

## **CEPF Final Completion and Impact Report**

<b>Organization's Legal Name:</b>	Centar za zivotnu sredinu
<b>Project Title:</b>	Steps Towards the Protection of Neretva Tributaries: Buna, Bunica, Begava and Trebižat, Bosnia and Hercegovina
<b>Grant Number:</b>	CEPF-109139
<b>Hotspot:</b>	Mediterranean Basin II
<b>Strategic Direction:</b>	2 Support the sustainable management of water catchments through integrated approaches for the conservation of threatened freshwater biodiversity
<b>Grant Amount:</b>	\$146,923.62
<b>Project Dates:</b>	November 01, 2019 - July 31, 2022
<b>Date of Report:</b>	November 11, 2022

### **IMPLEMENTATION PARTNERS**

- CSO "Majski cvijet", Buna was a project partner and local support for field research, events organization, and advocacy. We had very good communication during the project implementation and they were very helpful and they were very supportive and cooperative. They are very active in protecting Buna, so their experience was very helpful for project implementation.
- Youth Association "Novi val", Blagaj is a local CSO who is a very important stakeholder due to their activities on Buna and Bunica protection. We were in regular communication about each other's activities; they actively participated in and supported our events related to the project.
- "Eco Tour" Stolac is a local CSO for protecting nature and tourism development and is a very important stakeholder in the area of the Bregava catchment. They were our local support for activities and this area. They actively participated in our events related to the project.
- CSO "Tajna prirode", Čapljina is the organization that aims for the preservation and development of natural, sports, and eco-tourism potential waters. They are very active in protecting and promoting the Trebižat river. We had very good cooperation during the project and they supported our activities in the area.
- relevant ministries in West Herzegovina canton and Herzegovina-Neretva canton (Ministry of spatial planning, construction and environment in West Herzegovina canton and Ministry of trade, tourism and environment in Herzegovina-Neretva canton). These cantons' governments are relevant stakeholders for advocacy and we had several meetings with them presenting project results and arguments for protection.
- The public company "Parkovi" that manages the protected area, i.e. waterfalls Kravica and Koćuša on river Trebižat. We worked together on the promotion of the area and shared information on management improving and using the results of our research.

## CONSERVATION IMPACTS

Planned Long-Term Impacts: 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
<p>Threats on at least 10 species are reduced and population of at least five species recovers or stabilize</p>	<p>The desk and field research we conducted showed presence of many rare, endangered, critically endangered and vulnerable species according to international directives and conventions (Habitats Directive and Birds Directive of the European Union, Bern Convention) and Red list of endangered species of flora and fauna in the Federation of Bosnia and Herzegovina. The protection and good management of the area will contribute to reduction of threats to these species, especially critically endangered (CR) fish species (Red list in Federation of B&amp;H) <i>Salmo marmoratus</i>, <i>Salmo obtusirostris</i>, endangered (EN) fish species <i>Rutilus basak</i>, <i>Chondrostoma knerii</i>, <i>Gasterosteus aculeatus</i>, and vulnerable (VU) species <i>Squalius svallize</i>, <i>Cobitis narentana</i>. Numerous species of briophytes, plants, amphibians, reptiles, butterflies, dragonflies, and macrozoobenthos will gain from protection and contribute to the preservation of habitats in which they play a crucial role. Findings and recommendations published as a result of the project can serve as a baseline for further research, revision of Red lists in B&amp;H and creation of measures for species conservation and area management in order to improve freshwater biodiversity status.</p>
<p>Protected, promoted and well-managed rivers Buna, Bunica, Bregava and Trebižat within at least two new protected areas that are benefiting local communities and wider public within the next 10 years</p>	<p>Our initiative for the revision of Neretva river protection from former Yugoslavia (this is obligatory according to applicable Law on nature protection in the Federation of Bosnia and Herzegovina) in the part that concerns the Buna estuary will contribute to the protection, promotion, and management establishment of river Buna. We also made a draft law for the declaration of the protected area (Buna river) and delivered it to the authorized Ministry. The results of this project will be the basis for initiating the protection of the river Trebižat and we have already provided funds for this and started preparatory activities. The protection of these rivers and good management will enable the protection of species and valuable habitats and, at the same time, will enable the prosperity of local communities through the promotion of tourism and other activities in a way that would not endanger the survival of species and habitats.</p>

Planned Short-Term Impacts: 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
<p>Seven researchers from Bosnia and Herzegovina and seven students increase their capacities on freshwater biodiversity through participation to research projects and collaboration</p>	<p>Seven researchers and seven students learned more about the uniqueness of the Neretva river watershed and its flora and fauna through 15 days of field work on four Neretva tributaries. Researchers and students improved their understanding particularly about freshwater biodiversity and the numerous endemic and rare species that are present in the area. Although the COVID-19 pandemic, travel restrictions between communities, and curfews delayed the research, all of them spent 15 working days in the field as planned. The opportunity for some of the them to conduct research in this region of the country (Herzegovina and the Mediterranean basin) for the first time was cited as a particular benefit. They all carried out their research in an efficient, effective, and sustainable way.</p>
<p>10 taxonomy groups of the rivers Buna, Bunica, Bregava and Trebižat are researched leading to the submission of the proposals for the protection of those sites.</p>	<p>Plants (Bryophytes and Tracheophyta), Insects (Lepidoptera), birds (Aves), amphibians (frogs (order Anura), salamanders (order Caudata)), reptiles (order Turtles (Testudines), snakes and lizards (order Squamata), macrozoobenthos (Cnidaria-Hydra sp., Hirudinea, Turbellaria, Oligochaeta, Bivalvia, Gastropoda, Arachnida, Crustacea, Odonata, Ephemeroptera, Plecoptera, Megaloptera, Hemiptera, Trichoptera, Hymenoptera, Coleoptera, Diptera), mammals (Rodentia, Chiroptera, Carnivora) are taxonomy groups researched during the project. Research has inventoried a large number of species, including 373 plant taxa, 126 bird taxa, 99 bryophytes, 6 amphibian species, 13 reptile species, 128 macrozoobenthos taxa, 49 butterfly species, and 14 mammal species. For example, a total of nine species are considered endangered according to the Red List of Flora in FB&amp;H, and along the rivers there are four species endemic to the Balkans. 37 habitat types according to EUNIS and 45 plant associations were registered, and among these, there are 16 types that are important for protection and require the allocation of areas of the European ecological network Natura 2000 along these rivers. These findings resulted in submission of the initiative for protection of Buna estuary with conservation measures.</p>
<p>At least five freshwater species are identified and promoted as a key indicators of the good status of rivers Buna, Bunica, Bregava and Trebižat, their status is monitored and improved and within two KBAs (Trebižat drainage including Imotsko polje and Neretva</p>	<p>The project did not include any conservation measures or monitoring, and this is discussed with Programme Officer for the Balkans. 33 bird species are registered for the first time in the research area and this is an example of how biodiversity knowledge has grown. Total</p>

Impact Description	Impact Summary
<p>delta and associated springs/lakes including Hutovo Blato) knowledge of freshwater biodiversity will be improved.</p>	<p>ornithofauna of the area is 191 species, and this is 55% of the total species number registered in Bosnia and Herzegovina. According to IUCN Red list, one among detected bird species is endangered (<i>Neophron percnopterus</i>), one is vulnerable (<i>Streptopelia turtur</i>), and seven are near threatened. According to Bern Convention 54 species are protected. Twenty four species are on Annex I of the Birds directive. Five species are regionally extinct according to Red list of fauna in FB&amp;H and four of them nested in the researched area. Three bryophyte species are endemic to the European continent, and regionally rare, while two species are vulnerable in Europe. Along the river Trebižat, a new nesting site of the streaked fantail warbler (<i>Cisticola juncidis</i>) was discovered, and with an estimated national population of 5-20 pairs, the species has the status of a critically endangered (CR) according to the Red List of Fauna of FB&amp;H. <i>Austropotamobius pallipes</i> (IUCN status-EN) is registered</p>
<p>Within the project implementation at least 50 individuals representing the local communities, scientific public, decision-making bodies and media are engaged on the protection of the rivers Buna, Bunica, Bregava or/and Trebižat.</p>	<p>More than 50 individuals representing the local communities (activists, CSOs, fishermen, individuals interested in river protection, citizens), decision-makers at different levels, the scientific public (researchers and students), and media, especially media from the area, are engaged in the protection of Neretva tributaries. Researchers and students participated in promotions of research results and workshops with local communities and actively promoted and advocated for river protection. At least 150 people attended our events, promotions and workshops.</p> <p>Through project activities and outcomes we increased public and local community knowledge of the value of river conservation for community well-being. These rivers are the basis of life in Herzegovina, and their significance for human existence cannot be adequately defined or measured. We worked to increase citizens' and communities' understanding of their right to clean water and how this affects their way of living and income, as well as to increase their awareness on ability to participate more into decisions involving protected areas, and the steps to take in the case of illegal activities. In that way we tried to give them tools to enhance their subsistence economy.</p>
<p>Publication with the results of the research is promoted and used by at least 20 different institutions, CSOs, local communities and media houses.</p>	<p>Publication of the research results is promoted in universities in Banja Luka and Sarajevo, as well as in Mostar. Due to the desire of both students and faculty in repeating the promotion for all study programs at the Faculty of Natural Sciences and</p>

Impact Description	Impact Summary
	<p>Mathematics, we had two promotions in Banja Luka. A number of participants in Banja Luka was 60 in two promotions, in Sarajevo 12, and in Mostar, there were 24 people from institutions and different organizations. Among the participants in Mostar, there were also representatives of the City of Mostar, Ministry of Spatial Planning, Construction and Environmental Protection of West Herzegovina Canton, and Ministry of Trade and Tourism in Herzegovina-Neretva canton. All participants in the promotions, raising awareness events and workshops got a copy of the publication. Federal Ministry of Tourism and Environment, Environmental Fund of the Federation of Bosnia and Herzegovina, Ministry of Foreign Trade and Economic Relations of B&amp;H, and Commission to Preserve Natural Monuments got their copies by post, too. The publication is available in the National and University Library of the Republic of Srpska as well as the University of Džemal Bijedić library in Mostar. Wide range of media houses shared information about the publication.</p>

**Unexpected impacts (positive or negative)?**

Due to our project activities and communication with the City of Ljubuški, they agreed to sign our Declaration “Cities/Municipalities without dams” and they undertook not to issue any concession, permit, or recommendation for the construction of a dam or hydropower plant on their territory without consulting the citizens. The declaration “Cities/Municipalities without dams” is a joint initiative of environmental non-governmental organizations and municipalities, initiated by the Coalition for the Protection of Rivers of Bosnia and Herzegovina and the Center for Environment.

**PROJECT RESULTS/DELIVERABLES**

**Overall results of the project:**

The most important result of the project is the initiative for the revision of Neretva river protection from former Yugoslavia (this is obligatory according to applicable Law on nature protection) in the part that concerns Buna estuary. All protected areas from former Yugoslavia should be revised and aligned with applicable laws but there is not any process started yet. We prepared the study for protection (a document that contains legal basis and all arguments for protection) based on our desk and research results, and delivered it to the authorized ministry in Herzegovina-Neretva canton, and we will continue to follow that process and advocate for protection. A draft law on declaration of protection is also prepared and sent to the Ministry. This will contribute to increased number of protected areas in Federation of B&H and reducing threats to rare and endangered, endemic species and natural habitats of this area that are part of international directives and conventions (Habitats Directive and Birds Directive of the European Union, Bern Convention) and are also part of the Red list of endangered species of flora and fauna in the Federation of Bosnia and Herzegovina.

Very important results of the project were the results of biodiversity research. We contributed to improving knowledge about biodiversity of Neretva tributaries but also used

these results to initiate official protection of Buna river. The results that help disseminating data on biodiversity and threats to species and ecosystems in this area are the publication with research results obtained and collected during the project and video filmed during the research. The publication is promoted in universities in Banja Luka and Sarajevo, as well as in Mostar. All participants of the promotions, raising awareness events and workshops got a copy of the publication. It also delivered to all relevant institutions (Federal Ministry of Tourism and Environment, Environmental Fund of the Federation of Bosnia and Herzegovina, Ministry of Foreign Trade and Economic Relations of B&H, Commission to Preserve Natural Monuments, cities and municipalities in the area, libraries). Video about the rivers, research results, and the problems that pose the biggest threats to these rivers and biodiversity is a project result that helped raise awareness about the rivers, and their values but also threats to the biodiversity and freshwater ecosystems in this area.

The protection of an area is based on the recognition of natural values that need to be protected and the definition of the conditions for further use of the area by the category of protection, that is, the values that are protected in the given area. Given that many local communities live in and around future protected areas and that conservation efforts cannot make a huge impact without them we dedicated time to work with them through meetings and workshops.

An important step for the successful management of the protected area is the identification of all actors who use the area in some way, whether for recreation and rest, preservation of natural values, economic exploitation of the area's natural resources, water management, etc. We have identified the users of the area, i.e. interested parties and their impact on the given area, and also discussed the impact of future protection of the area on their activities. We discussed the possibilities for protection with all interested parties (primarily the local population who live near these localities and use the rivers as a central point of their activities). We talked about the problems that led to the disruption of the normal state of this river, how they use this river, and what they think is the most important thing to protect, but also about what they think will change by protecting this area and what effects it would have on them. Those present pointed out numerous problems that threaten biodiversity, but also the fear that the protection of the area could limit their activities, for example, fishing. Such discussions gave us an insight into the importance of the river itself, as well as the importance of protection with the active participation of citizens, and they also allow us to educate interested parties about the benefits of area protection and sustainable river management. We used the conclusions from these workshops for better planning and implementation of activities in the field of nature protection, as well as launching an initiative to protect parts of the area along these tributaries of the Neretva. Also, we tried to explain the possibilities for communities to generate income and other non-cash benefits by protecting, rather than exploiting, conservation values, because then direct use pressure decreases, communities protect those values from use by outsiders and they are more likely to engage in restoration activities.

Meetings with decision makers at different levels (municipalities, cities, cantons, federation) had the aim to advocate for the protection and present the arguments for protection. Also, we followed the processes of issuance of preliminary water consent for small hydropower plants on Buna and gave strong arguments why the consents should not be issued.

We expect the long term impact of the project will be increased number of protected areas in Federation of B&H, decreased threats on species and habitats in the project area, protected and well-managed rivers Buna, Bunica, and Trebižat.

**Results for each deliverable:**

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
1.0	Research - Aim of this phase is to collect the data about the species (for at least 10 taxonomy groups) present in rivers Buna, Bunica, Bregava and Trebižat combining the field research and already existing data (published and unpublished).	1.1	Report on the present state and proposed most suitable locations for research	The scientists examined every river and identified the best areas for studying a certain types of organisms. Almost always the representatives of Center for Environment or our partner organization "Majski cvijet" were also present with them in the field. The locations for research were chosen to provide as much diversity of habitat types as possible along the rivers, from springs to estuaries.
1.0	Research - Aim of this phase is to collect the data about the species (for at least 10 taxonomy groups) present in rivers Buna, Bunica, Bregava and Trebižat combining the field research and already existing data (published and unpublished).	1.2	Database or electronic folder gathering data from field research, including photos and video material, for inventories on i) fish, ii) plants, iii) birds, iv) mammals, v) herpetofauna, vi) insects, vii) macrozoobenthos.	For each group of organisms—birds, plants, bryophytes, herpetofauna and amphibians, insects (butterflies), macrozoobenthos, and mammals—we created an electronic folder including data from field study. Each category of organisms includes a folder containing information (a report), a species list, images of the species and their habitats, information about the research locations, and videos. The database can be found on Google Drive at this link: <a href="https://drive.google.com/drive/folders/1nXdwUpvU-EYNg98VivisS4GV_tEEaXAI?usp=sharing">https://drive.google.com/drive/folders/1nXdwUpvU-EYNg98VivisS4GV_tEEaXAI?usp=sharing</a>
1.0	Research - Aim of this phase is to collect the data about the species (for at least 10 taxonomy groups) present in rivers Buna,	1.3	Final document containing all reports developed	The final document containing all the reports is developed and it is on the Google drive link <a href="https://drive.google.com/file/d/1yMXTe3tYjWx4fqIUKIJv7j7oJxZKkRTw/view?usp=sharing">https://drive.google.com/file/d/1yMXTe3tYjWx4fqIUKIJv7j7oJxZKkRTw/view?usp=sharing</a>



Component		Deliverable		
#	Description	#	Description	Results for Deliverable
	Bunica, Bregava and Trebižat combining the field research and already existing data (published and unpublished).			This document is the basis for the content of the publication "Biodiversity of Buna, Bunica, Bregava, and Trebižat - Biodiversity research and problem identification".
2.0	Education and promotion - Our big focus of the project will be on working with local communities and all stakeholders on raising their awareness.	2.1	At least 10 media press releases, at least 300 media articles and reports, one publication and one short video produced.	There were ten news releases that covered various subjects, research findings, promotions, and events. Both the publication and the video have been released. Press releases, publications, and press clippings are all attached under the category Other information.
2.0	Education and promotion - Our big focus of the project will be on working with local communities and all stakeholders on raising their awareness.	2.2	Photos and press release of three presentations	There were four research results promotions, two at the Faculty of Natural Sciences and Mathematics in Banja Luka, one at the Forestry faculty in Sarajevo, and one at Mostar. After the first promotion in Banja Luka professors contacted us to repeat the promotion for a greater number of students from all groups and years. After each promotion, we sent press releases. After each promotion, we sent press releases. We explained the project, played the movie, and the researchers then presented the findings of their work before we had a discussion.
2.0	Education and promotion - Our big focus of the project will be on working with local communities and all stakeholders on raising their awareness.	2.3	Three reports and at least 50 media outreach document(s) presenting conclusions	



Component		Deliverable		
#	Description	#	Description	Results for Deliverable
2.0	Education and promotion - Our big focus of the project will be on working with local communities and all stakeholders on raising their awareness.	2.4	Pictures and/or video published on social media on three awareness raising events for Buna, Bunica, Bregava and Trebižat rivers	There were two raising awareness events as agreed with Programme Officer for the Balkans. On World Water Day (March 22nd 2022), together with other environmental organizations, we organized a clean-up campaign with the aim of raising citizens' awareness of the importance of freshwater ecosystems and their preservation. Our second raising awareness event was part of the Ljubuški outdoor festival (27-28 May 2022) where we presented the project activities, results and talked about our efforts in the protection of rivers Trebižat, Buna, Bunica and Bregava. The tab Other information contains pictures from both events.
2.0	Education and promotion - Our big focus of the project will be on working with local communities and all stakeholders on raising their awareness.	2.5	Visual identity (logo etc) created and used for advocacy and promotion purposes	Visual identity of the project has been used for all activities (research results promotions, promotion materials, online promotions).
3.0	Advocacy - We are planning to initiate the procedures for the protection of Buna and Bunica, Bregava and Trebižat rivers towards the Governments with arguments and with better	3.1	Document presenting the argumentation for Buna, Bunica, Bregava and Trebižat protection	A study for the protection of the Buna estuary has been prepared, and it contains all the relevant information about the area and has all the elements required by law. For other rivers, only data about flora and fauna is collected and summarized. A draft of the law regulating declaration of protection is also

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
	understanding about importance and vulnerability of species/habitats.			created and submitted to the relevant ministry.
3.0	Advocacy - We are planning to initiate the procedures for the protection of Buna and Bunica, Bregava and Trebižat rivers towards the Governments with arguments and with better understanding about importance and vulnerability of species/habitats.	3.2	Official letters of the protection initiation for Buna, Bunica, Bregava and Trebižat sent	We sent one official letter with the initiative for revision of the Neretva river protection that regards the Buna river. This protection is from the former Yugoslavia, and according to applicable law, every protection from a former state must be updated and in compliance with current laws. The authorities should have already started these processes for all protected areas in B&H but not a single one began yet. This should indirectly contribute to better management of possible Natura 2000 area Buna and Bunica that is estimated to be 795 ha.
3.0	Advocacy - We are planning to initiate the procedures for the protection of Buna and Bunica, Bregava and Trebižat rivers towards the Governments with arguments and with better understanding about importance and vulnerability of species/habitats.	3.3	Minutes or internal briefs on at least 10 meetings with decision makers	Meetings with decision makers at different levels (municipalities, cities, cantons, federation) had the aim to advocate for the protection and present the arguments for protection. There were meetings with the Federal Ministry of Tourism and Environment, Environmental Fund of the Federation of Bosnia and Herzegovina, City of Ljubuški, Municipality of Široki Brijeg, Ministry of Trade and Tourism in Herzegovina-Neretva Canton, Ministry of Spatial Planning, Construction and Environment in West Herzegovina canton, Commission to Preserve National Monuments

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				in Mostar, Agency for the watershed of Adriatic Sea. Due to the complicated political situation in the area, in some municipalities, we did not manage to organize the meetings. Also, we followed the process of issuance of preliminary water consent for small hydropower plants on Buna and gave strong arguments about why the consent should not be issued.
4.0	Capacity building and project administration	4.1	CSTT/GTT filled up and sent to CEPF at beginning and end of the project	CSTT/GTT are filled up and sent to CEPF at the beginning and end of the project.
4.0	Capacity building and project administration	4.2	Final Completion and Impacts Report filled up and submitted at the end of the project	Final Completion and Impacts Report is filled up and submitted at the end of the project.
3.0	Advocacy - We are planning to initiate the procedures for the protection of Buna and Bunica, Bregava and Trebižat rivers towards the Governments with arguments and with better understanding about importance and vulnerability of species/habitats.	3.4	Process Framework prepared and submitted to CEPF, prior to start active advocacy work for protection of 2 or 3 sites	Process Framework is prepared, submitted, and approved by CEPF.
4.0	Capacity building and project administration	4.3	Complaint mechanism developed and disclosed to	The complaint mechanism is developed and disclosed on more than four sites. The

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
			local stakeholders in the four sites	complaint mechanism is also available on the CZZS web page (www.czzs.org).

### Tools, products or methodologies that resulted from the project or contributed to the results:

Publication „Biodiversity of Buna, Bunica, Bregava, and Trebižat“ summarized research results from the field and desk research of seven taxonomic groups. The publication is shared with participants of research results promotions, workshops with local communities, and also with other relevant stakeholders (cantonal ministries, municipalities, and cities in the area Federal Ministry of Tourism and Environment, Environmental Fund of the Federation of Bosnia and Herzegovina, Ministry of Foreign Trade and Economic Relations of B&H). The publication has Cataloging in Publication record (CIP data) and it is available in the National and University Library of the Republic of Srpska as well as the University of Džemal Bijedić library in Mostar. Many students contacted us to ask for the publication to use as literature for their exams and we find this very important contribution to the results of the project. This publication is the first of this kind that gathered so much information about biodiversity in this area. The publication is uploaded in the tab "Other information".

Video about the rivers, research results, and the problems that pose the biggest threats to these rivers and biodiversity is a project result that helped raise awareness about the rivers, and their values but also threats to the biodiversity and freshwater ecosystems in this area. The video is on a link <https://www.youtube.com/watch?v=luchYb1JYhg>

## PORTFOLIO INDICATORS

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
2.1	Number of threatened freshwater species seeing status improved (i.e., short-term increase in population and/or breeding success)			0	There is no change of the status recorded but research results showed many first findings for the research area i. e. 33 bird species are registered for the first time. According to IUCN Red list, one among total number of detected bird species is endangered, one is vulnerable, and seven are near threatened.

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					<p>According to Bern Convention, 54 species are protected. Twenty four species are on Annex I of the Birds directive. Five species are regionally extinct according to Red list of fauna in FB&amp;H and four of them nested in the researched area. Nine out of total detected plant species are considered EN according to the Red List of Flora in FB&amp;H, and along the rivers there are four species endemic to the Balkans. Three bryophytes are endemic for Europe, and regionally rare, while two species are VU in Europe. According to the national and regional red lists in SE Europe (B&amp;H does not have its own), 52 bryophyte species are considered regionally rare, vulnerable and important for protection. According to the Red List of Fauna of the FB&amp;H, four species of detected amphibians and reptiles are vulnerable species, one species is endangered, one is almost endangered, while the rest</p>

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					are LC-least concern. One from the inventoried butterfly species is endangered and five species are vulnerable according to the FBiH Red List of Fauna. The white-clawed crayfish is detected and the species IUCN status is EN. All these data could result in improving species status and enhanced protection.
2.4	Number of Freshwater KBAs in priority CMZ with improved information on biodiversity, shared with stakeholders			2	Trebizat drainage including Imotsko polje and Neretva delta and associated springs/lakes including Hutovo Blato are two KBAs that were covered by the biodiversity research. Seven taxonomic groups were researched (plants, bryophytes, mammals, butterflies, amphibians, reptiles, macrozoobenthos, birds. The research results are shared online, during promotions and all events with local communities, fishermen associations, students, professors, decision makers, protected area managers, environmental organisations, touristic

<b>Portfolio Indicator Number</b>	<b>Portfolio Indicator Description</b>	<b>Expected Numerical Contribution</b>	<b>Expected Contribution Description</b>	<b>Actual Numerical Contribution</b>	<b>Actual Contribution Description</b>
					organisations, etc.. The results are also discussed during online meetings and were sent to all relevant stakeholders who we had not chance to meet in person during the project implementation. These results are good basis for further detailed research on different species, studies for protection (documents with arguments for protection), management plans, environmental strategies, creating conservation measures, etc.
2.0	Number of hectares of KBAs under improved management (please indicate the KBA names in comments)			795	Based on the results of the biodiversity surveys, the Buna and Bunica are suitable for the proclamation of a protected area. The area was protected in the former Yugoslavia, and according to applicable law, every protection from a former state must be updated and in compliance with current laws. The authorities should have already started these processes for all protected areas in B&H, but not a single one has begun. We initiated this process, which



Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					contributes to better management of possible Natura 2000 area Buna and Bunica, estimated to be 795 ha.
4.6	Number of KBAs for which information on plants is improved			2	Knowledge of plants was significantly improved for KBAs Rijeka Neretva (BIH07) and Trebižat (BIH09). A plant survey was done within 46 localities in those two KBAs, and 440 plant taxa were recorded. Additionally, the literature review resulted in 67 plant taxa which were not recorded in the field during this survey. Nine registered taxa are considered endangered according to the national Red List. Except for the plant survey, the identification of habitats was made. In total, 37 habitat types, according to EUNIS, were recorded.

## GLOBAL INDICATORS

### Protected Areas

Protected areas that have been created and/or expanded as a result of the project. Protected areas may include private or community reserves, municipal or provincial parks, or other designations where biodiversity conservation is an official management goal.

Name of Protected Area	WDPA ID*	Latitude	Longitude	Country	Original Total Size (Hectares) **	New Protected Hectares ***	Year of Legal Declaration or Expansion
------------------------	----------	----------	-----------	---------	--------------------------------------	-------------------------------	--

\*World Database of Protected Areas

\*\*If this is a new protected area, 0 should appear in this column

\*\*\* This column excludes the original total size of the protected area.

## Key Biodiversity Area Management

Key Biodiversity Areas (KBAs) under improved management—where tangible results have been achieved to support conservation—as a result of the project.

KBA Name	KBA Code	Size of KBA	Number of Hectares with Improved Management
Neretva River	BIH07		795

## Production Landscapes

Production landscapes with strengthened management of biodiversity as a result of the project.

A production landscape is defined as a site outside a protected area where commercial agriculture, forestry or natural product exploitation occurs.

Name of Production Landscape	Latitude	Longitude	Hectares Strengthened	Intervention
------------------------------	----------	-----------	-----------------------	--------------

## Benefits to Individuals

- Structured Training:**

Number of Men Trained	Number of Women Trained	Topics of Training
3	4	The students engaged on the project had a training during a field work with the researchers. Each student had training in field research for different group of organisms (mammals, amphibians and reptiles, birds, bryophytes, plants and vegetation, macrozoobenthos, butterflies), and some of them were included in laboratory work and report writing. Some of them had a chance to participate the field research for the first time.

- Cash Benefits:**

Number of Men – Cash Benefits	Number of Women – Cash Benefits	Description of Benefits

## Benefits to Communities

View the <b>characteristics</b> column below with the following corresponding codes:	View the <b>benefits</b> column below with the following corresponding codes:
1- Small Landowners	a. Increased Access to Clean Water
2- Subsistence Economy	b. Increased Food Security
3- Indigenous/ Ethnic Peoples	c. Increased Access to Energy
4- Pastoralists / Nomadic Peoples	d. Increased Access to Public Services
5- Recent Migrants	e. Increased Resilience to Climate Change
6- Urban Communities	f. Improved Land Tenure
7- Other	g. Improved Use of Traditional Knowledge
	h. Improved Decision-Making
	i. Improved Access to Ecosystem Services

Community Name	Community Characteristics							Type of Benefit									Country	Number of Males Benefitting	Number of Females Benefitting	
	1	2	3	4	5	6	7	a	b	c	d	e	f	g	h	i				
Buna	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bosnia and Herzegovina	40	30
Blagaj	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bosnia and Herzegovina	50	50
Tihaljina	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bosnia and Herzegovina	30	20
Trebižat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bosnia and Herzegovina	20	15

### Characteristics of "Other" Communities:

## Policies, Laws and Regulations

View the <b>topics</b> column below with the following corresponding codes:			
A- Agriculture	E- Energy	I- Planning/Zoning	M- Tourism
B- Climate	F- Fisheries	J- Pollution	N- Transportation
C- Ecosystem Management	G- Forestry	K- Protected Areas	O- Wildlife Trade
D- Education	H- Mining and Quarrying	L- Species Protection	P- Other

No.	Name of Law	Scope	Topics															
			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Environmental Strategy and Action Plan 2030+ for state and entity levels; only Federation of B&H adopted the strategy so far.	National	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Declaration under the "Cities/Municipalities without dams"	Local	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### "Other" Topics Addressed by the Policy, Law or Regulation:

- Environmental Strategy and Action Plan 2030+ for state and entity levels; only Federation of B&H adopted the strategy so far.: Waste
- Declaration under the "Cities/Municipalities without dams": Infrastructures

No.	Country/ Countries	Date Enacted/ Amended	Expected impact	Action Performed to Achieve the Enactment/ Amendment
1	Bosnia and Herzegovina	August 25, 2022	The BiH ESAP 2030+ will be a policy document that establishes the environmental policy goals and key activities up to 2032 in Bosnia and Herzegovina. It	There was a work group for each area, and we had

No.	Country/ Countries	Date Enacted/ Amended	Expected impact	Action Performed to Achieve the Enactment/ Amendment
			<p>should strengthen the environmental frameworks within BiH and it is one important step for BiH to align with EU laws and procedures, and hence to be better able to join the European Union in the future. It will provide an overview of the current environmental situation and challenges, as well as a 10-year plan on how to address these challenges.</p> <p>The content of BiH ESAP 2030+ will cover the following seven EU environmental policy areas: Water, Waste, Biodiversity and nature conservation, Air quality, climate and energy, Chemical safety and noise, Resource management Environmental management (as horizontal policy). More info: <a href="https://www.fmoit.gov.ba/bs/novosti/vijesti/usvojena-federalna-strategija-zastite-okolisa-2022-2032">https://www.fmoit.gov.ba/bs/novosti/vijesti/usvojena-federalna-strategija-zastite-okolisa-2022-2032</a></p>	<p>representatives in all working groups at all levels. We provided feedback on the draft texts and participated fully in the discussions.</p>
2	Bosnia and Herzegovina	September 24, 2020	<p>they agreed to sign our Declaration "Cities/Municipalities without dams" and they undertook not to issue any concession, permit, or recommendation for the construction of a dam or hydropower plant on their territory without consulting the citizens. The declaration "Cities/Municipalities without dams" is a joint initiative of environmental non-governmental organizations and municipalities, initiated by the Coalition for the Protection of Rivers of Bosnia and Herzegovina and the Center for Environment.</p>	<p>Meetings held to present Initiative, Support provided to Municipality, Data gathered and shared with all stakeholders, including use, demonstrating importance of maintaining rivers without dams.</p>

## Companies Adopting Biodiversity-friendly Practices

A company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses natural resources in a sustainable manner.

Name of Company	Description of Biodiversity-Friendly Practice	Country/Countries where Practice was Adopted
JP "Parkovi" Ljubuški	"Parkovi" manages protected areas waterfall Kravica and Koćuša on river Trebižat. They still lacks a management plan, despite the fact that the legislation requires managers to have one for the protected area. We have begun discussions with them regarding the preparation of this document as part of the project, and in the near future, they are planning specific activities for the development of a management plan, which will include the findings of the project and define measures according to it.	Bosnia and Herzegovina

## Networks and Partnerships

Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable.

Name of Network/Partnership	Year Established	Country/Countries	Established by Project?	Purpose
Udruga Trebižat, Ljubuški	2022	Bosnia and Herzegovina	Yes	Udruga Trebižat from Ljubuški is eco-touristic civil society organization whose activities are connected to river Trebižat (cleaning river, raising awareness activities). Their representatives participated our workshop in Ljubuški on 23rd June 2022 that was part of the project and we continued to share information about activities we do, project calls and local events and problems. Also, we plan to apply for projects together.



<b>Name of Network/Partnership</b>	<b>Year Established</b>	<b>Country/ Countries</b>	<b>Established by Project?</b>	<b>Purpose</b>
Udruga mladih Agape, Trebižat	2022	Bosnia and Herzegovina	Yes	Youth association Agape from Ljubuški is non-governmental organization that strives to initiate the social and cultural scene in this area, as well as the activism and solidarity. They are very interested and they encourage the education of young people in a different way using a learning by doing method. They participated our workshop in Ljubuški on 23rd June 2022 that was part of the project and we continued to share information about activities we do, project calls and local events and problems. Also, we plan some activities together in the field regarding river protection.
Udruga Tajna prirode, Čapljina	2021	Bosnia and Herzegovina	Yes	Udruga Tajna prirode from Čapljina is civil society organization that aims the preservation and development of natural, sports and eco-tourism potential of waters. They participated the media tour in June 2021 that was part of the project and also participated our workshop in Ljubuški on June 23 2022. We still have good communication, we share information about activities we do, project calls and local events and problems. Also, we plan some activities and projects together in the field regarding river protection and cyclotourism.
Youth club Novi val (New wave), Blagaj	2021	Bosnia and Herzegovina	Yes	The New Wave is a youth organization that aims young people and actively their active engagement in educational, ecological, sports, artistic, tourist, cultural and fun activities. One of the basic activities implemented by the New wave is the reintroduction of griffon vultures in Bosnia and Herzegovina as well as the development of eco-tourism. A visit to their club was a part

Name of Network/Partnership	Year Established	Country/Countries	Established by Project?	Purpose
				of the media tour in June 2021, and their representatives also participated our research results promotions in Mostar and workshops in Buna and Blagaj. This year we started a cooperation on river protection within a regional project.

## Sustainable Financing

Sustainable financing mechanisms generate funding for the long-term (generally five or more years). These include, but are not limited to, conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

Name of Mechanism	Purpose	Date Established	Description	Country/Countries	Project Intervention	Delivery of Funds?

## Globally Threatened Species

Globally threatened species (CR, EN, VU) on the IUCN Red List of Threatened Species, benefitting from the project.

Genus	Species	Common Name (English)	Status	Intervention	Population Trend at Site
Austropotamobius	pallipes	Atlantic Stream Crayfish	EN	No conservation measures so far, only raised public awareness on the presence and thus enhanced possibility of protection.	Unknown
Neophron	percnopterus	Egyptian Eagle	EN	No conservation measures so far, only raised public awareness on the presence and thus enhanced possibility of protection.	Unknown

<b>Genus</b>	<b>Species</b>	<b>Common Name (English)</b>	<b>Status</b>	<b>Intervention</b>	<b>Population Trend at Site</b>
Streptopelia	turtur	European Turtle Dove	VU	No conservation measures so far, only raised awareness about presence and thus possibility for protection.	Unknown
Proteus	anguinus	Olm	VU	No conservation measures so far, only raised awareness about presence and thus possibility for protection. Confirmed only by desk research.	Decreasing
Testudo	hermanni	Western Hermann's Tortoise	EN	No conservation measures so far, only raised awareness about presence and thus possibility for protection.	Unknown
Salmo	obtusirostris	Soft-muzzled trout	EN	Protection of the species habitat initiated, and all relevant documents sent to authorised Ministry. This should contribute to improved species status.	Decreasing
Squalius	svallize	Neretva chub	VU	Protection of the species habitat initiated, and all relevant documents sent to authorised Ministry. This should contribute to improved species status.	Decreasing
Chondrostoma	knerii	Dalmation nase	VU	Protection of the species habitat initiated, and all relevant documents sent to authorised Ministry. This should contribute to improved species status.	Decreasing
Cobitis	narentana	Neretva spined loach	VU	Protection of the species habitat initiated, and all relevant documents sent to authorised Ministry. This should contribute to improved species status.	Unknown

## LESSONS LEARNED

Bosnia and Herzegovina is an administratively and politically very complex country. As B&H has two entities, the project area is administratively in the entity of Federation Bosnia and Herzegovina (FB&H), which has 10 cantons and the river Trebižat is in two cantons. Although the project proposal took this into account, the situation in the field is even more complicated because FB&H has two constitutively ethnic groups with political tensions and obstruction of political processes and those tensions were in our area of work. We had to be very careful in communication in order not to be involved in these conflicts or not be accused of choosing sides. Therefore, the project timeframe for complex projects like this with such communities involvement should be designed for a longer period considering that the first half of the year of the project or even more was necessary as the orientation phase (staff recruitment, procurement of equipment, identification of consultants and service providers, review of planning documents, establishing of a peer network, etc.) until the project can be implemented efficiently. Also, the project proposal should have had components with more realistic and achievable outputs. The biodiversity research was basic for quite a big area and it should be more detailed or the project should focus on one or two rivers. Also, next time we would focus on less types of activities.

## SUSTAINABILITY/REPLICATION

Project results, especially biodiversity research results, are publicly available and will serve as a basis for future research activities and conservation measures. We have already started a new project in the region that continues the activities of this project and it will result in the initiative for the protection of river Trebižat and making a study for protection. Our organization received a Sigrid Rausing Trust grant that will enable us a further presence in the region and a continuation of activities on the protection of Neretva tributaries. We will also try to provide more funds from other donors for activities in this region. Our research showed that some groups of organisms need to be further and more detailed research.

## ENVIRONMENTAL AND SOCIAL SAFEGUARDS/STANDARDS

## ADDITIONAL COMMENTS/RECOMMENDATIONS

## ADDITIONAL FUNDING

<b>Total Amount of Additional Funding Actually Secured (USD)</b>	\$8,130.00
<b>Breakdown of Additional Funding</b>	Center for Environment 7450 Sigrid Rausing Trust 278 Balkan Civil Society Development Network 168 Riverwatch 117

## **INFORMATION SHARING AND CEPF POLICY**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. For more information about this project, you may contact the organization and/or individual listed below.

Center for Environment, [info@czzs.org](mailto:info@czzs.org)