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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

45th meeting

Strasbourg, 8-12 December 2025

Bureau of the Standing Committee

Autumn 2025


Strasbourg

New complaint: 2025/1

**Alleged threat to habitat and protected species by the the construction of
the Gradina S4 hydropower plant on the Studenica River (Serbia)**

- COMPLAINT FORM -

*Document prepared by
Polekol and informal citizens' group Save Studenica, Ušće*

Convention on the Conservation of European Wildlife and Natural Habitats	
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Please, fill in this form and send it to the attention of:

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Directorate	of	of	Democratic	Participation
Council				Europe
F-67075 Strasbourg Cedex		E-mail:	Bern.convention@coe.int	

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On behalf of (if applicable): NGO Polekol and informal citizens' group Save Studenica, Ušće	
County/State/Province: Serbia	Country: Serbia
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Date: 28.1.2025.	Electronic Signature
	ЖАКЛИНА ЖИВКОВИЋ Digitally signed by ЖАКЛИНА

1. Please state the reason of your complaint (refer also to the Contracting Party/ies involved and the Articles of the Convention which might be violated)

Serbia has violated Article 3 and Article 4, point 1, 2 and 3 of the Bern Convention, and Recommendation No. 157 (2011) of the Standing Committee, by planning the development of the 2.160 kW Gradina S4 hydropower plant on Studenica river. The 30 m high and 100m long dam with 1.4 km long reservoir would produce significant adverse impacts on protected habitats and species in the Golija **candidate Emerald site (RS0000030)** but no appropriate assessment has been carried out according to art. 10 of the Serbian Environmental Protection Law and can not be carried out since the Government never adopted Bylaw on appropriate assessment (AA) or amended the law to regulate it. HPP is planned on the east border of Emerald site, which means that it would negatively influence the whole site.

Portion of the Studenica river canyon in the site would be flooded and would be transformed into an artificial lake, thus irreversibly damaging the most important ecological features and the integrity of the site. Moreover, the project would affect UNESCO Man and Biosphere reserve Golija - Studenica whose core value is its hydrological network and Studenica. Negative pressures are already present in the form of 6 SHPPs on tributaries of Studenica and Studenica itself. The Emerald site already faces severe cumulative threats from ski center, a highway project, changes allowing wind farms and resource exploitation, and infrastructure works like road widening and water diversion, detailed further in the annex. There is no effective legal protection of Emerald sites in Serbia and their status especially according to the provisions of Bylaw on ecological network and Law on nature protection that regulate protection measures

and protection zones.

We therefore urge the Bern Convention, IUCN and UNESCO to ask the Government of Serbia to halt the construction of the hydropower plant, to ensure the protection of all the species and habitats of Golija Emerald site, to include the whole stretch of Studenica in the Emerald Network, and to arrange an on-the-spot visit by independent experts in order to evaluate the actual situation in detail and consider opening a case file.

2. Which are the specific specie/s or habitat/s included in one of the Appendices of the Bern Convention that are potentially affected? (Please include here information about the geographical area and the population of the species concerned, if applicable)

Many habitats and species found along the Studenica River and its surroundings are listed in the Appendices of the Bern Convention and the Annexes of the EU Habitats and Birds Directives.

Species list (priority species marked with *):
*Ursus arctos**, *Canis lupus**, *Lutra lutra*, *Vormela peregusna*, *Morimus funereus*, *Rosalia alpina**,
Euplagia quadripunctaria, *Euphydryas aurinia*, *Lucanus cervus*, *Lycaena dispar*, *Bombina variegata*,
Triturus cristatus (macedonicus), *Rhinolophus euryale*, *Rhinolophus ferrumequinum*, *Myotis emarginatus*,
Myotis myotis, *Rhinolophus hipposideros*, *Aquila chrysaetos*, *Falco peregrinus*,
Dendrocopos leucotos, *Picus canus*, *Ficedula parva*, *Lullula arborea*, *Emberiza hortulana*; *Barbus meridionalis (balcanicus)*, *Cottus gobio*, probably *Zingel spp.* and *Rhodeus amarus*.

*Note: According to the data from the Emerald Green workshop¹, and considering the presence of this species in neighboring river sections, there is a high likelihood that **Zingel zingel** is also present in this part of the Studenica River. It is important to note that the data on ichthyofauna for Studenica is quite limited. This species is also listed in Resolution 6.*

The riverine habitat types that, according to Resolution No. 4 (1996) would be extensively destroyed include: C3.55, H2 5, H2 6 (H2.6D, H2.6C, H2 6E, H2 6G), E5.4, E2.2, G1.A4; G1.11; G1.21 (91E0* according to the Habitats Directive), G1.6

Other habitat types that will be partially destroyed, due to their presence in both the areas to be flooded and those above the planned reservoir level, include: G3.5, G1.7.

3. What might be the negative effects for the specie/s or habitat/s concerned?

Degradation or loss of riparian habitats, leading to the disappearance of freshwater species. The remaining section of the Studenica River within the Emerald site cannot provide adequate refuge or spawning grounds due to prior ecosystem disruption from small hydropower plants (SHPPs).

Fragmentation of remaining habitats, disrupting communication between neighboring populations.

Loss of integrity in protected areas, including candidate Emerald site, potential Natura 2000 sites, Golija Nature Park and the Golija–Studenica Biosphere Reserve.

Alteration of ecosystems and microclimatic conditions caused by the flooding of narrow canyon.

Amplified cumulative negative impacts on the ecosystem and protected areas due to the existing SHPP network, further reducing ecological integrity and fragmenting freshwater systems, leaving species without suitable habitats.

Forest degradation and habitat disruption from flooding, access road and tunnel construction, causing long-term harm to local biodiversity.

Destruction of biological corridors, critical for species movement between the Studenica River and the Ibar gorge - important ecological area (IEA), which presents future Natura 2000 site.

¹ <https://bankwatch.org/publication/joint-statement-on-the-expansion-of-the-emerald-network-in-countries-of-the-western-balkans-by-scientists-and-representatives-of-ngos>

4. Do you know if potentially affected species or habitats also fall under the scope of other international Conventions, (for instance: RAMSAR, CMS, ACCOBAMS, Barcelona Convention, etc) or if the area has been identified as a NATURA 2000/Emerald Network, UNESCO site? Are there pending procedures within another international institution?

In 2001, Golija was designated as Serbia's **first biosphere reserve, "Golija-Studenica,"** under the **UNESCO MAB Program**. This area is one of the most significant biodiversity centers in Serbia, hosting numerous species and habitats of national and international importance.

Furthermore, Golija supports habitats and species protected under the **IUCN Red List** (vulnerable and endangered species), the **EU Habitats Directive** (Annexes II and IV), and is designated as an **Important Bird Area (IBA)** with the code Golija RS029IBA, **IPA (Important plant area)**, in addition to being governed by national regulations that ensure the strict protection of species and priority habitat types.

5. Have you attempted to address this issue with the relevant local and national authorities? Please describe. Are there any pending procedures at national level regarding the object of your complaint?

The process of confirming the Urban project for SHPP Studenica S4 - Gradina is underway. A public presentation was held, during which citizens and NGOs submitted numerous objections disputing the project. The situation is approaching a critical point, as procurement procedures for construction may soon begin. The Environmental Impact Assessment (EIA) procedure may be expected during the procedure of granting of the construction permit if the investor does not lower installed power of SHPP below 2MW in which case EIA will not be required.

Committee's report on the disputed project was not delivered within the legally prescribed timeframe. The project is planned within the borders of Spatial plan of special purpose Golija - Studenica which is a protective zone in which same rules and restrictions apply like in the buffer zone of Emerald site.²

In both 2021 and 2023, Polekol, Save Studenica and Protect Mountainous Rivers of Kraljevo submitted petitions demanding that the City of Kraljevo ban the construction of SHPPs on its territory, following the examples of many other municipalities and cities in Serbia. However, these petitions were never discussed or decided upon. Requests for meetings on this topic were also ignored.

6. Any other information (existence of an Environmental Impact Assessment (EIA), size of projects, maps of the area, etc) (for large files, please add a separate annex document, as mentioned in the above instructions)

A detailed map, description of the Studenica hydropower plant and additional biodiversity data is provided in the Annex to this complaint.

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https://www.novipazar.rs/images/download/urbanizam/vazeci_planovi/Prostorni%20plan%20Golija/Prostorni%20Plan%20Parka%20Priode%20Golija-usvojeni%20planovi.pdf



Studenica river and canyon just outside the Emerald site planned to be flooded, Photo: Tijana Jevtić¹

Small hydropower plant Studenica S4 - Gradina (SHPP or Studenica S4 - Gradina in further text) with high dam and accumulation planned in vicinity of Emerald site

Development of SHPP Studenica S4 - Gradina project on Studenica river is in the phase of confirmation of urban planning document - urbanistic project.

Regardless dam construction, the project foresees an expansion, widening, and upgrade of an existing forest road to serve as an access road to the dam construction site. Servicing road would be connected to the state road Ib No. 30 Ivanjica - Ušće at km 46+694. It's characterized by extremely high denivelation. Planned length is 1224m. Space is under forest cover with riparian vegetation.

The project also foresees the construction of a tunnel for redirecting river water from the construction site, 5 meters in diameter and 120 meters long, through the right cliff of the gorge. There is no explanation what the investor will do with estimated 4.000m³ of excavated rock from tunnel construction. Water quality will be severely impacted by boring of the tunnel with significant negative impact on the habitats and species at the construction site and downstream.

The project envisions construction of at least 4 bank protection objects in the gorge (40m, 32m, 25m, 20m long from upstream to downstream respectively) although Urbanistic project

¹ Additional photos of the area by Tijana Jevtić and Predrag Ilić available at:

<https://drive.google.com/drive/folders/1Gi7F4sBmbrusk5YwFiWePVTWfKT7x-Hc>

mentions more of them downstream the dam but they are not represented in graphic documentation. Access road and double high voltage lines 35kV from SHPP to the power station (TS Ušće - TS Milići) 2km long. Negative impact of the transmission lines on birds and mammals also raise the concern. Also it will inevitable make whole protective area along transmission lines route prone to excessive erosion because of required clearcutting the vegetation on steep slope of the left bank.

The project foresees construction of the dam 6530m upstream from the confluence of Studenica and Ibar rivers. Projected height of the dam is 30m (H), length of the crest 100m (L) that will form 1400m long accumulation with a volume of accumulation 467.400m³ at reservoir water level (KNU) 404m above sea level. Installed flow would be (Q) 15m³/s, biological minimum 1,53m³/s, installed power 2,16MW and planned annual production 8,5GWh.²



Small scale Map by Kelsey Aho³

History and procedures of the development of SHPP Studenica S4 - Gradina

The investor submitted an Urbanistic project for SHPP Studenica S4 - Gradina to the Ministry of construction, transport and infrastructure that made it available via the local government of Kraljevo to the citizens. Public presentation of the project started on March the 1st 2024. and lasted for 7 days during which citizens and NGO's and other organisations submitted their objections and suggestions.⁴

² https://drive.google.com/drive/folders/1tccFi447vZra81a_F2o2GjTeWLaKN0jJ

³ Map also available in .pdf at: <https://drive.google.com/drive/folders/1-TRFTYet1TDcyvRxu1VePI4IjZ18rRPz>

⁴ <https://www.kraljevo.rs/oglasna-tabla-2024/> (On 22.2.2024.) and also available at: <https://drive.google.com/drive/folders/1OWxjwQWCw0BLysrv6NtM8UDFkBcvEw7V>

In jurisdiction of local government of Kraljevo is right and duty to check fulfilment of formal requirements⁵ (articles 89 - 91.)

After conclusion of the public presentation it was obligation of local government of Kraljevo, Department for urbanism to create Notification on concluded public presentation of urbanistic project and to dispatch Urbanistic project with all objections and suggestions, informations on concluded proceeding check of fulfilment of formal requirements for Urbanistic project to the Ministry for expert control of the project and it's confirmation according to article 63. and 63a of the Law on spatial planning and construction.⁶

Although Complainant requested Notification on concluded public presentation of urbanistic project local government of Kraljevo, Department for urbanism and decision if UP fulfills formal requirements or decision of the Expert committee of the Ministry about the result of the expert control, he did not get it. Complainant got answer that Ministry does not have requested documentation and was directed to the Agency for spatial and urban planning but until submission of this Complaint Complainant did not obtain them.

Project is planned within the borders of Spatial Plans of Special Purpose Area Golija which consists of Nature park Golija (same borders as UNESCO Golija - Studenica MAB reserve) and protective zone.

The protective zone of NP Golija includes parts of the cadastral municipalities (hereinafter: KO) that are partially covered by the borders of the Nature Park, i.e. 8 whole KOs and parts 4 KOs - whole: Brezova, Bzovik, Vrh, Dolac, Dražiniće, Miliće, Reka, Rudno and parts: Savovo, Orlja glava, Ušće, Zasad;

Disputed project of SHPP Studenica S4 - Gradina is dominantly located in KO Ušće and partially in KO Tadenje.

Spatial plan orders that in the protection zone of the Nature Park, the rules and measures of protection, organisation and rational management of resources, determined by this spatial plan for zones of the III degree of protection, will be applied.

In the area of the Spatial Plan, in zones of the III degree of protection and in the protection zone of the Nature Park, the following is prohibited: construction of industrial, infrastructural, hydrotechnical and other facilities whose operation and facilities can cause unfavorable changes in the quality of soil, water, air, wildlife, the beauty of the landscape, cultural assets and their surroundings unless they are foreseen by the adopted plans of a higher order and represent a public interest of republican importance, and under the conditions established by the Law on Environmental Protection.⁷

Given that SHPP Studenica S4 - Gradina is not an object in public interest but project in profit interest of private investor and there's no decision of the Government of Republic of Serbia

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<https://www.paragraf.rs/propisi/pravilnik-o-sadrzini-nacinu-i-postupku-izrade-i-nacinu-vrsenja-kontrole-tehnicke-doku-mentacije-prema-klasi-i-nameni-objekata.html>

⁶ <https://www.paragraf.rs/propisi/zakon-o-planiranju-i-izgradnji.html>

⁷ <https://pravno-informacioni-sistem.rs/eli/rep/sgrs/vlada/uredba/2009/16/7/reg>

that declares it as a project of public interest, it's construction is not permissible on the Studenica River at the location determined by the Urban Planning Project and by the project developer.

In addition to the aforementioned prohibitions from all planning documents that expressly prohibit the construction of hydrotechnical facilities, including facilities like SHPP Studenica S4 - Gradina, there is room for an analogous interpretation of Art. 38 of the Law on Nature Protection, which stipulates that the proceedings of deciding upon the requests related to the construction of SHPPs in a protected nature area, are suspended ex officio, because the purpose and meaning of the protection zone is the protection of natural assets in such a way as to prevent endangerment of natural assets as if they were part of it, although formally it is not.⁸

It is very concerning that the newly adopted Bylaw on Nature Park Golija⁹ allows the construction of wind farms and the exploitation of mineral resources, even within the park and the Emerald site, which was not allowed in the previous Bylaw from 2001¹⁰.

During public debate¹¹ held from August the 2nd to August 21st 2024. citizens and NGO's and other organisations especially from Kraljevo, Ivanjica, Raška and to lesser extent Novi Pazar and Sjenica submitted objections and suggestions. Majority of the requests were to include remaining section of Studenica which is now outside nature park or ecological network to nature park i.e. Emerald site discussed here. Alternative request was to declare KO Tadenje and KO Ušće through which Studenica flows a protected zone with the same regime of protection like in III zone in nature park (like in spatial plans). Other demands were concentrated on preventing dam construction for ski - center, restoration of free flow of the rivers and streams, cancelation of ski - center development due to climate change effects and prohibiting windfarm construction which is allowed even in II zone, restrictive stance toward mining operations. All these demands were declined by Ministry of the environment and the Government.¹²

Systemic failure of Serbia to comply with EU environmental law and Bern convention

Legal instrument in force in Serbia that regulates the environmental impact assessment procedure is the Law on Environmental Impact Assessment. The Regulation on determining the List (I) of projects for which the environmental impact assessment is obligatory and the List (II) of projects for which the environmental impact assessment can be required (Regulation no. 114/2008) (hereinafter "Regulation on establishing list of projects") provides lists of projects and aims to transpose the Annex I, II and III of the Directive.

New bylaw that would replace the Regulation on establishing the list of projects is currently not planned for legislative procedure, whilst the Regulation in force does not properly transpose the criteria from Annex III of the Directive. Therefore, in practice, we cannot expect a proper transposition if the two processes are not aligned.

⁸ https://www.paragraf.rs/propisi/zakon_o_zastiti_prirode.html

⁹ http://demo.paragraf.rs/demo/combined/Old/t/t2024_11/SG_088_2024_001.htm

¹⁰ <https://golija-studenica.srbijasume.rs/pdf/UredbaGolija.pdf>

¹¹

<https://www.ekologija.gov.rs/informacije-od-javnog-znacaja/javne-rasprave/javni-uvvid-i-javna-rasprava-o-nacrtu-uredbe-o-proglasenju-i-studiji-zastite-parka-prirode-golija>

¹² Raport on public debate available at:

<https://drive.google.com/drive/folders/1OWxjwQWCw0BLysrv6NtM8UDFkBcvEw7V>

Lack of EIA screening of SHPPs (less than 2 MW) located outside the protected areas. As the only criterion defined by EIA legislation, the size of SHPP results in problems in EIA implementation in Serbia. In Ukraine, all hydropower projects are subject to mandatory EIA.

Thresholds established by the contracting parties of the Energy community treaty (CP) relating to the renewable energy projects concern only the size of the project. However, the planned electricity generation capacity of the project does not suffice to decide whether an EIA would be needed. While establishing the legislative thresholds concerning renewable energy projects developments, CPs must consider the characteristics and location of the Project and the types and nature of Project's potential impact (the main categories of selection criteria listed in Annex III to the EIA Directive).¹³

CPs cannot consider projects falling below any "small" hydropower threshold as having a blanket exemption from the obligation to carry out EIA or to screen the potential impacts as a minimum. No matter what threshold they applied, the obligation to screen the potential impact of hydropower projects cannot be circumvented. Projects must be screened against all the relevant criteria listed under Annex III of the EIA Directive, regardless of the plant's capacity. When it comes to capacity, it is also highly important that planned projects on the same river and/or water basin are not assessed in isolation but their capacities as well as their environmental impacts shall be scrutinized in a cumulative manner.¹⁴

In its annual Implementation Reports, the Energy Community was repeatedly urging Serbia to align the national legislation with the Directive, and especially for amendments to address the possibility of issuing construction permits (development consent before the EIA decision), and to amend the secondary legislation concerning the lack of EIA screening of small hydropower projects (less than 2 MW) located outside protected areas.¹⁵

The main legal instrument that regulates issues of nature protection in Serbia is the Law on Nature Protection.

The section of the Law regulating the appropriate assessment procedure is non-existent. It contains only one article (article 10.) that defines AA and it's significantly harmonised with the Habitats Directive, however the Government has still not adopted any bylaw on the appropriate assessment, which makes the procedure impossible in practice. For 15 years after introduction of this legal institute in Serbian legal system, the Bylaw on AA is not adopted, although reasons of legal certainty and importance of this procedure favour amending Law on nature protection and regulating the AA procedure by amending the law instead of regulating it with bylaw. Last institutional effort to regulate AA and update Bylaw on ecological network was in 2021.¹⁶

Since AA procedure is not regulated, law provisions do not include any access to a justice provision for the public to challenge decisions deriving from the appropriate assessment procedure.

¹³ POLICY GUIDELINES by the Energy Community Secretariat on small hydropower projects in the Energy Community PG 02/2020 / 17 September 2020

¹⁴ POLICY GUIDELINES by the Energy Community Secretariat on small hydropower projects in the Energy Community PG 02/2020 / 17 September 2020

¹⁵ 2022 Energy Community Treaty Implementation Report, Serbia, p. 14

¹⁶ https://www.koalicija27.org/wp-content/uploads/2022/09/Izvestaj-iz-senke-2022_Korak-napred-nazad-dva.pdf, p. 91.

The complainant would like to emphasise again that the obligations to protect the habitats of species and endangered natural habitats are strict obligations according to Serbian Constitution that puts norms of international agreements among which is Bern Convention above national law.

Therefore, having regard to the objectives of the Convention to conserve wild flora and fauna and their natural habitats, the requirements from Article 3 of the Convention to take steps to promote national policies for the conservation of the habitats of wild flora, wild fauna and natural habitats, with particular attention to endangered and vulnerable species, especially endemic ones, and endangered habitats, as well as Article 4(1) of the Convention that provides that each Contracting party shall take appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of the wild fauna species, especially those listed in Appendices I and II to the Convention, it is clear from the recent developments explained above that these requirements have not been met.

Moreover, the Golija NR is officially nominated as a candidate Emerald site, and - as such - it is subject to Recommendation No. 157 (2011) on the status of candidate Emerald sites and guidelines on the criteria for their nomination, requiring national authorities to "take the necessary protection and conservation measures in order to maintain the ecological characteristics of the candidate Emerald sites" until their full inclusion in the Emerald Network, since the ecological quality of proposed Emerald Network sites should be preserved as soon as they are officially nominated as "candidate Emerald Network sites" by the Standing Committee to the Bern Convention.¹⁷

By excluding the lower Studenica from Golija NP, not protecting part of Studenica from confluence with Brevina to confluence with Ibar, Serbian Government violates Recommendation No. 16 (1989) of the Standing Committee on areas of special conservation interest:

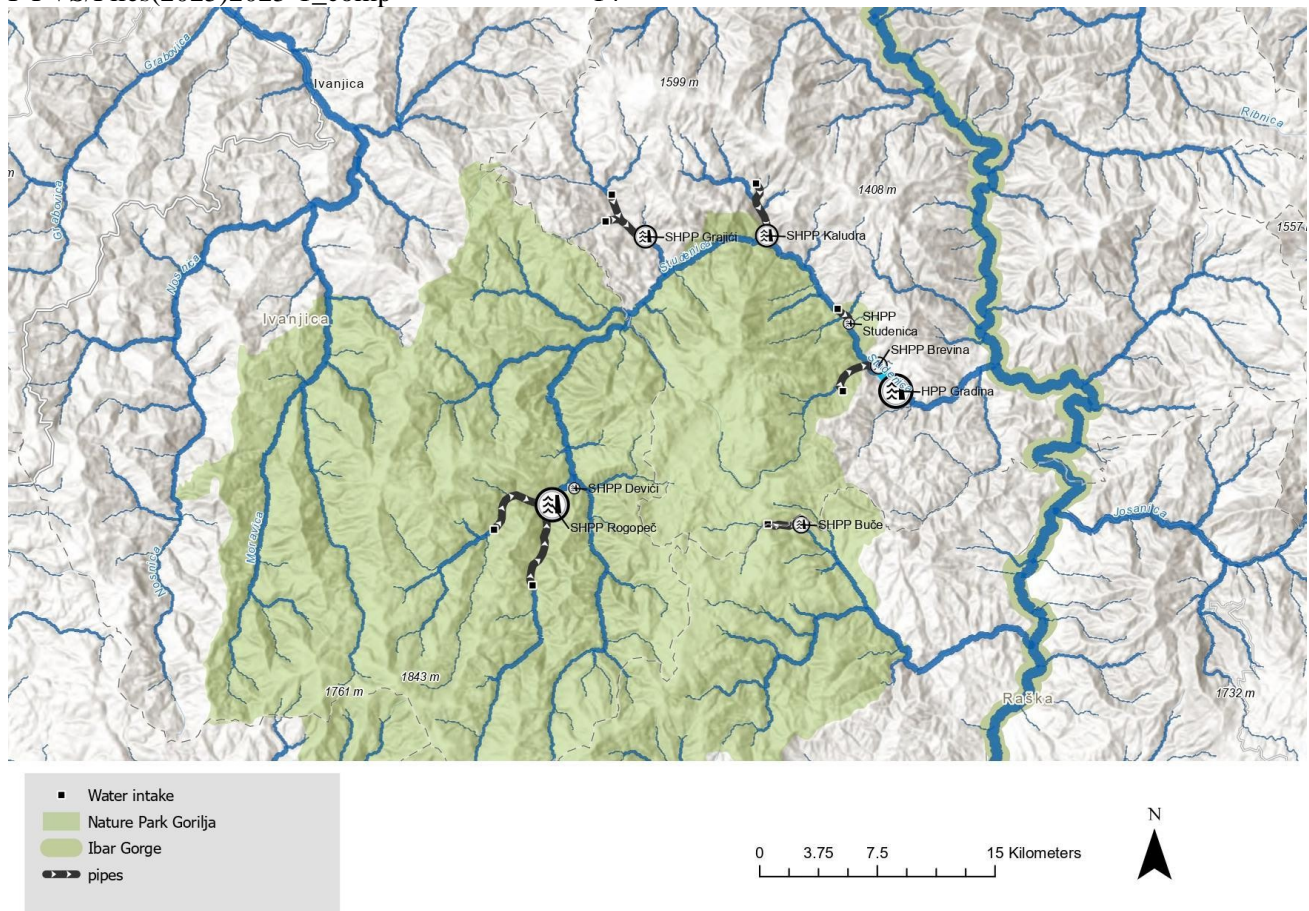
The Government doesn't "take steps to designate areas of special conservation interest to ensure that necessary and appropriate conservation measures are taken for each area situated within their territory or under their responsibility where that area fits one or several of the following conditions: a. it contributes substantially to the survival of threatened species, endemic species, or any species listed in Appendices I and II of the convention; (...) c. it contains an important and/or representative sample of endangered habitat types; d. it contains an outstanding example of a particular habitat type or a mosaic of different habitat types; (...) f. it otherwise contributes substantially to the achievement of the objectives of the convention".

Cumulative effects of all hydropower plants on the Studenica river basin

Golija BR and Ibar gorge are parts of ecological network of Serbia and dam on Studenica would cut link between these two ecologically important areas and cut migratory and feeding routes of aquatic organisms with further fragmentation of habitats.¹⁸

¹⁷ Recommendation No. 157 (2011) of the Standing Committee, adopted on 2 December 2011 and revised on 6 December 2019, on the status of candidate Emerald sites and guidelines on the criteria for their nomination, p 2.

¹⁸ More on that https://balkanrivers.net/uploads/files/3/are-balkan-countries-safeguarding-their-rivers_report.pdf, p. 181. and http://demo.paragraf.rs/demo/combined/Old/t/2011_01/t01_0149.htm



Big scale Map by Kelsey Aho¹⁹

Apart from the already existing six SHPPs on the Studenica river basin, of which only one is outside the protected area of Golija BR, this project directly indicates the enormous pressure and impact on the existing Emerald site. Additional pressures are present, such as development of ski center²⁰ which includes the construction of two reservoirs at the source of the Studenica river, posing significant threats to the river and the microclimatic conditions of the area, degradation of landscape, directly impacting its biodiversity. Additionally, the planned highway project in the westernmost part of the PA would further devastate the habitats on the border of the site. Any further intervention in hydrological network which is one of the core values of the Emerald site would have devastating cumulative consequences for the existing Emerald site. The site belongs to the area of high - quality environment characterized by morphological differentiation of the landscape, visual disposition of Studenica and combination of different vegetation - meadows and high forests. Studenica (and its basin) represent main hydrological value of the area as watercourse of 1st category and water quality of 1st class). It is also important landscape element. All this requires its preservation which is in direct correlation with the flow.²¹

Devastating effects of already constructed SHPPs on Golija in Studenica river basin are well documented in expert report on the project: Guidelines for sustainable planning and

¹⁹ Also available in .pdf at: <https://drive.google.com/drive/folders/1-TRFTYEt1TDcyvRxu1VePI4IjZ18rRPz>

²⁰ <https://media.ivanjica.gov.rs/2019/03/TEKST-PDR-e-Ski-centra-Golija-ELABORAT-PLANA-10-3-2017.pdf>

²¹ Spatial Plans of Special Purpose Area of Studenica monastery
<https://dopuna.ingpro.rs/04PDF/86132.pdf?r=1736968624589>

management of bassin areas of SHPPs in natural protected area²² Report contains photo documentation and expert findings regarding rivers in Studenica bassin - Brevina, p. 38, Studenica, p. 43, Savošnica, p. 48, Grajička reka and Vratišnjak stream, p. 53, Brusnička reka, p. 57, Dajička and Brusnička reka, p. 61, and summary findings on the page 230.

Adverse effects of SHPPs are caused by reduced water level, water current speed, and flow rate in downstream sections parallel to diversions, which result in warming of the water, decreased oxygen contents, and increased mineral dissolution. This reduces the diversity of habitat and its suitability for different age classes of brown trout and other fish species supported by results from our field experiment, affecting particularly brown trout (dominant and typical species in Studenica). In addition to significant difference in brown trout biomass between the streams with and without the SHPPs. The effect of RRHPs was an abrupt drop in brown trout population features (relative abundance, biomass, and natural production, and disturbance in their age structure or complete disappearance of brown trout in sections along diversions.²³

Under Article 12 of the Law on Nature Protection, the developer of a plan, programme, project, works and the activities is obliged to implement compensation measures for mitigating the negative consequences that they might have on nature according to the decision of the Ministry.

Compensation measures are determined depending on the anticipated or caused damage to nature, namely:

- 1) by establishing a new locality that has the same or similar characteristics as the damaged locality;
- 2) by establishing another locality important for the preservation of biological and landscape diversity, that is, for the protection of natural good;
- 3) monetary compensation in the value of the caused damage to the locality in case it is not possible to implement compensatory or remedial measures.

Since compensation measures are unenforceable regarding this site, a precautionary approach should be applied by suspending the hydropower project Studenica S4 - Gradina. Studenica S4 is only one of 6 SHPPs considered and planned in the Study of hydro potential exploitation on lower Studenica. Studenica 5 and Studenica 6 are located downstream of S4. S3 exists as SHPP Studenica and S1 and S2 are within borders of Emerald site so their construction is prohibited by law.

Reasons for doubt in impartiality and objectivity of Expert control committee (Republička reviziona komisija)

At the end of March 2021. A meeting was held in the premises of the Faculty of Civil Engineering in Belgrade which was attended by representatives of Investors, Designers and Auditors with the main goal that all the parameters of the hydropower facility MHE S4 on the river Studenica are defined. During this month the Expert committee had an insight into the working

²² Završni stručni izveštaj za projekat: Smernice za održivo planiranje i upravljanje slivnim područjima malih hidroelektrana u zaštićenim prirodnim dobrima, Belgrade, 2018, available at: <https://drive.google.com/drive/folders/13aeGqjCJGr4t5piFz3Cix9X8Pjo8WA48>

²³ Effects of run-of-river hydropower plants on fish communities in montane stream ecosystems in Serbia, Simonović et al, 2021. available at: <https://drive.google.com/drive/folders/13aeGqjCJGr4t5piFz3Cix9X8Pjo8WA48>

versions of the conceptual solution. After the involvement of the committee in the elaboration of the hydropower technical solutions of the SHPP Studenica S4 - Gradina, its parameters were defined.²⁴

After the project activities (elaboration of the technical solution, investments, operation) have been completed for new damming profile 2. The results of the analysis were presented to the Committee, which, after inspecting the documentation, expressed desire to visit the terrain and see the topographical, morphological and geological characteristics of variant barrier profiles of the dam. On March 12, 2021. Representatives Investors, Designers and Auditors visited the location of the future hydropower facility on the river Studenica when it was established that it is desirable to move the partition profile 2 about 15 m downstream in order to avoid the fault zone on the right flank of the dam. This practically defined the new one barrier profile of dam 3.²⁵

By acting in this manner and taking active role in developing the project Expert committee far exceeded its powers and compromised its position as independent, expert body that controls spatial and urban planning documents and compliance control of planning documents with the jurisdiction of the Republic of Serbia.

Therefore Complainant has reasonable doubts in impartiality and objectivity of Expert control committee and is very concerned about it and possible consequences of de facto prejudging decision by involvement in projecting the SHPP. That implies need for on-the-spot visit by independent experts in order to evaluate documentation the actual situation in detail.

Importance to community

Local community is under pressure from investors and local and national governments.

97% of citizens of Ušće are against SHPP construction²⁶ and against this specific project it lasts since 2021.²⁷

Local initiative Save Studenica, together with Polekol and Save mountainous rivers of Kravljevo submitted to the local government and assembly of Kraljevo a petition for ban of SHPP construction in 2021.²⁸ and 2024.²⁹ were on both occasions ignored.

Due to mounting public pressure in 2021. even the President of the Republic on live TV address to the nation, publicly promised to the citizens of Ušće: "We looked at several things, and together with the Prime Minister and other people, we decided to talk to the investor in order to get

²⁴ Idejno rešenje MHE „Studenica S4 – Gradina“ Sveska 1. Hidrograđevinski projekat TD 47 available at: https://drive.google.com/drive/folders/1tccFi447vZra81a_F2o2GjTeWLaKN0jJ

²⁵ Idejno rešenje MHE „Studenica S4 – Gradina“ Sveska 1. Hidrograđevinski projekat, TD 44 available at: https://drive.google.com/drive/folders/1tccFi447vZra81a_F2o2GjTeWLaKN0jJ

²⁶ <https://www.krug.rs/uscani-vi-ste-na-potezu-potpisivanje-peticije-za-spas-reke-studenice/>

²⁷ <https://www.krug.rs/goran-nikolic-ako-dozvolimo-prvu-branu-izgubili-smo-studenicu/>

²⁸ <https://www.krug.rs/tri-inicijative-predale-peticiju-za-moratorijum-na-gradnju-mhe-u-kraljevu-video/>

²⁹ <https://n1info.rs/vesti/ekoloska-udruzenja-kraljeva-mhe-tehnoloska-proslost-trazimo-zabranu/>

the best deal and stop the project. People can sleep peacefully, knowing that we will save the rivers.”³⁰

Impacts on protected and internationally recognised areas, protected species and habitats:

The provided information on endangered species and habitats, listed in the Appendices of the Bern Convention and the Annexes of the EU Habitats and Birds Directives, is based on several key documents, including:

- Protection Study of PP Golija (2020)
- Fishing Area Management Program "Golija" for the period 2013–2022
- Golija–Studenica Biosphere Reserve: Periodic Report
- Non-forest Habitat Types in Nature Park Golija

Golija Supports Habitats and Species Protected Under:

- The IUCN Red List (vulnerable and endangered species)
- The EU Habitats Directive (Annexes II and IV)
- Important Bird Area (IBA), with the code Golija RS029IBA
- National regulations: Strict protection of species and priority habitat types

Plant Species – Conservation and Significance

According to the European Red List of Vascular Plants (Bilz et al., 2011), Golija is home to 101 species out of the 483 vascular plant species present in Serbia:

- Near Threatened (NT): 4 species (further described in Annex I)

Animal Species – Protected and Threatened Categories

- **Dolichophis caspius (Caspian Whipsnake):**
National category: Vulnerable (VU) under IUCN criteria (C2a(i)).
- **Morimus funereus and Rosalia alpina (Beetle species):**
IUCN status: Vulnerable (VU).
Listed in Annexes II and IV of the EU Habitats Directive (92/43/EEC). In Serbia: Strictly protected species (Regulation on Nature Protection).

The conservation status of endangered bird species in the protected area was assessed based on the IUCN Red List criteria for Serbia. All data are sourced from Rajković and Vasić, 2018.

- **Glaucidium passerinum** - Status: Endangered (EN)
- **Aegolius funereus** - Status: Vulnerable (VU)
- **Alectoris graeca** - Status: Vulnerable (VU)
- **Aquila chrysaetos** - Status: Vulnerable (VU)
- **Falco peregrinus** - Status: Endangered (EN)

- **Dendrocopos leucotos** - Status: Vulnerable (VU)
- **Picoides tridactylus** - Status: Endangered (EN)

Habitats – Conservation Priorities

This wider area hosts numerous priority habitats for conservation as defined by the Regulation on Habitat Selection Criteria (Official Gazette of the Republic of Serbia, No. 35/2010):

- **Calluna vulgaris (Heather):** Forms priority habitat types for protection under national legislation.

According to Annex I of the EU Habitats Directive, these habitats are significant at the EU level and are designated as potential NATURA 2000 areas.

They are also recognized under Resolution 4 of the Bern Convention, coded as F4.2.

Other NATURA 2000 Habitats:

- **Forests:** Black alder, grey alder, sessile oak, Turkey oak, mixed forests of sessile oak and Turkey oak, montane beech forests, black pine, spruce and fir, spruce, mixed deciduous forests with fir and spruce, subalpine spruce forests.

EMERALD Habitats:

- **Forests:** Black alder, grey alder, Turkey oak, mixed forests of sessile oak and Turkey oak, sessile oak forests, montane beech forests, black pine, spruce and fir, spruce, subalpine spruce forests.

Fragile and Rare Habitats:

- **Black and grey alder forests:** Sensitive to degradation due to functional instability.
- **Mountain beech, Turkey oak, black pine, and spruce forests:** Poorly renewable and sensitive.
- **Subalpine spruce and mountain maple forests:** Rare and representative for Serbia.
- **Endemic habitats of mountain beech and maple:** Critical for biodiversity.

* * *

Stage of described plans and developments indicate the urgent need to preserve the remaining free-flowing section of the Studenica watercourse because of its key biodiversity significance, especially for species that inhabit rapidly flowing waters.

All aforementioned projects, plans and activities will inevitably degrade habitats, natural values and the landscape.

We urge the Bureau to consider upgrading the complaint to a possible or open file in order to prevent irreversible damage of Emerald site from construction of SHPP.

The Complainant would like to urge the Bern Convention Bureau to put the case onto the agenda of the next Standing Committee.

The complainant has tried all means on national and local level, participated in the procedures before the competent authorities regarding urban planning documents for SHPP Studenica S4 - Gradina which are preconditions for obtaining construction permit. Advocated in public discussions protection of Studenica in full length and submitted petitions to competent local and national authorities.

We therefore urge the Bern Convention, IUCN and UNESCO to ask the Government of Serbia to halt the all activities connected with construction of the hydropower plant, to ensure the protection of all the species and habitats of Golija Emerald site, to include the whole stretch of Studenica in the Emerald Network, and to arrange an on-the-spot visit by independent experts in order to evaluate the actual situation in detail and consider opening a case file.