimum of 5 fishing areas.)

Goal 5: Create a plan for the development of wellness, sports and gastronomy tourism.
(stimulate the development of wellness and gastronomy tourism in cooperation with interested parties; develop cycling.)

Goal 6: Create a tourist management plan related to sustainable tourism and improving the capacities of the Special Nature Reserve for managing sustainable tourism.
(establish the mechanism to control tourists; raise the level of knowledge and awareness of 20 employees from all profiles at the Special Nature Reserve regarding the importance of sustainable tourism, the relation towards tourists and the monitoring of tourists.)

Goal 7: Raising the awareness of Gornje Podunavlje as a tourist destination among the local population, visitors and foreign tourists.

(create adequate promotional materials with the designation of the Charter; establish cooperation with at least 10 local and national media outlets; get Gornje Podunavlje certified as a location for shooting films by the Film Association of Serbia; develop an Android application for the protected area SNR Gornje Podunavlje.)