

An approach to the development of the Urban Design “Karaotok”, Hutovo Blato Nature Park

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Abstract: Spatial planning is a vital process for a rapid and successful development of projects related to wetland management, and thereby projects related to tourism. Tourist activities could provide a boost to the development of general understanding of wetlands and raise public awareness of the functions and the ecosystem services wetlands provide. The tourism economy could be a source of income and could provide employment opportunities in rural areas.

However, tourists also have an impact on wetlands. Protected areas accessible to tourists require a comprehensive management. In order to ensure a harmonious relationship between tourism activities and environmental protection, when developing an urban design within a protected area, it is crucial to have a sensitive approach.

The paper suggests an approach to the development of the Urban Design "Karaotok", within the Hutovo Blato Nature Park.

Key words: urban design, nature park, tourism activities, Hutovo Blato

Pristup izradi Urbanističkog projekta Karaotok, Park prirode Hutovo blato

Sažetak: Prostorno planiranje je vitalni proces za brzo i uspješno razvijanje projekata vezanih za upravljanje vlažnim staništima, time i projektima vezanim za turizam. Turističke aktivnosti mogu dati obol razvijanju općeg razumijevanja, te podizanju pozornosti javnosti za vlažna staništa i njihove funkcije i ekološke sustave. Pored toga, turizam može biti i izvor prihoda te može pružiti mogućnosti zapošljavanja u ruralnim sredinama.

Turisti također imaju utjecaj na vlažna staništa. Mjesta koja su dostupna turistima traže intenzivnije upravljanje negoli ona koja im nisu pristupačna. U cilju osiguranja skladnog odnosa između turističkih aktivnosti i zaštite okoliša prijeko je potrebno pristupiti procesu izrade urbanističkog projekta u sklopu zaštićenog područja na iznimno senzibilan način.

U radu je sugeriran pristup izradi Urbanističkog projekta „Karaotok“, u sklopu Parka prirode Hutovo blato.

Ključne riječi: urbanističko projektiranje, park prirode, turističke djelatnosti, Hutovo blato

1. INTRODUCTION

Developing specific spatial planning documents in protected areas is a process that involves the issues related to uses of natural physical and developed structures in a given space in an integrated way. An approach to developing documents of this type should take into account not only common features and specifics of the area, but also its natural integrity, environmental sensitivity, infrastructure development and limitations, tourism attractiveness and other characteristics of the subject area as a basis for establishing common criteria for its use.

As one of the categories of documents that organizes space in its given domain, urban planning design is used in practice to develop highly sensitive settlement areas or a historical ensemble; such an instrument is rarely used in areas with valuable ecological features, protected due to their marked landscape, educational and tourist-recreational values, with few examples of their use in domestic professional practice.¹ Therefore, we find it advisable here to carry out the necessary analysis and to present an expert contribution to defining the terms of reference, and thereby to ensure a proper approach to the development of the Urban Design "Karaotok".²

2. CHARACTERISTICS OF THE HUTOVO BLATO NATURE PARK

The Hutovo Blato Nature Park is a protected area and, in accordance with the Convention on Wetlands of International Importance,³ enjoys the status of a wetland of international importance.⁴ Located in the very south of Herzegovina, Hutovo Blato, together

¹ The decision of the Assembly of the Herzegovina-Neretva County/ Canton on the implementation of the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park" for the period 2013-2023, established the obligation to develop an urban design of the tourist zone "Karaotok"; Official Gazette of HNC, no. 9/16.

² IBIDEM, Article 231. Decisions

³ *The Convention on Wetlands of International Importance especially as Waterfowl Habitat* is the original name of the international treaty which, in its original version, emphasized the use and protection of *wetlands*, primarily as waterbird habitats. In its development, the *Convention* later expanded the scope of its interest and activities in order to cover all forms of protection and use of *wetlands*, considering them part of the ecosystems exceptionally important for the preservation of biodiversity. The term *wetlands* is a relatively imprecise translation of a term that symbolizes areas where water is a primary factor in controlling the environment and its associated plant and animal life. The fundamental importance of the *Ramsar Convention* is in the fact that it calls for international attention due to the evident realization that wetland habitats are disappearing, among other things due to the lack of understanding of their role in the overall ecological system.

To date, more than 170 countries from around the world have accepted these commitments and acceded to the *Convention*. The signatories - members of the *Convention* initiate the process of identifying sites within their territory for which they find it necessary to pay special attention to their protection and sustainable use, precisely because of their special richness and importance for the survival of aquatic ecosystems.

For more on the spirit of the Convention see: www.ramsar.org

⁴ The Ministry of Construction, Physical Planning and Environmental Protection of HNC, within its competence over the Hutovo Blato Nature Park, has launched a campaign to promote this protected area at the international level, and to include it in the list of sites designated as *wetland habitats of international importance*. Thus, within continuous activities since 1997, a quality contact network has been established with the reference institutions within the Ramsar Convention system, as well as with the national coordinators of individual European countries responsible for implementing the Convention in their area. At the same time, a transboundary regional project of inventorying

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with the Neretva River Valley, forms a unique wetland habitat with a Mediterranean character.

The Hutovo Blato Nature Park covers an extensive complex of marshland, lakes and watercourses. The area encompasses the hilly zone of Londža, Ostrvo and Koščela, the lakes Svitavsko, Deransko, Jelim, Orah and Drijen, the ornithological reserve Škrka, and the Krupa River. This area provides excellent conditions for the development and survival of many animal and plant species thanks to its geographical position, specific geological past, favorable climatic and hydrological conditions and the proximity of the Adriatic Sea.

Hutovo Blato is also a key resting area in the period of migration and overwintering of a large number of bird species from Central and Northern Europe. The richness and diversity of the fauna, and especially the bird fauna, is one of the most significant natural features of the Hutovo Blato area,⁵ by which it has gained reputation on a wider international scale. Out of a total of 163 registered bird species from 39 families, 95% of the ornithofauna of Hutovo Blato is protected by international conventions and directives, and in addition to the Ramsar Convention, this area is also included in the IBA program, as part of internationally important bird areas.⁶ As part of the Neretva River basin, Hutovo Blato is one of the centers of endemism of freshwater fish. Namely, this area is a habitat for nine endemic fish species of narrow range, which include four sensitive species (VU) according to the IUCN,⁷ which are on the European Red List of Freshwater Fishes.⁸ Due to its exceptional biodiversity, Hutovo Blato is one of the key biodiversity areas (KBA) of the Mediterranean basin freshwater ecosystems.⁹ Also, the area is of great importance for the species listed in Annex I of the Birds Directive, as well as habitat types from Annex I and species from Annex II of the Habitats Directive, and Hutovo Blato is included in the list of potential Natura 2000¹⁰ sites for Bosnia and Herzegovina.

ecosystems in the Neretva River Delta, including the Hutovo Blato area, was launched by the Herzegovina Neretva and Dubrovnik Neretva counties in December 2000 under the auspices of the Ramsar Office for Europe.

The final result of all these efforts was the designation of Hutovo Blato as a wetland of international importance on 24 September 2001, whereby the fundamental precondition for accession of Bosnia and Herzegovina to the Ramsar Convention was met.

⁵ For more details, see: Radović, Dragan, Ornithological research of the Lower Neretva River, HAZU, study, Zagreb, 1996.

⁶ IBAs (Important Bird Areas) have been established as part of an international initiative aiming at identifying and creating a network of areas important for bird life. The initiative was launched by BirdLife International (www.birdlife.org), an organization that seeks to preserve bird habitats, encouraging research and sustainable habitat management, monitoring, education, and national and international legal protection. Hutovo Blato has been included in the IBA area list since 1998.

⁷ IUCN - The International Union for Conservation of Nature is the world's leading organization for risk assessment and conservation of wildlife, and consists of more than 200 government agencies and over 900 member NGOs.

⁸ For more details, see: Freyhof Jörg and Brooks Emma, European Red List of Freshwater Fishes, Publication Office of the European Union, Luxembourg, 2011.

⁹ For more details, see: Darwall Will et al., Freshwater Key Biodiversity Areas in the Mediterranean Basin Hotspot: Informing species conservation and development planning in freshwater ecosystems, IUCN, Cambridge-Malaga, 2014.

¹⁰ The Natura 2000 ecological network is a nature protection system in the EU aimed at creating interconnected or spatially close areas, important for the conservation of endangered species and habitats, which contribute to the preservation of natural balance and biodiversity with a balanced biogeographical distribution. The Natura 2000 ecological network is the basis of European nature conservation policy and the largest network of protected areas in the world. It is based on the Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora) and the Birds Directive (Council Directive 79/409/EC on the Conservation of Wild Birds), and the obligation of its implementation is one of the basic preconditions for candidate countries for EU

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Wetland, grassland and forest habitats alternate in the flooded and dry areas of this Nature Park, including two priority Natura 2000 habitats: Mediterranean temporary ponds (3170) and Soft deciduous forests on fluvisols (91E0).

The diverse distribution of wetlands, lake and water areas with different patterns of plant communities - which represents a specific spatial and temporal alteration of terrestrial and aquatic ecosystems typical of such preserved natural areas - is of special value and interest to potential visitors.

3. SITUATION WITHIN THE SCOPE OF THE URBAN DESIGN "KARAOTOK"

Based on the Spatial plan of the area of special features for the area of importance for HNC "Nature Park Hutovo Blato" for the period 2013-2023, in terms of basic organization and division of space by purpose, the overall extent of the Hutovo Blato Nature Park is arranged into the strict protection zone, the active protection zone, the use zone and the transition zone, with distinct forms and degrees of protection.¹¹

The use zone of the Hutovo Blato Nature Park is an area that traditionally involves the use of agricultural space, water management, forestry, sports and recreation, housing and tourism and catering activity.¹² The scope of the Urban Design "Karaotok" is in the use zone and is defined as a tourist zone requiring an urban design to be developed.¹³

The coverage area of the Urban Design "Karaotok" is on the northwestern periphery of the Hutovo Blato Nature Park, topographically classified as an elevation within a floodplain, covered with evergreen vegetation. Developed and irrigated plow fields make its contact area on the southwest side, while marshy floodplain is on the southeast side. The northern contact zone covers an area of separate sites Đinovica and Glavica.

Access to the Urban Design "Karaotok" coverage area is via local roads Klepci - Gnjilišta - Karaotok and Klepci - Prebilovci - Karaotok. The access road divides the coverage area into two parts and ends at the southeastern periphery of the coverage, in the immediate vicinity of the education center of the Public Company Hutovo Blato Nature Park. The peripheral road on the west side is undeveloped and impassable. An improvised boat dock from where tourist boat tours depart is located in the southern part of the coverage. The parking area is located in front of the existing tourist and catering facility (motel) and has a limited capacity.

membership. For more details, see: Herceg Nevenko et al., Čovjek i okoliš, HAZU, Sveučilište Sjever i Synopsis, Mostar-Zagreb-Sarajevo, 2018.

¹¹ In accordance with the established zones and space use possibilities, the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park" for the period 2013-2023 defines the basic organization and purpose of the space, based on the principle of protection of natural and architectural values and aimed at protecting them, as well as aimed at achieving self-sustainability of the Park through the planning of tourist and other business activities. The plan specifies three tourist and catering zones, where the tourist zone in Karaotok remains the primary information and reception zone of the Nature Park and the center of all tourist activities in the park. The Londža tourist zone is a secondary information and reception zone, where its central part is the existing hunting lodge next to the Londža spring. The main function of the third tourist zone, the Koščela zone, is to support scientific research and recreational tourism.

¹² The area of this zone is 5775.49 ha, which is 73.82% of the total area of the Hutovo Blato Nature Park; see in more detail: Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park" for the period 2013-2023; reference: Official Gazette of HNC, no. 9/16.

¹³ Decision on implementation of the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park" for the period 2013-2023, Official Gazette of HNC, no. 9/16

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Figure 1. Aerial photograph of the Karaotok site
(source: <http://hutovo-blato.ba/znanstveno-strucni-skup/>)

The existing built structure within the Urban Design "Karaotok" coverage area is not the result of systematically planned construction and includes a number of spontaneously located facilities (administrative building of the Public Company Hutovo Blato Nature Park, motel, education and information center, relay), which are not compatible with the environmental values of the area with their design characteristics. An educational path with accompanying equipment is developed in the eastern part of the coverage, while the western part of this area is not developed.

4. METHODOLOGICAL APPROACH TO THE DEVELOPMENT OF THE URBAN DESIGN "KARAOTOK"

The development of the Urban Design "Karaotok" involves the analysis, evaluation and planning of spatial development within the scope of this detailed spatial development plan,¹⁴ for an area that is located in the use zone and is formally intended for the development of tourism in accordance with the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park".

The primary function of this tourist area is the reception, information and education of visitors, the provision of catering and services, and the visitor movement control within the area of the Hutovo Blato Nature Park. Thus, this area should be treated as a primary site within the Hutovo Blato Nature Park with the purpose of accommodating educational, sports-recreational and tourist facilities, with a capacity in accordance with the principles of

¹⁴ Limits of the area for which the Urban Design "Karaotok" is being made are defined by the Decision on implementation of the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park" for the period 2013-2023, Article 233, paragraph (1), ("Official Gazette of HNC", no. 9/16). The coverage area is approximately 14.4 hectares and includes cadastral parcels 2132, 2133, 2134, 2135, 2139, 2140, 2141, 2142/1, 2142/2, 2142/3, 2143/1, 2143/2, 2143/3, 2211/2, 2205, 2216, cadastral municipality of Višići.

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sustainable development of protected areas. The Karaotok tourist zone should also be considered as a point where visitors adapt to the new regime of space use, and are introduced into the adequate visiting system.

In accordance with this, it would be advisable to suggest the removal of existing structures within the extent of the Urban Design "Karaotok" that are used by the administration and are at the service of park visitors (administrative building of the Public Company Hutovo Blato Nature Park, education and information center), and integration of their functions in a new building that would function as a visitors interpretation and education center that would also include space for administrative and service purposes. It would include rooms for administration and supervision services, souvenir shop, reception point, sanitary facilities, spaces for research activities aimed at educating about the natural resources of the Hutovo Blato Nature Park (botanical, ornithological and ichthyological collections), and a multimedia center for presentations¹⁵ and conferences. An official parking area with access road, bicycle/pedestrian paths and bicycle rental spaces should be located near the building. The building should be situated in the natural terrain configuration and architecturally designed to fit in the landscape, where it is necessary to preserve and emphasize natural and environmental values and achieve integrity and distinctiveness of the spatial structure. During construction, the area that directly belongs to the building must retain the existing forest stands. All interventions in the external space that is in narrower functional and landscape terms related to the building must be carried out so as to eliminate or reduce the existing forms of spatial and environmental pollution and degradation, and not to cause new forms of pollution and degradation.¹⁶

The main motive for visiting protected areas is to enjoy the natural beauty and preservation of nature. The impact of visitors does not depend so much on their numbers as it does on how the park visit is managed. The most common conflict in a protected area arises between tourism as an economic activity and the protection of the area itself. Protected areas can be the providers of a high-quality tourist offer of an area, but definitely not the accommodation space concentration zones, which proves to be a problem in some of our protected areas.¹⁷

The basic guiding principle of tourism planning in the Hutovo Blato Nature Park, which is promoted through the development of the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park" was to allow only the types of tourist accommodation that are needed by visitors whose primary goal is a visit to this protected

¹⁵ Including interactive educational content about the Neretva River and the Hutovo Blato ecosystem

¹⁶ Similarly, all buildings and developed public areas in the coverage zone of the Urban Design "Karaotok" should be accessible to all users, regardless of gender, age and type of additional mobility need, in which process regulations, standards and European experiences need to be applied in order to eliminate existing and prevent new urban and architectural barriers.

¹⁷ The example of the Blidinje Nature Park area is indicative. As a natural phenomenon of scientific and aesthetic value, it is endangered by other different interests of space use, primarily tourism development with tendencies of inappropriate tourist construction and introduction of tourist and recreational activities inappropriate for the Blidinje Nature Park, without tourist programs. and without determining the reception possibilities and planned development of the Park. This leads to an imbalance between the capacity of the desired tourist construction and real possibilities of receiving tourists in the Park. A particularly noticeable form of endangerment of this Park comes from the understanding that this area can be used for certain activities that are incompatible with the status of the Park, such as intensive tourist construction and construction of holiday homes. This construction is a dangerous form of degradation of space due to the poor spatial layout, arrangement of accesses to buildings, architectural design and the absence of any utility infrastructure. The threat of construction is substantial in the area of Dugo polje, and especially in the area of Masna Luka, Risovac, Donje Bare and around Blidinje Lake.

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area, rather than a random selection of vacation site.¹⁸ In practice, this means that it would be advisable to plan only so much accommodation as can be supported by the space¹⁹ and as much is needed for reception of those visitors who want to thoroughly explore the protected area (when it takes several days), and as much is a minimum completion of business units in terms of the basic hotel running, while higher concentrations of tourist accommodation should be realized outside the Hutovo Blato Nature Park area, in emitting contact areas.

To this end, the existing tourist and catering facility (motel) with its capacity, size and utility model must be adapted to the use and nature protection requirements in compliance with legal provisions, in accordance with the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park",²⁰ and the specifics of the area covered. The reconstructed building should form a complementary environmental and design unit with the rest of the designed building structure within the scope of the Urban Design "Karaotok". During the reconstruction, the space that directly belongs to the building must retain the existing forest stands.

It is necessary to relocate road traffic to the areas adjacent to the Urban Design "Karaotok" scope, and encourage organized transport of larger groups of visitors, along with bicycle and pedestrian traffic.²¹ Roads and parking areas within the complex should have a secondary importance, for the essential needs of visitors who stay here longer, for staff and employees. Within the coverage area of the Urban Design "Karaotok", pedestrian and bicycle traffic are priority forms of traffic,²² while road traffic should be regulated only as organized transport of larger groups of visitors, and for the purposes of management and administration in the Hutovo Blato Nature Park.

When building new or reconstructing existing road and path sections, the landscape values of the area should be fully preserved, by adapting the route to the natural shapes of the terrain with minimum planning of retaining walls, cuts and embankments.²³ It is important to take into account the existing intersection of the vertical plane that passes through the road axis with the upper pavement surface of access and peripheral roads, and pay attention to flood levels along the edge of the water surface.

Water trails are an integral part of the unique water system of the Hutovo Blato Nature Park, and therefore the method of their organization and use must be harmonized with the

¹⁸ Of the catering facilities within the Hutovo Blato Nature Park, motel "Karaotok" with a capacity of 36 beds is presently available to potential visitors, while in the part of the Park that administratively belongs to the municipality of Stolac there is a hunting lodge "Londža" with sixteen beds. along with a number of individual business households in the Londža site.

¹⁹ The sizing of space for tourism must not be based on the demand assessment method but on the analysis of the reception possibilities of the space. Therefore, the assessment of the "ecological capacity" of zones of natural values (how many visitors they can receive) is most important, followed by the assessment of developability of selected areas, and only then the demand analysis, where the result that gives lower capacity is relevant.

²⁰ The spatial plan allows increasing the hotel capacity by adding one new floor. It is not desirable to increase the plan view dimensions of the building; however, this spatial planning document leaves the possibility for that. As part of the hotel reconstruction, it is advisable to plan part of the missing service facilities.

²¹ A separate building plot may be designated as public parking area. In the public parking area, at least 5% of parking spaces should be provided for vehicles of disabled persons. In addition to the parking area for passenger cars, it is possible to build a parking area for bicycles.

²² By combining hiking (speed 5 - 7 km/h), cycling/ riding (speed 10 - 15 km/h) and coach and boat ride, all important and interesting sites of the Park can be visited in a one-day package, departing from Karaotok.

²³ When designing new roads or reconstructing existing ones, it is mandatory to plan fire approaches that have the prescribed width, slopes, turning points, bearing capacity and turning radii.

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water movement regime of the entire hydrological system of the Nature Park. The Urban Design "Karaotok" should define a location at the water entrance and set urban planning and technical conditions (area, number of berths and land access) for the mooring²⁴ for electrically driven boats with photovoltaic panels.²⁵

Within the scope of the Urban Design "Karaotok", the future power grid should be constructed only with underground cables,²⁶ and, where possible, as part of construction of other utility infrastructure. Public lighting of access roads, parking areas, pedestrian and bicycle paths, moorings, and other facilities within the use zone should be solved taking into account nature protection. In accordance with that, it is necessary to define the power supply and control, the type of lighting and its distribution in space, selection of fittings and lighting fixtures, and the required level of illumination. The public lighting network should be developed independently, using underground cables.

In the Urban Design "Karaotok" coverage area, it is necessary to plan a closed wastewater drainage system so as to prevent any impact of untreated wastewater on water and the underground. Sanitary and wastewater drainage of all buildings in the area should be solved in ways that have minimum impact on the hydrological system and habitat quality. The selected treatment process must be a so-called nature-friendly process, integrated into the environment. It is recommended to discharge the treated wastewater through the humus soil layer into the underground. For any intervention in the space, it is crucial to take into account that it is an area vulnerable to any type of pollution.

The specific relationship between high and low vegetation, soil and water surfaces is the essential value of the landscape in the wider scope of the Urban Design "Karaotok". Within the proposal for the development of green and free areas, it is imperative to protect native vegetation and its landscape and ecological values in a way that preserves the existing system of native species, their age distribution, and spatial extent. It is desirable to remove introduced, alien species and replace them with native species, for which it is necessary to analyze the changes that have occurred, and on this basis to select appropriate tree species. It is necessary to continuously ensure a constant percentage of mature, old and dry (standing and felled) trees, especially hollow trees, and to perform necessary afforestation (filling-up) with native tree species in a composition that reflects the natural composition, using nature-friendly methods.

²⁴ The required types of connection to other utility infrastructure as well as the place of connection are determined by preparing project documentation, or in the process of obtaining the relevant act for implementation of the reference spatial planning document and/or for the realization of interventions in space.

²⁵ The mooring should be provided with power supply, to enable recharging of boat's battery in cases where the energy collected by solar panels is not sufficient for its smooth operation.

²⁶ In determining the appropriate technical solution for construction of power facilities, it is necessary to follow the instructions of the Bonn Convention on avoiding or mitigating the impact of power lines on migratory bird species - Guidelines on How to Avoid or Mitigate Impact of Electricity Power Grids on Migratory Birds in the African - Eurasian Region" (Prinsen, H.A.M., Smallie, J.J., Boere, G.C. & Pires, N. (Compilers); AEWA Conservation Guidelines No 14, CMS Technical Series No. 3, Bonn, Germany, 2012.

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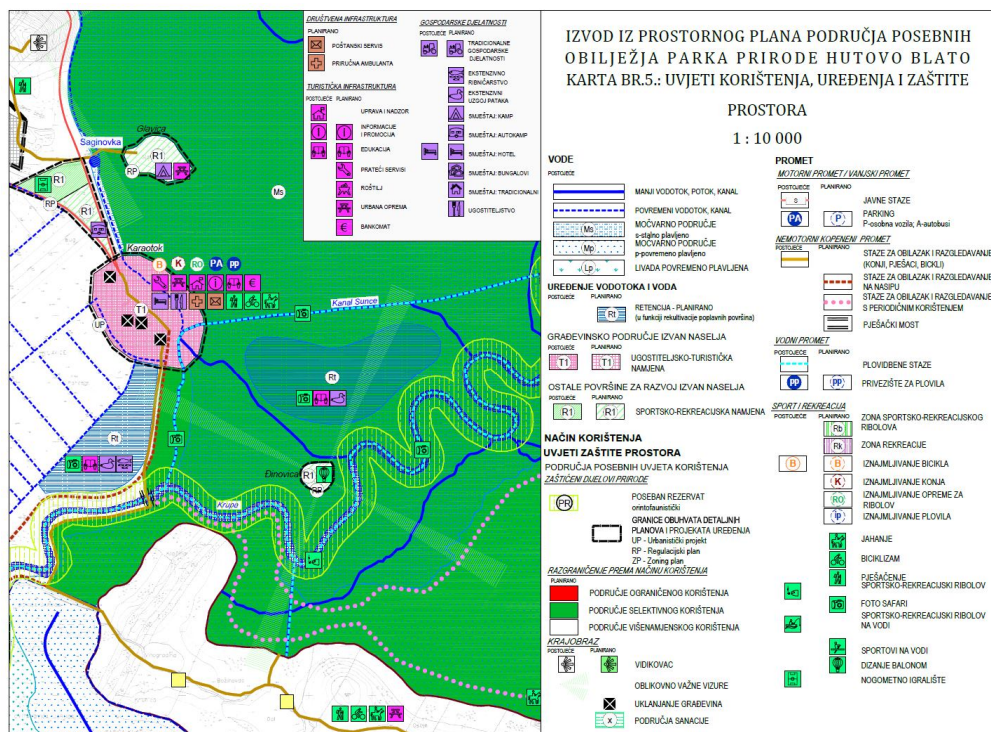


Figure 2. Excerpt from the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park" for the period 2013-2023, map no. 5: "Conditions of use, development and protection of space"

5. INSTEAD OF CONCLUSION

The development of tourism in the Hutovo Blato Nature Park that will have the epithet of sustainable requires a cautious approach to the implementation of development of this protected area, especially in the use zones defined by the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park". Consequently, the spatial planning document, Urban Design of the "Karaotok" area, the area defined as a tourist zone by the Plan, should offer implementing guidelines for spatial development that are needed for harmonious development and preservation of the values of the Park, adhering to the principles of preservation of its special quality, environmental stability and biodiversity. In the approach to drafting documents of this type, it is important to consider not only the common features and specifics of the area, but also its natural integrity, environmental sensitivity, level of development and infrastructure constraints, and the inevitable tourist attraction of the subject area as a basis for establishing common criteria for its use.

REFERENCES

1. Darwall, W., Carrizo, S., Numa, C., Barrios, V., Freyhof, J. and Smith, K.: Freshwater Key Biodiversity Areas in the Mediterranean Basin Hotspot: Informing species conservation and development planning in freshwater ecosystems, IUCN, Cambridge-Malaga, 2014.

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2. Eagles, P. F. J., McCool, S. F., Haynes, C. D.: Sustainable Tourism in Protected Areas; Guidelines for Planning and Management, IUCN, Gland, Switzerland, Cambridge, UK, UNEP and WTO, 2002.
3. Freyhof, J., Brooks, E.: European Red List of Freshwater Fishes, Publication Office of the European Union, Luxembourg, 2011.
4. Gugić, G.: Kojim putem vodi turizam u Parku prirode Lonjsko polje? Mogućnosti – opasnosti - smjernice, Turizam, međunarodni znanstveno-stručni časopis, br. 4/2000, Zagreb, 2000.
5. Herceg, N.: Okoliš i održivi razvoj, Synopsis, Zagreb, 2013.
6. Herceg, N, Stanić-Koštroman, S., Šiljeg, M., Čovjek i okoliš, HAZU, Sveučilište Sjever i Synopsis, Mostar-Zagreb-Sarajevo, 2018.
7. Prinsen, H. A. M., Smallie, J. J., Boere, G. C., Pires, N.: Guidelines on How to Avoid or Mitigate Impact of Electricity Power Grids on Migratory Birds in the African - Eurasian Region, AEWA Conservation Guidelines No. 14, CMS Technical Series No. 3, Bonn, Germany, 2012.
8. Radović, J., Vego, J.: The Lower Neretva - transboundary wetland area, Ministry of Environmental Protection and Physical Planning of the Republic of Croatia and Ministry of Construction, Physical Planning and Environmental Protection of HNC, Mostar - Zagreb, 2002.
9. Radović, J., Vego, J.: Neretva River Delta Transboundary Management Plan, Ministry of Environmental Protection and Physical Planning of the Republic of Croatia and Ministry of Construction, Physical Planning and Environmental Protection of HNC, Zagreb - Mostar, 2002.
10. Radović, D.: Ornithological research of the Lower Neretva River, study, HAZU, Zagreb, 1996.
11. Decision on implementation of the Spatial plan of the area of special features for the area of importance for HNC "Hutovo Blato Nature Park" for the period 2013-2023, Official Gazette of HNC, no. 9/16, Mostar, 2016.