MONTENEGRO, MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

PREPARATION OF THE PRELIMINARY DESIGN FOR THE FLOOD PROTECTION, REHABILITATION AND IRRIGATION OF LIM RIVER BASIN (WITH GRNCAR RIVER) WITH THE AIM OF MITIGATING THE IMPACT OF CLIMATE CHANGE AND SUSTAINABLE USE OF NATURAL RESOURCES AND (II) ASSESSMENT OF CLIMATE CHANGE IMPACTS ON GROUNDWATER IN DRINA RIVER BASIN IN MONTENEGRO

NOVEMBER 2020

ENVIRONMENTAL AND SOCIAL MONITORING AND MANAGEMENT PLAN (ESMMP) - LIM RIVER REGULATION – URBAN AREA LEFT RIVER BANK (FROM THE FIRE STATION TO THE LIMSKA STREET), BIJELO POLJE

- REVISED VERSION FROM JULY 2022-

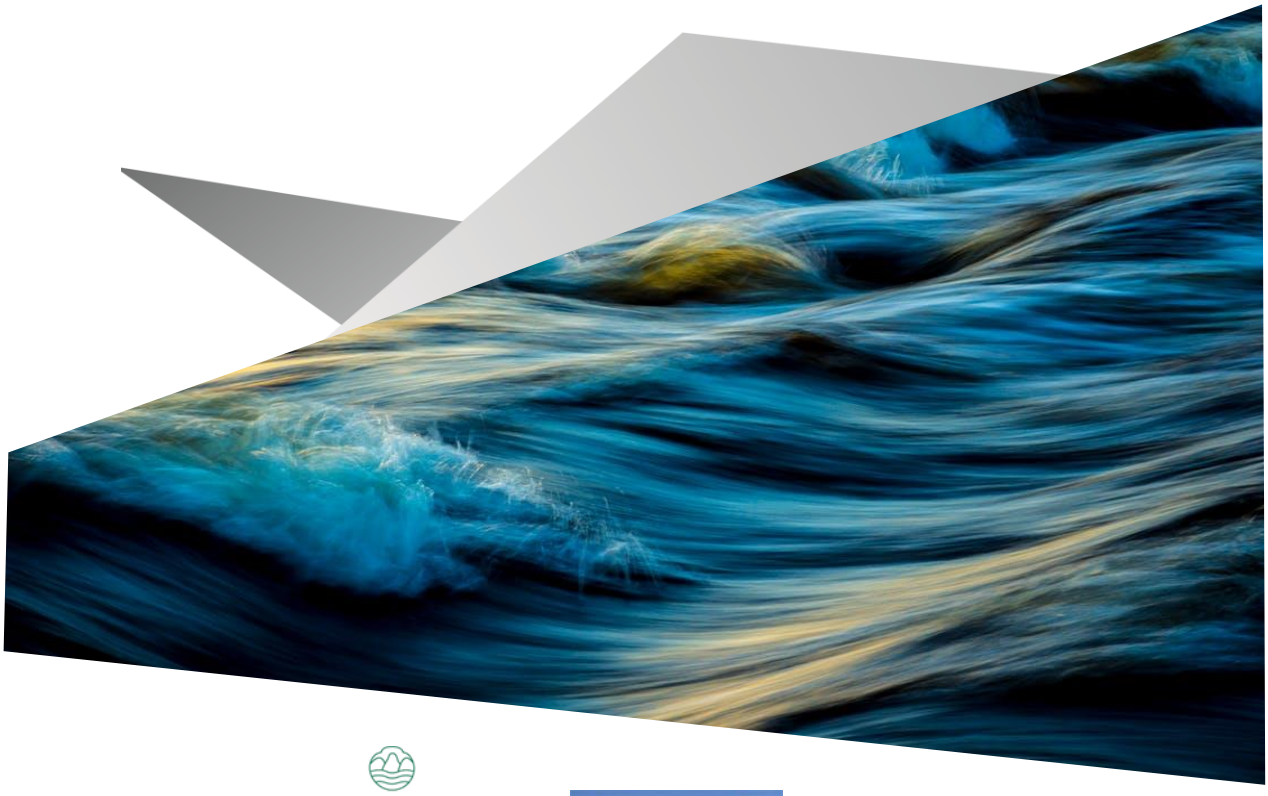

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Table of abbreviations

Abbreviation	*Meaning*
CSOP	Construction Site Organization Plan
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
E&S	Environmental and Social
ESMMP	Environmental and Social Management and Monitoring Plan
EPA	Environmental Protection Agency
ESA	Environmental and Social Advisor
ESE	Environmental and Social Expert
ESS	Environmental and Social Standards
FIFO	First-in/first-out
GBV	Gender-based violence
GEMM	General Environmental Mitigation Measures
GRS	Grievance Redress Service
HS	Hydrological station
LMP	Labor Management Procedure
MAFWM	The Ministry of Agriculture and Rural Development
MNE	Montenegro
MSDT	Ministry of Sustainable Development and Tourism
OHS	Occupational Health and Safety
PAP	Project Affected Person
PM	Particulate Matter
PIU	Project Implementation Unit
PPE	Personal Protective Equipment
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
RRA	Resettlement Review and Audit
SDIP	Sava and Drina Rivers Corridors Integrated Development Program
SEA	Strategic Environmental Assessment
SEP	Stakeholder Engagement Plan
WB	World Bank
WC	Water Consent
WP	Water Permit
WR	Water Requirements

1 Introduction

Sava and Drina Rivers Corridors Integrated Development Program (SDIP) represents the World Bank's long-term undertaking, to address neglected infrastructure development in the region while promoting joint decision making and development along the two river corridors. This Program will implement subprojects with high implementation readiness and relevance to the program objectives, with detail designs and tender documents likely to be ready by effectiveness in Montenegro, Bosnia and Herzegovina, and Serbia. One of the subproject that is financed under SDIP is the design and construction of the flood protection, rehabilitation and irrigation structures on the Lim River in Montenegro (hereinafter referred to as "the Project"). The project involves activities in four Montenegrin municipalities Bijelo Polje, Berane and Gusinje and Plav.

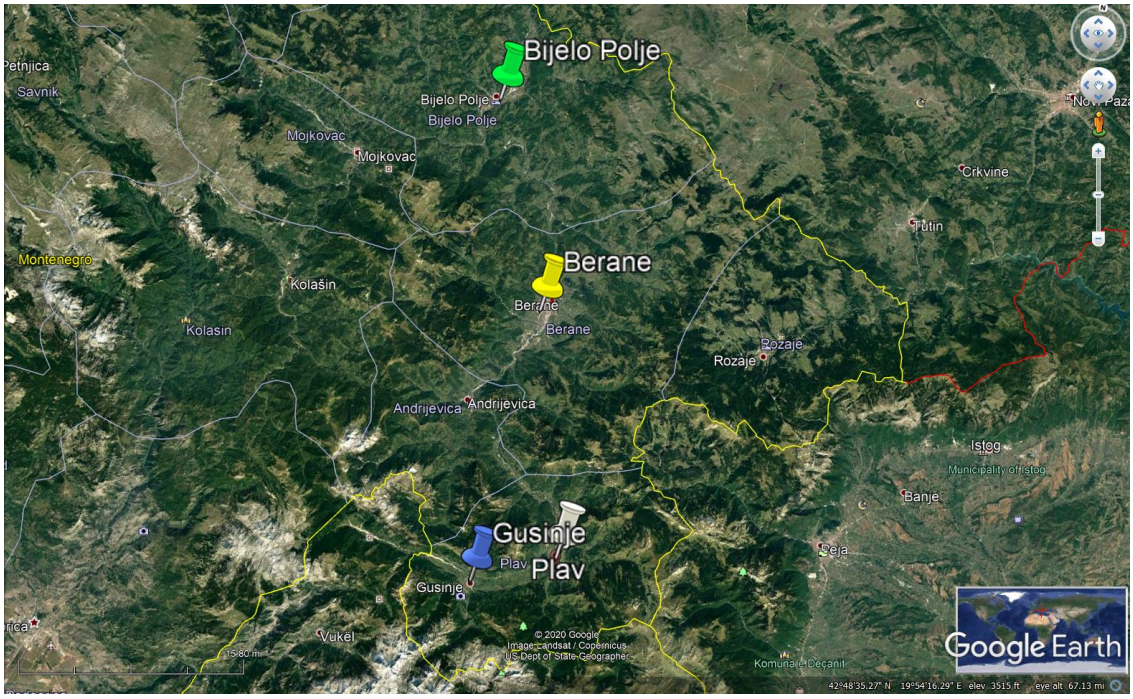

Figure 1 Project locations, Montenegro

Montenegro is, which, like all Balkan countries is particularly sensitive to future climate and precipitation change in Europe with weather related events to become more frequent and intense. Montenegro is already vulnerable to climate change, with signs of a trend towards a more extreme precipitation regime. The whole country suffered damages and losses amounting to around €44 million (1.4 per cent of gross domestic product) from the 2010 flood. Future flooding potentially threatens 250 square kilometres of farmland and urban zones. This is particularly pronounced in areas surrounding Lake Skadar and the Bojana River, Zeta Valley, Bjelopavlici, Plav ravine and areas around the Lim, Tara and Cehotina river valleys. Therefore, the overall objective of the sub-project is flood prevention and irrigation in the Lim River Basin (with Grncar River) with the aim of mitigating the impact of climate change

This document presents the Environmental and Social Management and Monitoring Plan (ESMMP) for design and construction of the flood protection structure in Municipality Bijelo Bolje. The ESMMP is first time prepared in November 2020 in the framework of the wider project entitled *Preparation of the preliminary design for the Flood protection, rehabilitation and irrigation of Lim River Basin (with Grncar River) with the aim of mitigating the impact of climate change and sustainable use of natural resources and (ii) Assessment*

of climate change impacts on groundwater in Drina River Basin in Montenegro – MNE-WBDRB-TF0A2318-TF0A2321-QCBS-CS-17-2.b.1.3.2. under Task 3. Assessment of environmental and social impacts of the Project. **The ESMMP has been revised by the Project Implementation Unit (PIU) of the Ministry of Agriculture, Forestry and Water Management (MAFWM)**[1] **in July 2022 to reflect the recent status of the Project**.

The purpose of this ESMMP is to ensure that the subproject meets the 2018 World Bank's Environmental and Social Framework and relevant national legislation. The ESMMP has been developed taking into account the Environmental and Social Management Framework developed and approved by the World Bank in February 2020.

The overall Project is classified as a high risk project due to its scope and activities unknown at the time of Appraisal. However, following the ESMF prescribed screening, this sub-project is screened as one with moderate risk since the type of works envisaged by the technical documentation require certain excavation and dredging. However, mitigation measures, both environmental and social adequately respond to the identified impacts, living residual impacts at an almost negligible scale. The ESMMP identifies the key environmental and social impacts that will result from the Project related activities and proposes mitigation measures to address the most significant impacts. The ESMMP also shows the responsibilities of different parties involved in the project implementation.

The responsibility for implementation of this ESMMP lies with the MAFWM, that is the PIU formed within this Ministry. The MAFWM will be responsible for ensuring that third parties or contractors working on project sites meet the requirements of this ESMMP. This is expected to be accomplished by inclusion of appropriate requirements and conditions in Tender Documents, contracts, and subcontracts, and through direct oversight and supervision by the MAFWM. The Tender Documents and contracts will meet the WB procurement requirements. The MAFWM will also be responsible for ensuring that the end user, the manager of flood protection structures, follows the requirements of this ESMMP in the operational phase.

[1] Former Ministry of Agriculture and Rural Development.

2 Project description

2.1 Location

The Project in the Municipality Bijelo Polje refers to the construction of the embankment with the supporting structure for cycling and walking lanes in the city centre, from Limska Street to the Fire station, downstream of the bridge and hydrological station on Lim (HS '' Bijelo Polje ''). The major tributary of the Lim River at this section is the River Ljesnica that flows into Lim at km 0 + 55. Within the section on the left bank, households and communal facilities are sporadically endangered by floods.

The design includes regulation of the Lim River and the Ljesnica River confluence zone. The section is bordered by two bridges. The first bridge is pedestrian bridge located approximately 171 m from the beginning of the regulation and the second is traffic bridge, located some 9 m upstream from the end of the regulation. The section starts with the ramp connecting the traffic bridge with the embankment and ends with the intersection with Limska street through which the connection to pedestrian bridge is enabled.

Figure 2 Project micro location - Bijelo Polje

2.2 Existing situation with the flooding

The subject section is characterized by different configurations of left and right riverbank. In general, the terrain in the right bank has significantly higher elevations than the left bank. Consequently, the left riverbank was more suitable for inhabitation of people, and includes public utility facilities (water supply facilities and fire house). Also, on the left bank of the River jesnica, near the estuary in Lim, there is a pumping station for communal waters. This valley configuration causes the endangerment of buildings built along the left river bank during the high waters of the two rivers. There is no existing embankment that could be used for flood protection.

Technical solution has been developed with the main goal to protect the left river bank from the floods, to stop further erosion and improve river bank resilience.

The proposed technical solution provides undisputable hydraulic and hydrotechnical benefits. In addition, the regulation of the left river bank will improve the quality of life of the local community.

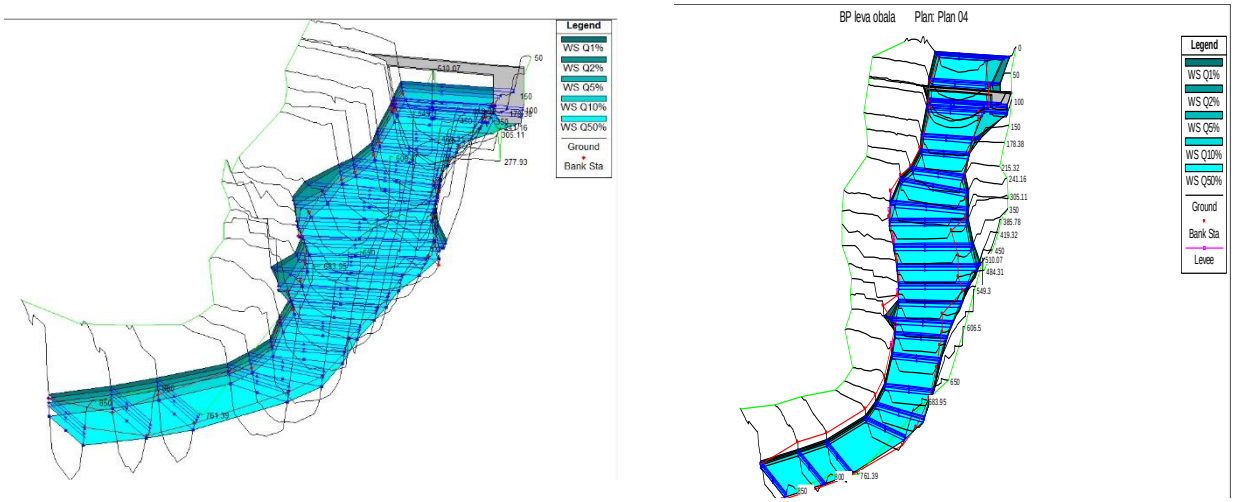

Figure 3 Situation with the existing (left) and regulated (right) riverbed

Spatial and urban planning documentation available envisages a bicycle lane along the planned regulation, also representing a line of coastal protection against extreme water levels. The regulation of the Lim river bed has been designed to fit the left bank into the requirements of the existing spatial and urban planning documentation, including development of the cycling and walking lanes on the embankment. The regulation has also been designed to accommodate a sewer collector, which according to the obtained urban and technical conditions will need to be constructed prior to the finalisation of regulation construction works. The collector itself is not the subject of this project.

2.3 Description of technical solution

Technical solution for the flood protection measures includes river training works in the length of 607.88 m on Lim river and 57.6 m on Ljesnica river. This works consists of formation of uniform cross-section of trapezoidal shape in both rivers, with an elevation of banks that ensures the protection from 100-year flood event, since the section is located in the urban area. The solution has been developed to protect the left bank from floods as the combination of embankment and berm, creating at the same time the supporting structure for pedestrian/cycling lanes. This solution additionally allows the use of a berm plateau for sport fishing or walking.

The solution includes the ramp that connects the embankment and walking-cycling lanes with the existing road bridge. The ramp is formed as a concrete "U" profile in cross section. Its width is 2.5 m, with a variable height of 0.4 m to 4.33 m at the connection point with the pedestrian-cycling bridge. The ramp is equipped with the 4 rest areas, 2 m long each. The base plate of the ramp is 0.5 m thick, and the thickness of the side walls is 0.3 m. The ramp lays on the embankment made of gravel material, compacted according to the recommendations provided in the Geotechnical study.

Proposed technical solution includes regular cleaning up of the riverbed with the objective of establishing the necessary flow profile of the riverbed.

The cross-section of Lim has a trapezoidal shape with a bottom width varying depending on the terrain configuration of the right river bank. Riverbank slope steepness has been set to 1:1.5, riverbed depth varies from 3.5 to 5 m at the downstream end of the section. The embankment transforms into berm behind which supporting structure for cycling/walking lane is placed. The width of the berm varies from 3 to 4 m depending

on the levelling of berm and cycling/walking lane. The material on the bank surface is stone in cement mortar, 0.5m thick. The 1 m high foot of the bank is also made from stone in cement mortar.

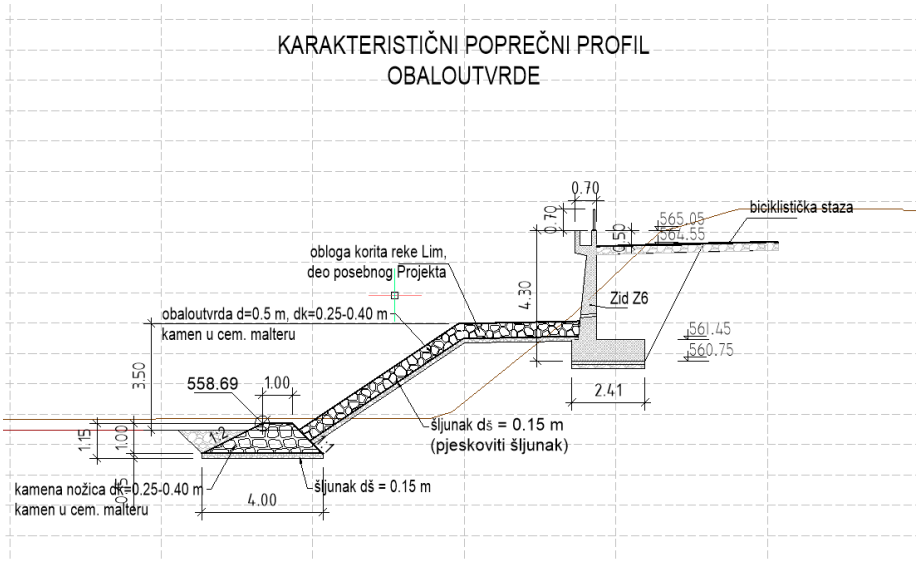

Figure 4 Typical cross section (Lim River Urban Area Bijelo Polje)

The designed pedestrian-biking bridge connects the embankment with Limska street and crosses river Ljesnica. Construction is designed as reinforced concrete frame, L = 9.0 m, lying on the foundation strips 1.0 m high (base coupling on the 556.95 m.n.n.m), length 6.67 m.

The cross-section of Ljesnica has a trapezoidal shape with a bottom width of 5 m, riverbank slope of 1:2, riverbed height/depth of 1m. The material on the bank surface is stone in cement mortar, 0.4m thick.

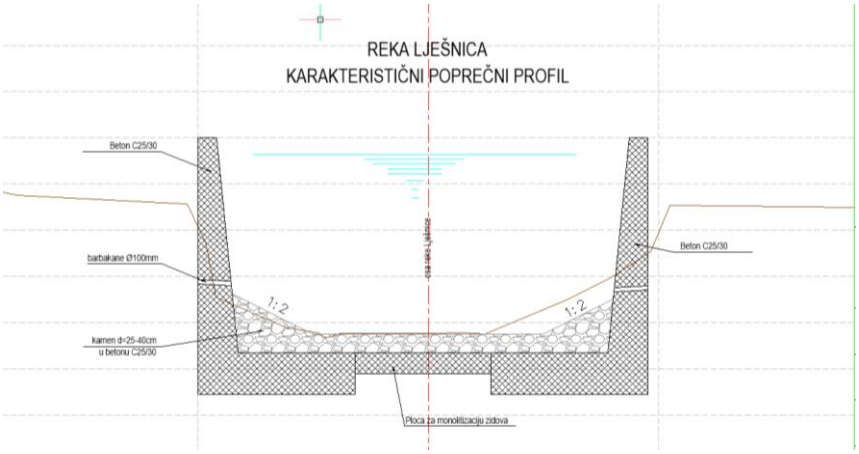

Figure 5 Typical cross-section (Ljesnica River Urban Area Bijelo Polje)

3 Legislative framework and permitting requirements

3.1 Obtained permits

3.1.1 Decision on the need for the EIA by the Municipality Bijelo Polje

The Law on Environmental Impact Assessment (Official Gazette of Montenegro, No. 75/18) regulates the complete process of evaluation of impact of projects that can have a significant and/or concrete impact on the environment (on the territory of Montenegro), the contents of official environmental impact assessments (EIA), including the provisions governing the participation of authorities and public organizations, administrative rules and assessment approvals, notification of projects that can have a significant impact on the environment of another state, supervision and a set of govern the EIA in Montenegro. Laws stipulate the implementation on the central and local level. The Law is accompanied with the set of bylaws.

Within the Montenegro regulation on EIA, projects are classified in two groups (lists)[2]: projects included in the List 1 are all subjects to compulsory EIA while for projects included in the List 2, the assessment contains an element of discretion, noting that an EIA procedure will, in any event, be required for projects with potentially significant environmental impacts. The public and other parties are to be consulted on the EIA.

The EIA procedure, defined by the Law, is divided into the following steps: I. Decision on the need for conducting EIA; II. Defining the scope and contents of the EIA Study (Environmental Report); III. Decision on granting the approval of the EIA Study.

Procedure of notification about project cross-border impact is regulated by a separate provision.

The competent authorities for the implementation of the EIA and SEA legislation are the Ministry of Sustainable Development and Tourism (MSDT), the Environmental Protection Agency – EPA and the municipalities (employees responsible for the EIA and SEA for the municipal programs and projects).

According to the project classification, the flood protection structures are found on the List 2. The opinion on the need of EIA is sought from the Municipality of Bijelo Polje, which is the responsible authority for this project in line with Article 5 of the Law on EIA. On 02 February 2022 **the Municipality Bijelo Polje issued the Decision based on which EIA for this project is not required** (Decision no. 09/4-322/22-587-6). The Decision is given in Annex 1.

3.1.2 Water Requirements

The **Law on Water** (Official Gazette of Montenegro, No. 27/07, 32/11, 47/11 48/15 and 52/16, 55/16, 02/17, 84/18) regulates the legal status and manner of integrated management of water, water and coastal land and water facilities, conditions, and manner of conducting water related activities and other issues of importance for waters and waters management.

In case of project which includes e.g., construction of flood protection facilities, as well as any other activity which may affect volume and quality of water, the following water management act that must be obtained are **Water Requirements (WR).** It prescribes the terms and conditions under which the responsible Water Administration will allow water use. The investor must obtain the WR for the preparation of technical documentation for the construction of new or reconstruction of existing structures and the execution of geological surveys and other works that may permanently, occasionally or temporarily lead to changes in the water regime. WR cease to be valid after one year, unless a duly filed application for the issuance of a Water

[2] Rulebook on the project that are subject to EIA procedure (Official Gazette of Montenegro no. 20/07, 47/13, 53/14, 37/18)

Permit has been submitted within that period. If, during the process of issuing WR, it is determined that the facilities and works cannot cause changes in the water regime or that they cannot be affected by the water regime, the responsible authority informs the investor that the WR are not needed.

Water documentation is issued by the Water Administration of Montenegro or local self-government unit depending on type of activities which may affect the volume and quality of water. For example, for regulation of watercourses and construction of flood protection facilities on waters of significance for Montenegro, water documentation is issued by the Water Administration of Montenegro, while for regulation of watercourses and construction of flood protection facilities on waters of local significance, water documentation is issued by the local self-government unit. **The Decision on Water Requirements for this project are issued by the Water Administration on Montenegro on 03 March, 2022.** The Decision is given in Annex 2. This is the precondition for the main water act that should be obtained prior to construction, that is the Water Consent.

3.2 Permits to be obtained prior to start of works

3.2.1 Water Consent

Water Consent (WC), which is necessary before construction of new, and reconstruction of existing structures and facilities and the execution of other works subject to WR. The WC confirms that the technical documentation for the facilities and works is in compliance with the WR. The WC determines the period of its validity, depending on the nature, complexity and extent of construction or reconstruction of buildings and facilities, or other works, the period of validity of the Construction Permit (when required), as well as contractual conditions. The period of validity of a WC may not exceed two years.

Water Permit (WP) which confirms that all the requirements set in the WC are met, and which has to be issued before starting using a building or facility (or before the issuance of a Use Permit when required). The WP determines the manner, conditions and extent of water use, permitted quantities, limit values, manner and conditions of discharge of waste water, manner and conditions of storage and discharge of hazardous and other substances that can pollute water, as well as conditions for other activities or works that affects the water regime. The WP is valid up to a maximum of 10 years.

3.2.2 Application of the construction site

According to the **Law on Spatial Planning and Construction** (Official Gazette of Montenegro, No. 64/17, 44/18, 63/18, 11/19), Article 181, building permit is issued by a decision based on: 1) preliminary design, i.e. main design, certified in accordance with the Law; 2) reports on the positive revision of the preliminary design or the main design; 3) evidence of the right of ownership, i.e. other right on construction land (real estate certificate, concession agreement, decision on determining the public interest, etc.) or proof of the right to build, i.e. other right on the building. The Main Design got positive revision reports, which is, in the case of this project in the range of a building permit.

The only procedure that remains for the investitor prior to the construction works, and after signing the contract, is to register the construction site with the competent inspection authority, submitting the revised Main Design and obtained Water Consent.

According to the Law, prior to the start of construction, the Constructor is obliged to prepare the Construction Site Management Plan in line with the Decree on Content of the Construction Site Management Plan (Official Gazette of Montenegro, No. 4/99). The Decree includes detailed description of the plans and measures that shall be included including water supply and wastewater management, material storage management, traffic regulation, OHS measures, organization of first aid and transport to a health care institution. The Decree also foresees development of a Separate Plan for the works that include high risk

from worker's injury which may also be applied to this Project as the works will be carried out in the river bed and special construction techniques shall be employed.

3.2.3 Expropriation procedure – implementation of RRA Bijelo Polje

The national legislation considers the issue of land acquisition under the **Law on Expropriation** (Official Gazette of Montenegro, No. 55/00, 12/02,28/06,21/08, 30/17, 75/18). The land acquisition process was conducted by Municipality Bijelo Polje in accordance with the Law on Expropriation and the Rulebook on Methodology for Assessing Property Value. The present law guarantees the principle of fair compensation for all persons affected by the process of expropriation who are holders of rights of the property and whose property is expropriated. It aims to provide a simple, efficient process, to the extent possible, to reduce the need for lengthy court proceedings and thus to implement the necessary expropriation. The fair value of the land that is the subject to an infrastructure project, is determined by the Commission for the assessment of value, appointed by the relevant national institutions (e.g., Real Estate Directorate of Montenegro/Ministry of Finance).

In line with the Bank's E&S procedures, a **Resettlement Review and Audit (RRA) Report for Bijelo Polje** is developed in June 2022. The purpose of the RRA is to demonstrate compliance of the process with WB Environmental and Social Framework, specifically ESS5, as well as to present the results of the land acquisition process in relation to the socio-economic impacts on the Project Affected Persons (PAP). It also identifies gaps and recommends corrective actions to address such gaps. Prior to the construction works, this document has to be disclosed and implemented.

3.3 Applicable environmental and social standards of the World Bank

Environmental and Social Standards relevant for the sub-projects are the following:

ESS1: Assessment and Management of Environmental and Social Risks and Impacts	Relevant
ESS2: Labor and Working Conditions	Relevant
ESS3: Resource Efficiency and Pollution Prevention and Management	Relevant
ESS4: Community Health and Safety	Relevant
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
ESS7: Indigenous Peoples/Sub-Saharan African Historically Undeserved Traditional Local Communities	Not relevant
ESS8: Cultural Heritage	Relevant
ESS9: Financial Intermediaries	Not relevant
ESS10: Stakeholder Engagement and Information Disclosure	Relevant

4 Environmental and Social Baseline

4.1 Description of the existing conditions of the micro-location

Existing poor condition regarding the stability of the riverbed, decreased discharge capacity of the riverbed segments and the vulnerability of surrounding areas during the rainy season, are mainly the product of following factors:

- Lack of river training structures for management of flow regime and prevention and mitigation of floods in entire project area;
- Previous exploitation of river deposits granted in accordance with state regulations have been conducted without adequate project documentation that would clearly define the obligations and constrains to the concessionaires in order to prevent riverbed degradation. Additional problem was lack of effective control and sanctioning of unauthorized works. Disposal of material with low market demand (coarse fractions produced by separation of send) was performed arbitrarily, i.e. in a way that was most suitable to the concessionaires. It was common practice to alter the river's base flow through newly established minor bed in order to provide easier access to mechanization;
- The project documentation was not adequate in terms of minimizing the impact on the sediment regime that results in degradation of riverbed downstream from the concession site. Quantities and type of deposits that can be taken out are generally not determined on the basis of appropriate investigations;
- Sediment exploitation has also been carried out illegally.

Above mentioned anthropogenic factors are just being an addition to natural features of Lim river basin, suitable for generation of flashing floods. Subbasins of all tributaries are characterized by steep average slopes that quickly generate high surface discharges after rainfall. In relatively short periods of time, tributary's discharge at the confluence can be greater than the discharge in Lim river which (larger) catchment area generates a flood wave at a slower pace. A large amount of sediment which is deposited by the tributary is also influencing the occurrence of a backwater in the Lim and increased the vulnerability of the upstream river banks. Also, unplanned deforestation in the catchment area increases the magnitude of these processes.

Subject area of this volume stretches in urban area of Bijelo Polje from fire station to Limska street. The length of this section is 608 m. The Lim River on this section has significant tributary river Lješnica, which is a left tributary to and flows into the Lim at km 0 + 055 per local chainage.

The Lim River bed on the section in question is located between two bridges. The first bridge is pedestrian and is located at about 171 m from the beginning of the shoreline that is the subject of the project. The second, traffic bridge is about 9 m upstream from the end of the planed embankment.

This section of the Lim river is characterized by different configurations of the left and right banks. The terrain on the right bank has a much steeper slope, with higher elevations than the left bank. Accordingly, the left bank was suitable for the formation of the settlement. The majority of objects in the contact zone are for individual housing, with several multi-story buildings. The project area also includes several public facilities: Public Water Supply Agency, Fire Station and pumping station for communal waters next to Lješnica confluence. The entire length of the left bank is overgrown with small to medium trees and bushes.

This project also envisages the arrangement of the river mouth of the river Lješnica in accordance with the leveling of the cycle path, i.e. coastal protection. In this sense, the existing supporting structures and the construction of a new bridge on the cycle path are needed.

In the left coast, on the current design section, households and communal facilities are sporadically endangered in the floodplain.

The urban plan envisages a cycling path along the planned part of the coastal landscaping, which should also represent a line of coastal protection against extreme water levels.

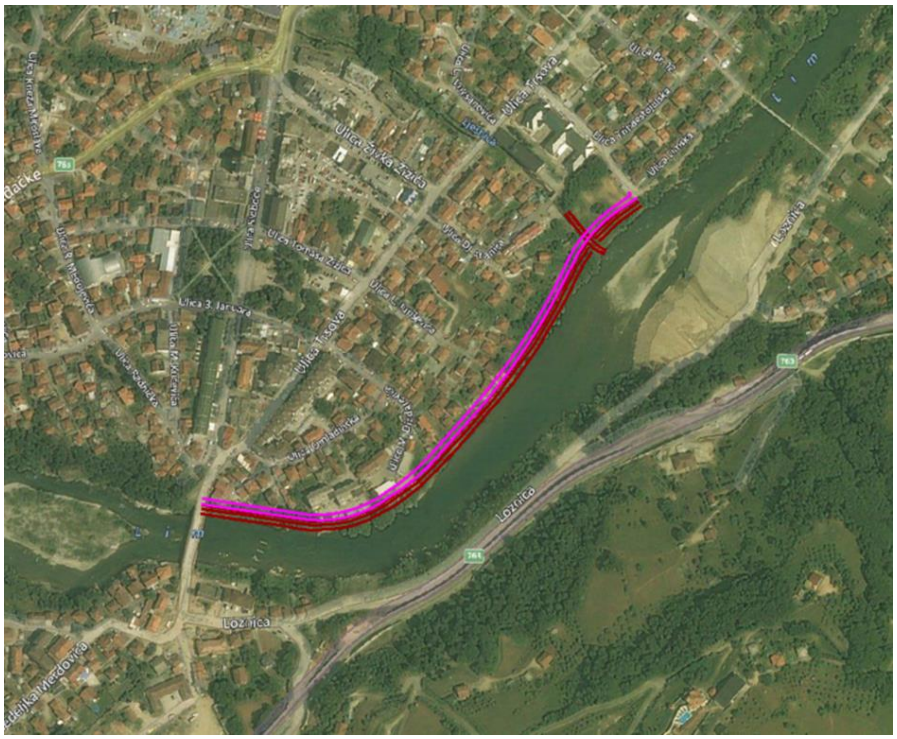

Figure 6 –Location of the site in Bijelo Polje

4.2 Water quality

Monitoring of the qualitative and quantitative characteristics of surface and groundwater in Montenegro is carried out by the Institute of Hydrometeorology and Seismology of Montenegro, within the framework of its basic activities and competences determined by the *Water Law (Official Gazette of Montenegro, No. 27/07, 32/11, 47/11, 48/15, 52/16, 55/16, 2/17, 80/17 and 84/18)*. In 2019, for the first time, surface and groundwater monitoring was carried out according to the Water Framework Directive, i.e. according to the *Rulebook on the manner and deadlines for determining the status of surface water (Official Gazette of Montenegro, 25/2019)* and the *Ordinance on the manner and deadlines for determining the status of groundwater Official Gazette of Montenegro, 52/2019)*.

The Lim River belongs to the Black Sea basin. The latest water quality monitoring results are available for 2020[3]. The monitoring on Lim was performed at three measuring points, upstream from Vinicka (the

[3] Institute of Hydrometeorology and Seismology of Montenegro. Status of water quality in Montenegro: Annual Report II-20, April 2021.

settlement in the Berane Municipality), downstream from Bijele Polje – industrial zone, and in Dobrakovo. The water quality test results, based on the 5 tested parameters, are given in the following table. The most relevant point of observation for this project is downstream from Bijele Polje – industrial zone where the quality of Lim river is determined to be poor according to three observed parameters.

The information on water quality of the Ljesevica river is not available as the monitoring on this river is not performed.

Table 1 Water quality of Lim River

Water body	Monitoring location	General physico-chemical parameters	Phytoplankton	Phytobenthos	Macrophyte	Macrozoobenthos	Total ecological status
Lim	Upstream from Vinicka	G	-	G	-	G	G
	Downstream from Bijelo Polje-Industrial zone	M	-	G	-	P	P
	Dobrakovo	M	M	G	-	M	M

G-good, M-moderate, P-poor

4.3 Biodiversity and protected areas

The Lim river is the habitat to different fish species from cold water riverine salmonids to lake dominant species. The species list includes grayling (*Thymalus thymalus*), Danube Salmon (*Hucho hucho*), various trout species including brown trout (*Salmo labrax*), pike, and others.

Fly fishing is popular throughout Lim. In Bijelo Polje a 2 km long fly fishing zone is determined, from Gubavacki bridge (near confluence of Bistrica and Lim) to Gosin bridge. The location is upstream from the future construction site.

The subject area of the river Lim regulation in Bijelo Polje is covered with low vegetation, so the presence of valuable plant and animal species is not expected.

Project location is placed in the urban area, hence not in the vicinity of any of the protected or potentially protected areas.

4.4 Air quality

Environment protection Agency of Montenegro – EPA Montenegro is the authority in charge for monitoring the air quality in Montenegro. The data on air quality are collected through automatic stationary measuring stations located in: Podgorica, Niksic, Pljevlja, Bar, Tivat, Golubovci and Gradina (Pljevlja). There are no measuring stations in the vicinity of Project area.

The Bijelo Polje Municipality belongs to Nort Air Quality Zone where the new monitoring station is set up. The measurement indicates increased presence of air pollutants during winter months as a result of poor-quality heating[4]. Average daily concentrations of suspended mayyer PM 10 were exceeded for 112 days in 2020 (limit value is 50 µg/m3). Average annual concentration of PM2,5 in Bijelo Polje is recorded as 34 µg/m^3 which is above the limit value of 25 µg/m^3. Maximum 8-hr average annual concentratios of CO, hourly and annual average values of NOx, and concentrations of lead were below prescribed limit values for protection of human health.

4.5 Land acquisition

Land acquisition activities for affected land plots have been ongoing since August 2021, and have already been completed in 99% of cases. According to the requirements of the WB E&S Policy, a Resettlement Review and Audit (RRA) was completed in May 2022. The purpose of RRA is documenting the results of an assessment of the land acquisition process implemented by the Municipality for construction of the embankment on Lim River and obtaining an overall understanding of the process conducted to date. This RRA is intended to demonstrate compliance of the process with WB Environmental and Social Framework, specifically ESS5, as well as to present the results of the land acquisition process in relation to the socio-economic impacts on the Project Affected Persons (PAP). It also identifies gaps and recommends corrective actions to address such gaps. The information presented below are taken from RRA.

The total number of affected land plots is 13 of which:

- 7 privately owned land plots (owned by 20 PAP in total – owners and co-owners);
- 6 state owned land plots.

All land plots (private and state-owned) were affected by complete expropriation. Incomplete expropriation (instigation of easement rights) was not required.

The Project does not require the acquisition of any residential structures and therefore the physical relocation of any households.

A total of 17 auxiliary structures were affected by land acquisition as follows:

- 16 garages, of which 15 were built on state owned land plots and are considered as informally built structures. One garage was built on privately owned land plot as a formal structure (i.e., built with permits).
- 1 garage foundation on state owned land plot considered as an informally built structure.

The Municipality has confirmed that all these structures were compensated based on the Commission's Report on property valuation. Only one owner of an informally built garage disagreed with the estimated value, and in this particular case court proceeding is pending. The Consultant has ascertained based on the Commission's Report that the cost method was used to evaluate the value and offer compensation for these auxiliary structures. The cost method of valuing property that was used by the Commission involved an estimation based on the principle that the buyer will not pay for the asset more than it would cost him/her to acquire or build the same asset of equal value. Using this method, the costs of building the structure, obtaining the necessary documentation as well as corrections depending on the age of the structure (depreciation) were determined. The assessment of the value in this way was not in accordance with the chapter 7 of Projects' Resettlement Policy Framework (RPF), where it is stated that depreciation will not be

[4] Environmental Protection Agency. Information on status of environmental quality in Montenegro for 2020 (2021)

taken into account, and that the assessment will be made at the time of removal of facilities, otherwise inflation must be taken into account. However, depreciation was taken into account in the assessment made by the Commission, and inflation was not taken into account when determining the compensation. Therefore, it will be necessary to review the report of the Commission, and to consider paying the owners the difference in price in relation to the above.

Impacts on privately owned land plots: Approx. 99% of PAP lost only a part of their land (the percentage of partially affected land plots ranges from 0.23% to 27.94%), and only one privately owned land plot was affected entirely on which a private auxiliary structure (garage) was located. The affected private land plots are mainly yards of residential buildings located in the immediate vicinity of the project area, as well as uncultivated land near the river. Only on two affected land plots there were a few fruit trees and ornamental plants. The Consultant has ascertained based on the Commission's Report that replacement value was not paid for this land but that the comparative method (to compare similar properties on the market) was used to evaluate the value and offer compensation. However, in view of the fact that (i) all losses were compensated for land plots and other assets, (ii) landowners were able to continue with their activities on remaining land and (iii) none of the landowners requested an increase in compensation, the Consultant considers that no further measures are needed.

Impacts on businesses: No businesses were affected by land acquisition. However, at a distance of 50-80 meters there are several local businesses (coffee shop, markets, hotel etc.). If certain temporary negative impacts on nearby businesses occur during the construction phase, the Municipality will need to provide compensation as defined in the RPF (i.e. "cash compensation for loss of income until the completion of construction works which directly impact the business operations of the business entity, in line with assessment of court experts").

Impacts on informal users of state-owned land: Ownership of all state-owned land plots (6 in total) was granted to the Municipality as the expropriation beneficiary. Prior to this, only one state-owned plot was used informally by a private person. The land plot was used by a private person who planted fruit trees, coniferous trees and other ornamental plants. All plantations have been assessed by the Commission and compensation for all plantations paid (assumably at market value). The Commission's report has no description of the method of valuation of plantations, and the Administration (which appointed the Commission) has not been able to provide any additional information at the Consultant's request. and adequate compensation has been paid for them. Therefore, it will be necessary to reconsider the method of valuation of plantations made by Commission, and in case of non-compliance with the RPF (which requires payment of full replacement cost, i.e. the cost of re-establishing the plantation and lost income during the transition period), it will be necessary to pay the difference in compensation.

The RRA has identified some gaps in the expropriation process comparing to the requirements of the WB. The gaps and recommened actions are summarised below.

- The Consultant analyzed the Report on the Assessment of the Value of Property prepared by the Commission and determined that the assessment was not performed in accordance with the provisions of the RPF. Therefore, the owners will need to be contacted by the Municipality and the Administration for purpose of bridging this gap by paying the owners the difference in price as defined in RRA.
- The Commission's Report does not contain a description of the method of valuation of trees/plants grown by a private person on state-owned land which does not allow assessment of adequacy of compensation in line with RPF. Therefore, it is necessary to reconsider the method of valuation of

plantations made by Commission, and in case of non-compliance with the RPF, it will be necessary to pay the difference in compensation as defined in the RRA

- There is only one dispute regarding the estimated value of an informally constructed auxiliary structure (garage) – the case is currently pending before the Constitutional Court of Montenegro. The compensation funds for this case have been secured in an escrow account.
- At a distance of 50-80 m from the Project there are several local businesses (coffee shop, markets, hotel etc.) which may potentially be affected by temporary negative impacts during the construction phase. Therefore, in case such impacts occur, the Municipality will need to provide compensation as defined in the RPF (i.e. "cash compensation for loss of income until the completion of construction works which directly impact the business operations of the business entity, in line with assessment of court experts").
- The PIU should undertake steps to implement the activities listed in the approved Project Stakeholder Engagement Plan.
- Written information will also be disclosed to the public via a variety of communication materials including brochures, flyers, posters, etc. The PIU will set up Information Desk in the premises of Municipality where they can meet and share information about the Project with PAPs and other stakeholders.
- The PIU must also maintain and disclose a Stakeholder Engagement Log as a documented record of all stakeholder engagement activities, including group and individual meetings, planned or spontaneous meetings, formal or informal, phone conversations, written exchanges etc.
- The PIU must ensure that the grievance mechanism is implemented in accordance with the provisions of the SEP and the RPF.
- The PIU should improve monitoring, evaluation and reporting for this Project by using the indicators defined in the RPF.

4.6 Cultural heritage

No objects of cultural heritage are presented in the project area of influence. There is a possibility of chance find during the excavation activities in the riverbed. The chance find procedure will be prescribed in case of any potential findings during the construction work.

5 Environmental and Social Impact Assessment

5.1 General overview of potential impacts

Due to the nature of the measures to be implemented through the sub-projects, it is assessed that the impacts on environment will be a consequence of human presence and construction machines, and the nature of construction works at a location, which are limited to the location of works or its surrounding vicinity. The planned interventions are not aimed at changing the flow of the river itself or to create changes to the overall flow patterns of the Lim river.

Embankment construction works would not pose significant risks to the environment. In addition, the objective of the designed measures is to decrease embankment erosion and deviation of the riverbed, and as such will have a localized impact on the flow of the river. Proposed works can be divided into surface and riverbed works. Riverbed works are expected to be implemented during low water levels periods, and should not last as long as surface works, which will start first. As a consequence, the range of impacts is limited and

their magnitude remains small. Considering the nature of the proposed project, it is anticipated that adverse environmental impacts can be expected in the construction phase mainly. The aspect of health and safety at work is also taken into consideration. It is to be noted that parts of the construction work are taking place in an urban environment, however in all parts in an environment already strongly influenced by human activities. Broadly, the impacts in the construction phase can be of the following types:

Soil and Water Pollution: during construction activities, when using machinery, there is a possibility of soil contamination due to accidental spills of oils and fuel from construction machinery. In the area of construction works, construction waste is generated which, if not properly disposed of, may result in adverse impacts. The construction works carried out inside the river bed results in a temporary increase of turbidity of the watercourse.

Flora and fauna: construction works in the river bed along with the temporary increase of turbidity in the watercourse can pose a threat to freshwater habitats, while noise originating from construction machinery may temporarily impact surrounding surface habitats. Impacts on other habitats are not expected. The works will be planned to be executed in a manner which shall safeguard the natural migration patterns and cycles of the freshwater fish.

Sourcing of materials. As typical for construction works the project will increase consumption of energy and raw materials, waste generation and emission of pollutants. Impact will be mitigated through utilizing material plants possessing valid environmental permits.

Disposal of excavated materials and construction wastes. Demolition debris and excessive soil are usually generated during the repair / reconstruction works on drainage and river embankment systems.

Degradation of landscapes and soil erosion. The impacts on vegetative cover will be short-term, localized, and totally associated with repair / reconstruction works.

Impacts from temporary access roads and work areas. Establishment of temporary dirt roads to access work areas and temporary disposal sites for excavated materials can enhance soil erosion, and degrade the landscape.

Noise and vibration disturbances during construction and temporary air pollution (dust) related to the transportation of construction materials and truck traffic. These impacts will occur during the construction works, but will be only short-term. Effects include dust from construction activities, noise during trench excavation, possible effect of vibration caused by operation of heavy machinery, increased traffic in some sections of roads, etc.

Safety hazards from construction activities. No major hazards are expected the construction of the proposed project elements, as long as proper construction practices and safety procedures are applied. Still the community health and safety risks shall be considered especially those in case construction practices and safety procedures are not applied.

Damages to private assets. Damage to private assets is a very common social impact encountered during flood protection works. The land expropriation process is already completed but RRA has identified some gaps that need to be closed (please see Chapter 4.5). The implementation of recommendations from RRA will be included as mitigation measure.

Impacts on historic-cultural and archaeological monuments. No archaeological or cultural resources are expected to be encountered during project implementation.

Key Labor Risks. Contractor's employees will encounter difficult working conditions regarding the river bank works, any OHS impacts will be mitigated by applying the procedures put forth in this ESMMP document, project LMP document and relevant national legislation. The project LMP document can be accessed on the web page: https://www.gov.me/mpsv/vodoprivreda. All Employers of direct or contracted workers, in the project must ensure safety and health at work and strict adherence to the legal provisions in respect to worker's rights.

5.2 Identified negative environmental and social impacts of proposed sub-project measures

In general, all negative impacts in the phase of construction are temporary and can be mitigated by applying good construction practices.

Construction of flood protection structures is based on the river bank regulation; it is about preventing the flooding of relatively small areas of urban zones, and at relatively shallow depths. The downstream impact on other water users in the construction phase can be expected in the area of 250 m downstream and will be reflected through changes in water quality (increased sedimentation and turbidity and possible incidental discharges of oils and lubricants).

The project impacts by phases are shown in following table:

Table 2 Project environmental and social impacts

Phase	Type of impact
Pre-construction phase	Land acqusition
Construction phase	Soil compaction and erosion Dust emission Noise Soil and water pollution Impact on aquatic ecosystem Degradation of riparian vegetation caused by construction work Community safety risks from unfenced and unlabelled construction site Health and safety risk for workers on the construction site
Operational phase	Low impact on natural environment on the project location Positive impact in terms of prevention of risks for environment, humans and property
Degree of negative impact	Minimum if mitigation measures are applied

5.3 Identified positive impacts of the proposed measures

The construction of flood protection infrastructure will bring economic, social, health and ecological benefits, to population and local community in the project area. Increase of flood protected areas will contribute to the safety and protection of the surrounding area and reduce potential material damages the local communities were facing.

During the construction phase a number of, project dependent or other positive national, regional and local economic and employment impacts are anticipated. It will beneficially impact the national economy through state receipt of import duties and value added taxes on construction supplies, and through state receipt of workforce income tax contributions. As contractors are likely to be local companies, it will have mainly local economic benefits on domestic construction businesses, local labour and local material suppliers.

Other environmental positive impact: Air quality and noise, water quality, biodiversity, geology, geomorphology, seismicity and soils, waste management.

5.4 Assessment of identified Impacts

Summary of key impacts during pre-construction and construction phase and recommended mitigation measures are described in following table:

Impact	Assessment of impact	ESS triggered	Impact significance
Land acquisition	The sub-project will require acquisition of land. Physical displacement is not required.	ESS5	minor
Ground and surface water	Temporary impact. Due to low amount of drainage water that can be potentially drained from the construction site and during works execution into the river the consequential impact is expected to be minimal to negligible. Adequate project supervision by the PIU will be established and no long term water disturbance or similar activities will be allowed. Considering the methodology of works on embankment regulation, localized impacts to the river flow (increased turbidity) are expected up to the 300 m downstream. Stopping the erosion of the riverbank will result in increased river flow in the operational phase. Also, improper disposal of excavated materials and construction waste could adversely impact ground and surface water.	ESS3	minor
Air quality	Temporary impact. Local air quality may experience some moderate and temporary deterioration due to dust from transportation of construction materials and truck traffic and elevated levels of nitrogen oxide (NOx) and sulfur oxide (SOx) from construction equipment exhausts.	ESS3	minor
Flora and fauna (protected areas and species)	Minimal loss or damage of vegetation and loss and damage or disruption to fauna can occur during works. The project works will lead to increased consumption of energy and raw materials, waste generation and emission of pollutants. Impacts can be offset or mitigated by following procedures and possession of valid environmental permits of the material suppliers. There will be no negative impacts on protected areas due to nature of works.	ESS6	minor
Noise and vibration	Only limited temporary impact during the construction phase. Mitigation measures in form of noise deflecting shields will be placed where the work-scheduling activities cannot have desired effect.	ESS3	minor
Soil quality	Soil contamination can occur from drainage of dredged materials, spillage of hazardous and	ESS3	minor

Impact	Assessment of impact	ESS triggered	Impact significance
	toxic chemicals. Impact can be mitigated by following GEMM procedures		
Loss of top soil	Loss of top soil due to temporary access roads and work areas	ESS3	minor
Waste	Health hazards and environmental impacts can happen due to improper waste management practices. Excess soil from excavation or other types of construction waste needs to be managed properly in line with the mitigation measures prescribed in Chapter 6.	ESS3	moderate
Cultural and religious issues	There is a possibility of chance find during the excavation activities in the river bed. The impact can be mitigated implementing measures prescribed in Chapter 6.2.11.	ESS8	minor
Cumulative impacts	Cumulative impacts are not expected. The impacts on air quality are minor and will not significantly contribute to worsening the air pollution in Bijelo Polje. The first stage of municipal wastewater treatement in Bijelo Polje is available for city wastewaters. Since potential impact of the project is mainly increase in suspended matter and sediment, and not the organic pollution, the cumulative impact is not expected.	ESS1	-
Community Health and Safety	The major risks tied to Community health and Safety relate to potential traffic and road safety risks to workers, affected communities and road users during construction. These risks mainly stem from increased traffic on haulage routes from and to potential borrow and deposit areas to be used by the Contractors during construction works. Influx of workers or people providing support services into an area is not expected.	ESS4	moderate
Workers safety	Construction workers may be affected adversely due to hazardous working environments where high noise, dust, unsafe movement of machinery and other dangers related to improperly managed construction sites may be present. Gender-Based Violence (GBV) or Sexual Exploitation and Abuse (SEA) of children, or communicable diseases are not anticipated in relation to the project.	ESS2	moderate
General population	At a distance of 50-80 meters from the construction zone there are several local businesses (coffee shop, markets, hotel etc.). They might be impacted by project activities if the appropriate access is not ensured.	ESS3, ESS4	minor

6 Environmental and social mitigation plan

6.1 Overview of mitigation measures during the pre-construction phase

6.1.1 Land Acquisition

Impact – A total of 17 auxiliary structures were affected by land acquisition. The Municipality has confirmed that all these structures were compensated based on the Commission's Report on property valuation. Only one owner of an informally built garage disagreed with the estimated value, and in this particular case court proceeding is pending. The RRA has identified gaps in the applied procedure and proposed mitigation measures.

Mitigation measure – implement mitigation measures identified in RRA.

6.2 Overview of mitigation measures during the construction phase

6.2.1 Site-Specific Implementation Plan

Prior to initiating works, the Contractors will be required to prepare and submit for approval the **Construction Site Organization Plan** (CSOP) as required by the national legislation. This Plan shall include at least:

- The plan for execution of works inside the riverbed including OHS measures appropriated to the works executed;
- Traffic management plan;
- Material storage plan;
- Construction waste management plan;
- Emergency response plan;
- Landscaping plan after the construction;

and other measures in line with the Decree on Content of the Construction Site Management Plan as explained in Chapter **Error! Reference source not found.**. The provisions of the CSOP will be in line with the provisions of this ESMMP. In case of differing requirements, the more stringent ones will apply. The contractor will have the ESMMP made available as a contract-binding document, and will ensure integration of the ESMMP into the CSOP.

Contractors are obligated to familiarize their workers with the E&S protection and monitoring measures put forth within the subject ESMMP document.

6.2.2 Erosion of embankment slopes

Impact - The earthworks for the sub-project activities might cause negative impacts in form of erosion on riverbank slopes, dust and noise that can create nuisance to local people.

Mitigation Measures – The flood protection structures that will be constructed intend to control and stabilize stream beds and banks. During construction, the extent of proposed excavation should be restricted to the defined project area. Contractors undertaking works should adopt the best engineering practices for work in water streams to control sediment and erosion. The flow must be diverted into a properly designed and constructed channel that has been stabilized. The construction works shall be carried out in a dry season with low seasonal flows. The Contractor should re-vegetate the disturbed areas and placing of tarps after the end of construction activities. The Contractor shall stabilize the cleared areas not used for construction

activities with vegetation or with the appropriate surface treatments as soon as practicable following completion of activities.

6.2.3 Increased generation of pollution – Supply of material

Impact - The project works will require purchase of materials that are required for construction of the structure including concrete, gravel, stone, fuel, etc. It is of outmost importance that the sourcing of material is from legal sources and companies that fulfill legally binding environmental requirements. In case of borrow pits being used, the remediation plan following use of such borrow pits will be part of the CSOP.

Mitigation Measures – During material supply ensure that material plants engaged by the Contractor possess valid environmental permits and work in conformance with the national and WB E&S requirements.

6.2.4 Potential air pollution - Dust

Impact - Possible sources of air pollution will be dust due to maintenance activities, machinery movement and other sources. Construction works involve breaking up, digging, crushing, transporting, and disposal of small quantities of excavated materials. Locally, the air quality may experience some moderate and temporary deterioration due to dust from construction traffic and elevated levels of nitrogen oxide (NOx) and sulfur oxide (SOx) from construction equipment exhausts. The dust may settle on vegetation, crops, structures and buildings.

Mitigation Measures - Spraying of water is the main way of suppressing and controlling dust in dry and windy conditions. If possible, works should be temporary stopped in case of extreme wind conditions. For piles of material, precautionary measures may include covering of such piles during incidences of windy weather and/or transport to and from the site. Road washing measures may also be in place, if debris generated on the roads used is further raised by additional traffic or wind.

6.2.5 Potential water impacts

Impact - While implementing the works localized impacts are expected, resulting from increased turbidity and disturbed river flow, accidental water impacts may occur during the execution of the project from site run off, spills from the equipment maintenance areas and sanitary wastewater effluent from the work camps. As for the potential pollution during operation, these are mostly limited to accidents. In such a case, procedures for action in incidental situations, as defined by the national legislation will apply.

Mitigation Measures - The site will establish appropriate erosion and sediment control measures (e.g., hay bales and / or silt fences) to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers. Fuel and lubricant spills can occur at the Contractor's work camp while maintaining and washing equipment and work vehicles. Should spills occur, to mitigate the problem the Contractor should use absorbing materials, such as absorbent mats/fabrics, or sand and scrape off the contaminated soils and dispose them in approved facility, in accordance with the national legislation.

In cases of increased and prolonged turbidity the work schedules shall be adjusted based on the fish spawning season or other concerns that might be raised by the local fishermen associations.

The measures foreseen under chapter 6.2.6 shall also be implemented.

6.2.6 Waste management

Impact – In case of improper handling of waste including disposal of waste materials the potential negative impacts on water and soil can be expected.

Mitigation measure - The Contractor should also manage waste properly to prevent water pollution. The Contractor shall produce the Construction Waste Management Plan for the Project. Mitigation measures should, among other requirement, contain contractor obligations to:

- Locate the communal waste disposal containers inside the construction camp, min 500 m away from the residential area so that people are not disturbed with the odor likely to be produced from anaerobic decomposition of wastes at the waste disposal places. All solid waste will be collected and removed from the work camps and disposed in approval waste disposal sites by local waste collection company.
- All special waste categories should be handled in cooperation with licensed waste operators. Special waste categories should be segregated on site, particularly paying attention to separate hazardous and non-hazardous waste categories.
- In case oil and grease are trapped for reuse in a minimum 60cm thick lined pit, care shall be taken to ensure that the pit should be located at the lowest end of the site and away from the residential areas.
- In case of filling of low-lying areas with wastes, it needs to be ensured that the level matches with the surrounding areas. In this case care should be taken that these low lying areas are not used for rainwater storage.

6.2.7 Equipment maintenance and fueling

Impact - equipment maintenance and fueling may cause contamination of soils and watercourses, including groundwater, if storage or handling of lubricants, fuels and solvents (either new or waste) is improper or careless.

Mitigation Measures - To avoid damage to natural environment there is a need to ensure proper handling of lubricants, fuels and solvents while maintaining the equipment. Oil and other lubricant drums should be stored in a clean, cool and dry environment (possibly with consistent temperature), on proper storage racks using the first-in/first-out (FIFO) method to maintain a good stock rotation. On-site refueling of vehicles shall be forbidden.

6.2.8 Occupational Health and Safety

Impacts - Construction workers may be affected adversely due to hazardous working environments where high noise, dust, unsafe movement of machinery etc. may be present.

Mitigation Measures - The Contractor shall instruct his workers in health and safety matters and require from the workers to use the provided personal safety equipment. Contractor has to ensure that all operators of heavy or dangerous machinery are properly trained/certified, and also insured. He will have to provide first aid facilities, rapid availability of trained paramedical personnel, and emergency transport to nearest hospital with accident and emergency facilities. OHS indicators shall be developed and used in monitoring and evaluation of health and safety performance. The World Bank General EHS Guidance for OHS can be used to create appropriate monitoring program[5]. The work of contractor will be supervised by OHS supervision engineer.

6.2.9 Noise

Impact - Noise caused by the repair / reconstruction works will have only a temporary impact. Although temporary and mostly moderate, noise impacts in the vicinity of residential areas may cause negative health impact, if not mitigated.

[5] https://documents1.worldbank.org/curated/en/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf

Mitigation Measures – There is no sensitive receivers in the close proximity of the construction site. Still if the local communities raise the issue of noise disturbance appropriate mitigation measure shall be applied such as limiting the working hours, paying attention not to operate several noisy machines at the same time, and if possible, isolate noisy machines in a technically possible way (e.g., use acoustical silencers in intake and exhaust systems). For workers, personal hearing protective equipment shall be used.

6.2.10 Labor risk

Impacts – According to the LMP, the key labor risks would be associated with health and safety risks related to the construction activities of sub-projects, such as exposure to physical hazards during construction activities: works on river banks with high speed currants, use of heavy equipment, trip and fall hazards, exposure to hazardous materials and electrical hazards from the use of tools and machinery. Since the construction activities will involve hazardous work, persons under the age of 18 will not be employed by the Project.

It is expected that **direct workers** (PIU and external consultants) within the framework of the Project would perform office operations primarily, in addition to occasional visits to sub-project locations on the part of the consultants, so that the risks upon the health and safety of those workers are minimal or negligible. The risks in relation to work in civil service and consultant business are, in general, very small in Montenegro (for example, irregular payment of compensation for work, informal labor or labor of minors are not practiced).

It is anticipated that the workers (**contracted workers**) will be exposed to occupational health and safety hazards, primarily including but not limited to:

- working at height;
- working in/near water;
- excavations hazards;
- lifting heavy materials;
- chain saws and treefall during timber cutting;
- exposure to dust and odour;
- working on steep and treacherous terrain;
- working near or on roads with live traffic;
- electrical works.

No other labor risks are considered to be significant. The Project is assessed as low on gender-based violence (GBV) risk.

Mitigation Measures – Establishment of a worker specific grievance mechanism for project workers. The project worker is entitled to give suggestions, remarks and information regarding health and safety at work. The project workers should be informed on available grievance mechanisms upon their employment or engagement. Contracted parties should demonstrate their willingness to implement these mechanisms, even if such requirement is not prescribed by any law of the domicile country. The contractor shall also implement requirements from the Labor Management Plan. The Contractors will need to include implementation costs of the LMP in their budget for the implementation of the Project.

6.2.11 Chance finds

Impact - Possibility of chance finds in particular for cultural, historical or even natural sensitive issues that may be found during the construction works.

Mitigation Measures – In case of chance finds, the construction works shall be stopped, the site or findings shall be prevented of any damage, destruction and unauthorized access by others, and the responsible

authority and the Bank team shall be notified. The procedure defined in the *Law on the protection of cultural heritage (Official Gazette of Montenegro, No. 49/10)* shall be followed.

6.3 Environmental and social mitigation plan

Table 3 Mitigation Plan

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
	Permits and tender documents preparation			
Pre-construction (Planning/Designing)	Land acquisition	› Implement recommentations for gap closure form the Resettlement Review and Audit prepared in May 2022 by E3 consulting	› Yet to be calculated	› MAFWM/PIU
Pre-construction (Planning/Designing)	Tender documents prepared without access to or use of this ESMMP and other framework documents produced in line with the WB E&S requirements.	› Tender documents should include copy of the mitigation and monitoring plan, which shall be included in the safeguard clauses of the technical specifications in the contract and commitment to comply with lender requirements › Tender documents should include requirements for contractors from the Labor Management Procedure (LMP) › Tender documents should include requirements for contractors from the Stakeholder Engagement Plan (SEP) › Compliance with OHS regulation and this ESMMP should be clearly stated in the tendering documents.	› Included in the tendering procedure	› MAFWM/PIU
Pre-construction (Planning/Designing)	Incompliance with relevant environmental and construction related legislation	› Acquire construction permit › Obtain water consent	› No cost	› MAFWM
Pre-construction (Planning/Designing)	Potential damages to the existing infrastructure and facilities, especially underground installations which would cause obstacles in the provision of services to consumers, as well as chance finds	› Precisely situate the position of infrastructure facilities and underground installations at the location of works in cooperation with the relevant institutions. › Obtain relevant Opinions/Approvals related to communal infrastructure from responsible local or national institutions, including those related to cultural heritage chance finds	› No cost	› MAFWM
	General Site Conditions and Safety Notifications			
Construction	Notification of public and overall site safety	› Prepare the Construction Site Organization Plan (CSOP). The Plan shall include methodology for safety execution of works inside the river bed. › The local construction and environment inspectorates and communities have been notified of upcoming activities › The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works)	› Included in the Technical Design, bill of quantities	› Construction contractor to prepare › Engineering Supervision to control on behalf of MAFWM

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
		› The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment. › Workers' personnel protective equipment (PPE) will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) › Appropriate signposting of the sites will inform workers of key rules and regulations to follow and emergency contact numbers › Provide on-site medical services and supplies for any emergency, through institutional and administrative arrangements with the local health unit › Provide portable water & sanitary facilities for construction workers		
	Material supply			
Construction	Unsustainable extraction of resources	› During material supply ensure that material plants engaged by the Contractor possess valid environmental permits and work in conformance with the national and WB E&S requirements. › In case of borrow pits being used, the remediation plan following use of such borrow pits will be part of the CSOP. The Contractor is to implement remediation plan once the exploitation is over.	› Included in the Technical Design, bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Material spillage during transport	› All trucks are to be covered	› Included in the Technical Design, bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
	Traffic and pedestrian safety			
Construction	Increased traffic due to heavy equipment/vehicle movement/works in vicinity of main/local roads	› Develop Traffic Management Plan if machinery access will impact the existing local traffic or the construction site will block passage / transport of vehicles and people › Designate an alternate route for pedestrian and/or vehicles in coordination with the Municipal Authorities or provide safe passageway through the construction site	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to
Construction	Limited public access to and through the construction area			

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
		› Schedule vehicle movement during lean daytime traffic hours. › Provide traffic aides/flagmen, traffic signs to help ensure the free and safe flow of traffic › Maintain & Repair temporary alternative route of vehicles & pedestrians		control on behalf of MAFWM
	Construction site			
Construction	Potential water and soil pollution from improper material storage, management and usage	› Identify storage areas in the Construction Site Organization Plan › Construct and cover material storage areas › Oil and other lubricant drums should be stored in a clean, cool and dry environment (possibly with consistent temperature), on proper storage racks using the first-in/first-out (FIFO) method to maintain a good stock rotation. › On-site refueling of vehicles shall be forbidden. › Isolate concrete works from watercourse by using sealed formwork or covers.	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Water and soil pollution from improper handling of waste including disposal of waste materials	› Develop Construction Waste Management Plan › Typical containers for solid Communal waste are placed at the construction site locations at least 500m from closest houses; › Acceptance of collected Communal waste and its disposal by authorized institutions; › Hazardous waste fractions (used waste oils, oiled packaging. bitumen agents waste, waste transformer oils, waste asbestos-cement pipes etc.) are separately collected into typical containers or metal barrels; they are to be delivered to entities authorized for hazardous waste management. Apply additional measures for storage of hazardous wastes (such as use of secondary containment, access restriction, provision of PPE etc.) as necessary to prevent harm to construction staff, environment and public. › Re-usage and recycle of waste whenever possible. › It is prohibited to burn waste in the open and at the location. › Use and labelling of designated waste collection containers and temporary disposal areas for different kind of wastes › Ensure that the waste is finally disposed in cooperation with licensed waste operators. The Contracts with licensed waste operators shall be signed and any waste transfer shall be recorded.	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
Construction	Potential contamination of soil and water from improper maintenance and fueling of equipment	› No washing of trucks and equipment is allowed in the construction site › On-site refueling of vehicles shall be forbidden. › Provide absorbing material in case of fuel spills. Used oiled materials and agents should be managed in line with the Construction Waste Management Plan. ›	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Potential pollution of soil and water due to the discharge of waste sanitary waters from the construction site	› Installation of ecological toilettes for workers › Engage the licensed company for regular emptying and maintenance of ecological toilettes	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Community Health and Safety: Population at increased risks of traffic accidents and from unauthorized access to the construction site.	› Implement traffic management measures from the Traffic Management Plan that is part of the Construction Site Management Plan. › Assure adequate warning signs, lighting, protective fencing etc. › Clean construction waste from the construction site both in the construction phase and after works completion, when closing the construction site. › Establish cooperation with local health care institutions for any emergency needs related to injuries on the construction site. › Include appropriate measures in the Construction Site Organization Plan. › Implementation of SEP, in particular the provisions on providing timely information to citizens through the media about upcoming construction works, expected duration of the works, alternative routes, etc.	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Possibility of encountering an archaeological site	In case of any findings the Contractor shall cease with works momentarily and proceed as indicated in the Montenegro national legislation Law on the protection of cultural heritage (Official Gazette of Montenegro, No. 49/10). The random discoverer (investor) shall: › Stop the works and provide the site, or findings of any damage, destruction and unauthorized access by others;	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
		› Report the finding to the authority, the nearest public institution for protection of cultural heritage goods, the authority in charge of police affairs or the administration body competent for maritime safety; › Preserve discovered assets at the location of finding in the state in which they were found until the arrival the authorized persons of the entities referred previously. › Disclose and communicate all relevant information regarding the location and position of the findings at the time of detection and the circumstances under which they were discovered to the competent authorities.		control on behalf of MAFWM
Construction	Workers safety	› Develop OHS management plan appropriate to the level of the construction activities and ensure its implementation. The plan shall include measures to ensure safety of workers working the in the river bed, as well we use of protective equipment appropriate to the works conducted. › Provide OHS training for workers and demand from all workers to abide by the Protection at work measures; › Provide protective equipment; › Install warning signs at the construction site. › Develop OHS indicators and use them for monitoring and evaluation of health and safety performance. › The Supervision Engineering contractor to employ the OHS supervision engineer to oversight the construction works	› Included in the bill of quantities	› Construction contractor to prepare › Engineering Supervision to control on behalf of MAFWM
Construction	Increase noise due to the construction activities	› Observe law-defined working hours at the construction site. › Avoid night-time construction using heavy machinery, from 22:00 to 6:00 near residential areas. › Good maintenance and proper operation of construction machinery to minimize noise generation. › Where possible, ensure non-mechanized construction to reduce the use of machinery › Ensure mufflers for heavy machinery › Do not to operate several noisy machines at the same time › If possible, isolate noisy machines in a technically possible way (e.g., use acoustical silencers in intake and exhaust systems)	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
Construction	Communication with stakeholders	› Implement communication methods described in Stakeholder Engagement Plan. › Establish Grievance Mechanism in line with requirements of Stakeholder Engagement Plan.	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Labor risks	› Implement requirements from the Labor Management Procedure (LMP) › Workers may raise their concerns (safety, discontent, maltreatment or else) through the Grievance Mechanism	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Emissions of dust from the construction activities and any temporary spoil storage site	› Avoid construction during high wind › Compact deposited earth material. › For piles of material, cover such piles during incidences of windy weather and/or transport to and from the site. › Sprinkle dust sources with water in order to reduce impacts on the surrounding population and vegetation. › Perform road washing measures if debris generated on the roads used is further raised by additional traffic or wind. › Control the speed of vehicles in order to reduce dust rising.	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Emission of gases and particles from vehicles, mechanization and generators	› Regular equipment maintenance. › The contractor is obliged to submit evidence of vehicle roadworthiness in line with the regulations on hazardous gases emission.	› Included in the, bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Increased water turbidity as a consequence of the works which may have negative impact on biodiversity in the Lim river.	› Construction works should be executed in a way that surfaces and natural contents outside the project are not damaged and that works are performed so that watercourses are not unnecessarily made tumid and watercourses discontinued.	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
		› Works should be executed in low water season when minimum flow is observed in the Lim river. › The Contractor will be responsible to establish the construction works to avoid the period of the fish spawning › In cases of increased and prolonged turbidity the work schedules shall be adjusted based on the fish spawning season or other concerns that might be raised by the local fishermen associations.		control on behalf of MAFWM
Construction	Construction surplus material after the closure of construction sites	› Address this issue in the Construction Waste Management Plan › All shivers and material that remain after the closure of temporary construction sites are to be removed from the location and reused/recycled where possible. › All remains are to be disposed of in a manner that will not be harmful to environment; this is to be done by companies that have permits to perform such works	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Operation and maintenance				
Operation and maintenance	Regular inspection of the flood protection structure	› Organize the flood control team and perform at least twice a year the detailed inspections of the flood protection structure. Identify potential issues and prioritize for repair.	› Included in the regular activities of the administration	› Owner of flood protection structures
Operation and maintenance	Improper management of waste from maintenance activities (grass and woody vegetation as well as other types of waste generated)	› Waste collection and disposal pathways and sites will be identified for all major waste types expected from maintenance activities. › All waste will be collected and disposed properly by licensed collectors › No open burning of wastes/removed vegetation on or off site	› N/A	› Contractor for maintenance › Owner of flood protection structures
Operation and maintenance	Repair of structural damage to regain functionality of the embankments	› Implement the same measures as described under heading “Construction “	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of owner of flood protection structures

7 Environmental and social monitoring plan

MAFWM/PIU will monitor overall environmental performance during project implementation by engaging the licensed engineering supervision company. Monitoring is a tool to assess environmental conditions and trends, support policy development and its implementation, and develop information for reporting to national policymakers, international forums and the public. The monitoring program refers to construction phase and deals with the natural and social parameters. The characterization of impacts chapter defines how important is the evaluation of mitigation measures caused by the construction works or wrong implementation of mitigation measures.

The Contractor environmental monitoring includes continuous and periodic observations, the recording, archiving and management of data for environmental and social protection and the reporting of the results to the management and to the affected parties and the general public as sets of primary, calculated or aggregated data and general information in monthly reports. Monitoring costs are included in contingencies costs and are the matter of the agreement between the MAFWM and the Contractor.

The following table presents the monitoring activities and responsibilities over the implementation of monitoring responsibilities during execution of this sub-project.

Table 4 Monitoring of environmental and social impacts

Project Phase/Activities	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored/ type of monitoring equipment?	When the parameter should be monitored (frequency of measurement of continuous)?	Monitoring cost/ what is the cost of equipment or contractor charges to perform monitoring?	Responsibility	Supervision observation and comments
Pre-construction phase	Obtaining all the necessary permits (Water Management Acts, Construction related permits)	Administrative office of the PIU	Insight in the administration files	Before the start of the works	-	PIU	
Pre-construction phase	Land acquisition completed in line with recommendations from RRA	Municipality Administrative office of the PIU	Visual insight in the files	Before the start of the works	-	PIU	
Pre-construction phase	Include into Employers Requirement (tender documents) the obligation for Contractors to implement Environmental and Social Management Plan, Labor Management Procedure and Stakeholder Engagement Plan.	Administrative office of the PIU	Insight in the Employers Requirements/ tender documents	Before publishing the tender dossier	-	PIU	
Pre-construction phase	Baseline surface water quality: total suspended solids and mineral oils	River Ljesevica and River Lim, downstream from the location of the works	Laboratory testing of nearby water stream	During setting up the construction camp, prior to start of construction works	USD 500	Construction contractor Supervisor Engineer	
Construction phase	Quality of the Construction Site Organization Plan	On the construction site	Visual insight in the files Visual observation of the site	Visual insight in the files	-	PIU through Engineering Supervision	

Project Phase/Activities	**What is the parameter to be monitored?**	**Where the parameter should be monitored?**	**How the parameter should be monitored/ type of monitoring equipment?**	**When the parameter should be monitored (frequency of measurement of continuous)?**	**Monitoring cost/ what is the cost of equipment or contractor charges to perform monitoring?**	**Responsibility**	**Supervision observation and comments**
Construction phase	Level of dust (amounts of sediment particles and airborne particles) Exhaust emissions from vehicles and equipment	Working area used by the excavation and earth moving machinery and/or at entry and exit points	Measurement devices Visual inspection, check vehicle and equipment service history	If needed (will be decided upon visual inspection) Upon complaints from local community	-	Construction contractor Supervisor Engineer	
Construction phase	Noise from construction works	Working area	Measurement devices Observation	Upon complaints from local community	USD 500	Construction contractor Supervisor Engineer	
Construction phase	Surface water pollution: total suspended solids and mineral oils	Downstream of the works	Visual inspections and laboratory testing of nearby water streams if needed	In case of pollution accidents or upon complaints from local community	USD 500	Construction contractor Supervisor Engineer	
Construction phase	Construction waste generation and management	Working site	Visual inspection, disposal records in line with Construction Waste Management Plan	Monthly during the execution of the works, as appropriate. Amount and disposal records internal reports will be made daily and monthly	Included in bid price	Construction contractor	

Project Phase/Activities	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored/ type of monitoring equipment?	When the parameter should be monitored (frequency of measurement of continuous)?	Monitoring cost/ what is the cost of equipment or contractor charges to perform monitoring?	Responsibility	Supervision observation and comments
Post-construction	Stability and functionality of flood protection structures	On and around the flood protection structure	Visual observation	2 times per year	-	Owner of the flood protection structure	

Table 5 Monitoring of social impacts

Project Phase/Activities	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored/ type of monitoring equipment?	When the parameter should be monitored (frequency of measurement of continuous)?	Monitoring cost/ what is the cost of equipment or contractor charges to perform monitoring?	Responsibility	Supervision observation and comments
Construction phase	Community Health, Safety and Security	At the construction site	› Visual inspection of the construction site organization › Records of complaints from residents through the grievance mechanism	Monthly	Included in Construction and design/ supervision cost	Engineering Supervision of behalf of MAFWM	
Construction phase	Occupational Health and Safety of Workers	At the construction site	› Visual observation of the compliance of respecting of health	Daily	Included in Construction and design/	Engineering Supervision of	

Project Phase/Activities	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored/ type of monitoring equipment?	When the parameter should be monitored (frequency of measurement of continuous)?	Monitoring cost/ what is the cost of equipment or contractor charges to perform monitoring?	Responsibility	Supervision observation and comments
			and safety working conditions, approved by permits and required by Montenegrin legislation. › Visual observation of the compliance with respect to Construction Site Organization Plan › Record of accidents in work		supervision cost	behalf of MAFWM	
Construction phase	Access	All sites where infrastructure and settlements/assets will be affected	› Observing and evaluation of infrastructure net (access roads, telecommunication, electrical net irrigation draining systems, in relation with interventions during construction phase › Recording issues and restoration time, for repairing of damaged infrastructure › Observe and evaluate functioning of	Daily	Included in Construction and design/ supervision cost	Engineering Supervision of behalf of MAFWM	

Project Phase/Activities	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored/ type of monitoring equipment?	When the parameter should be monitored (frequency of measurement of continuous)?	Monitoring cost/ what is the cost of equipment or contractor charges to perform monitoring?	Responsibility	Supervision observation and comments
			temporary infrastructure, till the end of works and install of existing infrastructure at last in the same conditions as prior construction works › Record local community compliance and represent it at contractor and local/national relevant authorities				
Construction phase	Workforce related impacts and Issues	Working sites and campus	› Evaluate the working contracts, social and health insurance, are regulated in respect with Montenegrin legislation and much with ESS. › Observe and record any discrepancy on working hours, holidays, medical reports with working contracts and legislation	Daily	Included in Construction and design/ supervision cost.	Engineering Supervision of behalf of MAFWM	

Project Phase/Activities	**What is the parameter to be monitored?**	**Where the parameter should be monitored?**	**How the parameter should be monitored/ type of monitoring equipment?**	**When the parameter should be monitored (frequency of measurement of continuous)?**	**Monitoring cost/ what is the cost of equipment or contractor charges to perform monitoring?**	**Responsibility**	**Supervision observation and comments**
Construction phase	Cultural Heritage	Chance finds	› Observe and report any chance finds, and monitor their related procedures according to national/local related legislation and approved procedures. › Record any chance finds and report on its management procedures.	› Daily monitoring of impacts in cultural, religious and heritage sites or objects › Frequent observing, recording and informing on chance finds and their manageme nt	Included in Construction and design/ supervision cost,	Contractor Engineering Supervision	

8 Implementation arrangements

8.1 Roles and responsibilities

The main responsible party involved in the implementation and monitoring of the ESMMP is the MAFWM and the PIU unit organized within it.

The PIU shall ensure that the requirements of the site-specific ESMMP are included in employer's requirements that are part of the tender documents as well as the contract later on. Within its usual monitoring activities, the PIU shall perform monitoring (including on-site monitoring, as needed) to ensure that Contractors comply with their contractual obligations. The PIU shall establish and maintain records on dissemination of information and engagement of all stakeholders in accordance with the SEP.

For the purposes of implementing the obligations contained herein, the MAFWM/PIU shall appoint an Environmental and Social Expert (ESE) for the Project. The ESE shall be the responsible person for ensuring that the provisions of the ESMMP are complied with during the life of the contract. The ESE will be responsible for issuing instructions to the Contractor and where environmental considerations call for action to be taken. The ESE shall submit regular written reports to MAFWM, but not less frequently than once a month.

It is the responsibility of the Contractor to ensure the proper execution of works and labor management compliance, according to measures prescribed in this ESMMP and the LMP, and in line with national and international standards. The PIU will report on a regular basis to WB on Project screening, approval and monitoring results.

The Contractor should nominate the Environmental and Social Advisor (ESA) for the Project. The ESA will be site-based and shall be the responsible person for implementing the environmental provisions of the construction contract. ESA should have relevant education background in engineering and environment protection. Its responsibilities will entail:

- Reporting structures.
- Actions to be taken to ensure compliance.
- Overall implementation of this ESMMP in all stages/phases of the Project.
- Documenting the environmental policy and strategy.
- All the aspects which require action under the other core elements and sub-elements of the ESMMP.
- All official communication and reporting lines including instructions, directives and information shall be channeled according to the organization structure.

8.2 Implementation schedule

Implementation schedule, timing, frequency, duration of mitigation measures and monitoring is defined taking into account the maximum period planned for the construction, i.e., 18 months.

8.3 Environment and Health Training and Awareness

A training needs analysis shall be conducted by the ESE to identify the appropriate environmental and OHS training programs. The training should, as a minimum, be focused on presenting this ESMMP and include the following topics:

- The importance of conformance with all environmental policies.
- The significant environmental impacts, actual or potential, as a result of their work activities.
- The environmental benefits of improved personal performance.
- Their roles and responsibilities in achieving conformance with the environmental policy and procedures,
- The mitigation measures required to be implemented when carrying out their work activities.
- Details of, and encouragement to, minimize the production of waste and re-use, recover and recycle waste where possible.
- Procedures to be followed if any chance find encountered.
- Details regarding fauna and flora of special concern in the Lim river and the procedures to be followed to protect them.
- Information within the Project LMP and related documents, including significant Project aspects, impacts and controls
- OHS issues for the high risk construction activities (work in the river bed).

8.4 Emergency Preparedness

Before the construction start, the Contractor shall compile environmental emergency procedures in the Construction Site Organization Plan. The procedures shall be maintained to ensure that there will be an appropriate response to unexpected or accidental actions or incidents that will cause environmental impacts, throughout the life cycle of the Project. The Contractor shall comply with the emergency preparedness and incident and accident-reporting requirements.

8.5 Stakeholder Engagement

The MAFWM, that is the PIU, will implement the Stakeholder Engagement Plan (SEP) prepared for this Program in line with ESS 10 to provide ongoing information to the affected Stakeholders and general public about the key relevant environmental and social aspects throughout the project execution.

Stakeholder engagement activities need to provide specific stakeholder groups with relevant information and opportunities to voice their views on topics that matter to them. The stakeholder engagement activities are adapted to the three main project stages:

1. RAP preparation, implementation and project design;
2. Construction;
3. Post-construction and Operation phase.

The proposed strategy for consultation is given in the SEP.

The PIU will set up a grievance procedure which provides stakeholders with a way to formally register any complaints/ grievances to the MAFWM about any part of the process of the Project implementation.

The Construction Contractor will also be required to give a "quick and realistic response" procedure, to react as efficiently as possible to stakeholder concerns, without necessarily having to first go through the formal grievance process with MAFWM. Any complaint received by the Contractor shall also be recorded in the grievance register.

Any grievance can be brought to the attention of the PIU by filling the grievance form in hard copy or on-line, or in any other format as chosen by the grievant.

PIU will collect and process all grievances directly or through the contractor or local government offices. The monthly social monitoring reports to the WB shall be submitted through the PIU.

Any type of grievance can be submitted by mail, fax, phone, e-mail or in person using the below access details:

Attention: Mr. Željko Furtula, General Director of Directorate for Water Management

Government of Montenegro, Ministry of Agriculture, Forestry and Water Management

Address: Rimski Trg 46, 81000 Podgorica/Montenegro

Tel: + 382 20 482 108 , E-mail: zeljko.furtula@mpsv.gov.me

The Grievance Procedure will be updated as appropriate during the course of project implementation and subsequent operational stage.

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). For information on how to submit complaints to the World Bank's corporate GRS, please visit *http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service*. Addresses to send complaints:

Email: grievances@worldbank.org

Fax: +1-202-614-7313

Mail address:

The World Bank Grievance Redress Service (GRS)

MSN MC 10-1018, 1818 H St NW

Washington, DC 20433, USA

8.6 Workers Grievance Mechanism

A Labour's Grievance Mechanism in compliance with ESS2 will be provided for **all direct workers and contracted workers** to raise workplace concerns. Grievance Form for Workers is provided in Chapter 9 of the LMP developed for this Program. The PIU will ensure that the responsible Directorates respond to complaints within 30 days from the date of their acceptance. If MAFWM is not able to address the particular issue raised through the grievance mechanism or if action is not required, the complainants have the opportunity to seek legal remedies in accordance with the laws and regulations of the Republic of Montenegro. The PIU will also ensure that Contractors have grievance mechanism set in place in line with LPM.

8.7 Monitoring

A formal Project monitoring needs to be conducted on a regular basis in which the monthly internal audit reports written by the ESE and based on frequent inspections and interactions with the ESA based on the latter's daily reports, audit reports by the independent external auditor will be reviewed. The purpose of the review is to critically examine the effectiveness of the ESMMP and its implementation and to decide on potential modifications to the ESMMP as and when necessary. The process of management review is in keeping with the principle of continual improvement.

8.8 Capacity Strengthening and Training

Through SDIP project implementation relevant national agencies will familiarize themselves with WB Environmental and Social Standards through consultations and public presentations, as well as with good practices in their purposeful implementation.

Engaged Contractors will be obliged to familiarize their workers and staff engaged on Sub-Projects implementation with the Environmental and Social Standards, increasing awareness and knowledge.

9 Cost of Implementing the ESMMP

This ESMMP refers to the construction of flood protection structure on river Lim. The main impacts are identified in the construction phase. Since the nature of the project is as such that it entails standard construction activities, all mitigation measures refer to good construction practices and will be implemented into the project design. Therefore, the associated costs will be included in the cost of overall project implementation. Potential bidders are to prepare their bill of quantities referring to the ESMMP given in Chapter 6.2 and Chapter 7.

10 Public consultations and public disclosure of the ESMMP

The ESMMP shall be publicly disclosed in line with the requirement of Stakeholder Engagement Plan developed for this project.

Note: This chapter will be finalized after the public consultations' procedure is over.

Annex 1. Scoping Decision

CRNA GORA
OPŠTINA BIJELO POLJE
- Sekretarijat za ruralni i održivi razvoj

Adresa:Ul.Nedeljka Merdovića bb ,
84000 Bijelo Polje
Telefon: +382(0)50/484-805
www.bijelopolje.co.me

Up.br. 09/4-322/22-587-6

Bijelo Polje, 28.02.2022.godine

Sekretarijat za ruralni i održivi razvoj Opštine Bijelo Polje, u postupku sprovedenom po zahtjevu Ministarstva poljoprivrede, šumarstva i vodoprivrede- Direktorata za vodoprivredu, Rimski trg 46 iz Podgorice, za odlučivanje o potrebi izrade elaborata procjene uticaja na životnu sredinu za projekat "Uređenja lijeve obale rijeke Lim na potezu od Vatrogasnog doma do ulice Limske" u opštini Bijelo Polje, na osnovu člana 14. Zakona o procjeni uticaja na životnu sredinu (" Sl.list CG", br.75/18), te člana 13 Odluke o organizaciji i načinu rada lokalne uprave Opštine Bijelo Polje („Sl.list CG-opštinski propisi", br.16/19), i čl.18 i 46 stav 1 ZUP-a ("Sl.list CG", br. 56/14,20/15, 40/16, 37/17) d o n o s i

R J E Š E NJ E

I - UTVRĐUJE SE da nije potrebna izrada Elaborata procjene uticaja na životnu sredinu za projekat "Uređenja lijeve obale rijeke Lim na potezu od Vatrogasnog doma do ulice Limske" u opštini Bijelo Polje.

II – Ministarstvo poljoprivrede, šumarstva i vodoprivrede- Direktorata za vodoprivredu iz Podgorice može pristupiti izvođenju projekta iz tačke I ovog rješenja, u skladu sa važećim zakonskim normativima i standardima propisanih za tu vrstu objekta, uz obavezu da pri izgradnji objekta primijeni potrebne mjere predložene u Dokumentaciji za odlučivanje o potrebi izrade Elaborata procjene uticaja na životnu sredinu i to:

- projektovane radove izvoditi u malovodnom periodu (ljeti i početkom jeseni), kako bi se osigurao rad u suvom ili u prisustvu manjih količina voda, kao i ocjeđivanje i konsolidovanje nanosa;
- se tokom izvođenja radova spriječi rasipanje građevinskog materijala i otpada, odnosno nastali otpadni materijal propisno sakuplja i odlaže na za to predviđenu lokaciju,
- osigurati racionalno kretanje vozila i građevinske mehanizacije;
- uklanjanje postojeće vegetacije ograničiti na najmanju moguću površinu;
- da sklopi Ugovor sa preduzećem koje ima dozvolu za sakupljanje i transport opasnog i neopasnog otpada koji se može pojaviti u toku izgradnje objekta;
- da se tokom izvođenja projekta pridržava mjera privremenog ograničenja utvrđenog Zakonom o zaštiti od buke u životnoj sredini („Sl.list CG", br.28/11);
- da realizuje sve mjere navedene u Dokumentaciji o potrebi izrade Elaborata procjene uticaja na životnu sredinu

III – Nosilac projekta je dužan da ovo rješenje da na uvid obrađivaču tehničke dokumentacije kako bi se navedene mjere ispoštovale pri izradi tehničke dokumentacije i iste provjerile u postupku tehničke kontrole projekta i tehničkog pregleda objekta.

IV - Nosilac projekta, Ministarstvo poljoprivrede, šumarstva i vodoprivrede- Direktorat za vodoprivredu iz Podgorice, se obavezuje da u slučaju **proširenja kapaciteta ili promjene namjene**, podnese zahtjev nadležnom opštinskom organu za odlučivanje o potrebi izrade Elaborata procjene uticaja na životnu sredinu.

V - Ministarstvo poljoprivrede, šumarstva i vodoprivrede- Direktorat za vodoprivredu iz Podgorice je dužno da u roku od dvije godine, od dana dostavljanja Rješenja da nije potrebna izrada Elaborata procjene uticaja na životnu sredinu za projekat "Uređenja lijeve obale rijeke Lim na potezu od Vatrogasnog doma do ulice Limske" u opštini Bijelo Polje, pribavi odobrenje za izvođenje projekta od strane nadležnog organa.

O b r a z l o ž e n j e

Nosilac projekta, Ministarstvo poljoprivrede, šumarstva i vodoprivrede- Direktorat za vodoprivredu, Rimski trg 46 iz Podgorice, obratilo se zahtjevom Sekretarijatu za ruralni i održivi razvoj, kao nadležnom organu za odlučivanje o potrebi izrade elaborata procjene uticaja na životnu sredinu za projekat "Uređenja lijeve obale rijeke Lim na potezu od Vatrogasnog doma do ulice Limske" u opštini Bijelo Polje.

Uz navedeni zahtjev nosilac projekta je dostavio potrebnu dokumentaciju, čiji je sadržaj utvrđen Pravilnikom o blizem sadržaju dokumentacije koja se podnosi uz zahtjev za odlučivanje o potrebi izrade elaborata („Sl. List CG", br.19/19).

Postupajući po zahtjevu Nosioca projekta, a shodno odredbama člana 13 Zakona o procjeni uticaja na životnu sredinu ("Sl.list CG", br.75/18), Sekretarijat za ruralni i održivi razvoj Opštine Bijelo Polje obavijestio je zainteresovanu javnost, organe i organizacije, organizovao javni uvid i obezbijedio dostupnost podataka i dokumentacije Nosioca projekta. Uvid u dokumentaciju bio je obezbijeđen u prostorijama Sekretarijata za ruralni i održivi razvoj kao i na sajtu Opštine Bijelo Polje. U toku trajanja javnog uvida nije bilo dostavljenih mišljenja kao ni uvida u dostavljenu dokumentaciju.

Razmatranjem predmetnog zahtjeva Nosioca projekta i podataka o predmetnoj lokaciji, karakteristikama i mogućim uticajima projekta na životnu sredinu, Sekretarijat za ruralni i održivi razvoj Opštine Bijelo Polje utvrdio je razloge za donošenje ovog rješenja:

- Predmetna lokacija – lijeva obala rijeke Lim od Vatrogasnog doma do ulice Limske u Bijelom Polju.
- Zahvata potez od 608m nizvodno od mosta i hidrološke stanice na Limu. U sklopu projekta je predviđeno i uređenje zone uliva rijeke Lješnice saglasno nivelaciji biciklističke staze, tj.priobalja. U tom smislu potrebna je dogradnja postojećih potpornih konstrukcija i objekat novog mosta na biciklističkoj stazi.
- Regulacija vodotoka će doprinijeti bezbjednosti i zaštiti okolnog područja i stanovništva.

Uzimajući u obzir raspoloživu dokumentaciju i podatke o karakteristikama planiranog projekta i predmetne lokacije, važeće tehničke normative i standarde propisane za izgradnju objekta, korišćenje i održavanje ove vrste objekata, kao i odgovarajuće mjere zaštite, ne očekuju se negativni uticaj na segmente životne sredine u toku izvođenja i korišćenja predmetnog projekta.

Imajući u vidu navedeno, Sekretarijat za ruralni i održivi razvoj Opštine Bijelo Polje na osnovu sprovedenog postupka, razmatranja zahtjeva nosioca projekta, a primjenom odredaba člana 14 4 Zakona o procjeni uticaja na životnu sredinu („Službeni list CG", broj 75/18), te članova 18 i 46 stav 1 Zakona o upravnom postupku ("Službeni list RCG", br. 56/14,20/15, 40/16, 37/17) odlučio je kao u dispozitivu ovog rješenja.

Ovim rješenjem su utvrđene mjere za sprječavanje mogućih štetnih uticaja na životnu sredinu u toku izgradnje objekta uz obavezu Nosioca projekta da ovo rješenje da na uvid obrađivaču tehničke dokumentacije kako bi se navedene mjere ispoštovale pri izradi tehničke dokumentacije i iste provjerile u postupku tehničke kontrole projekta i tehničkog pregleda objekta.

Takođe, rješenjem je utvrđena obaveza nosioca projekta da u slučaju proširenja kapaciteta ili promjene namjene podnese zahtjev nadležnom opštinskom organu za odlučivanje o potrebi izrade Elaborata procjene uticaja na životnu sredinu.

Rješenje prestaje da važi ukoliko nosilac projekta u roku od dvije godine, od dana dostavljanja Rješenja, ne pribavi odobrenje za izvođenje projekta od strane nadležnog organa.

Sekretarijar za ruralni i održivi razvoj opštine Bijelo Polje, obavijestiće zainteresovane organe i organizacije o donijetoj odluci.

PRAVNA POUKA: Protiv odluke iz ovog rješenja može se izjaviti žalba Glavnom administratoru Opštine Bijelo Polje, u roku od 15 dana od dana prijema rješenja. Žalba se predaje preko ovog Sekretarijata, taksirana sa 3,00 € opštinske administrativne takse.

Ovlašćeno službeno lice
Danijela Lazarević,

SEKRETAR
Jasmin Čorović

Dostavljeno:
- Nosiocu projekta
- ekološkoj inspekciji
- a/a

Annex 2. Water Requirements

Crna Gora
Uprava za vode

Adresa: Bulevar Revolucije 24
81000 Podgorica, Crna Gora
tel: +382 20 224 593
fax: +382 20 224 594
www.upravazavode.gov.me

Br:060-327/22-02011-34 03.03.2022.

Uprava za vode, na osnovu čl. 114 i 115 Zakona o vodama ("Sl. list RCG", br. 27/07, "Sl. list CG", br. 73/10, 32/11, 47/11, 48/15, 52/16, 55/16, 2/17, 80/17 i 84/18) i čl. 18 Zakona o upravnom postupku ("Sl.list CG", br. 56/14, 20/15, 40/16 i 37/17), rješavajući po zahtjevu Opštine Bijelo Polje – Sekretarijat za uređenje prostora, br. 06/4-319/22-708 od 22.02.2022. godine, a u ime Investitora Direkcije za izgradnju i investicije, radi utvrđivanja vodnih uslova za izradu tehničke dokumentacije za uređenje lijeve obale rijeke Lim na potezu od „Vatrogasnog doma" do ulice Limske u Bijelom Polju, na katastarskim parcelama br. 2350, 2353/1, 1347, 1333/1, 1333/2, 1332, 2353/2, 1292, 1234/1, 1233, 1225, 1223, 156, 157, 226, 236/2, 227/4, 236/4 i 303/1 KO Bijelo Polje, u zahvatu Izmjena i dopuna Detaljnog urbanističkog plana Centralne zone Bijelo Polje, donosi

R J E Š E NJ E
o utvrđivanju vodnih uslova

UTVRĐUJU SE Investitoru OPŠTINI BIJELO POLJE – Direkciji za izgradnju i investicije u postupku izrade Glavnog projekta uređenja lijeve obale rijeke Lim, na potezu od „Vatrogasnog doma" do ulice Limske u Bijelom Polju, na katastarskim parcelama br. 2350, 2353/1, 1347, 1333/1, 1333/2, 1332, 2353/2, 1292, 1234/1, 1233, 1225, 1223, 156, 157, 226, 236/2, 227/4, 236/4 i 303/1 KO Bijelo Polje, u zahvatu Izmjena i dopuna Detaljnog urbanističkog plana Centralne zone Bijelo Polje, **sljedeći vodni uslovi**:

1. Glavni projekat uraditi u skladu sa važećim tehničkim i zakonskim normativima za ovu vrstu radova.
2. Tehnička dokumentacija treba da sadrži:
   - opšte podatke o planiranim regulacionim radovima (lokacija, položaj, dužina, tip, karakteristične kote elemenata prirodnog i planiranog regulisanog korita, karakteristične proticaje, ostale objekte na regulisanoj dionici rijeke);
   - preglednu situaciju lokacije u pogodnoj razmjeri;
   - podloge za projektovanje sa prikazom postojećeg stanja u pogodnoj razmjeri (geodetske, hidrološke, hidro-geološke);
   - tehničke uslove izvođenja radova;
   - predmjer i predračun radova.
3. Tehničke karakteristike projektovanog rešenja za regulaciju korita rijeke Lim na naznačenom potezu, moraju biti takve da zadovoljavaju sledeće uslove:
   - utvrditi osnovne mjere odbrane od velikih voda rijeke Lim kojim će se definisati način zaštite obala, priobalnog zemljišta i objekata na identifikovanom potezu;
   - spriječiti meandriranja korita rijeke Lim na predmetnom potezu;
   - definisati uslove i mogućnost upotrebe raspoloživog materijala u svrhu formiranja obaloutvrda i nasipa za zaštitu od poplavnih talasa;

- definisati neophodne periodične mjere održavanja korita rijeke Lim kojim bi se održavala protočna moć korita;
- primijeniti mjere zaštite voda i zaštite od štetnog dejstva voda i očuvati prirodni režim podzemnih i površinskih voda i
- obezbijediti tehničko rješenje regulacije rijeke Lim u obimu koji će obezbijediti hidrauličnu protočnost i stabilnost rječnog korita.

4. Rok važenja ovog rješenja je godinu dana od dana izdavanja istog. Investitor je u obavezi u naznačenom roku podnijeti uredan zahtjev za izdavanje vodne saglasnosti, u skladu sa čl. 118 i 119 Zakona o vodama. Uz zahtjev se prilaže Glavni projekat i Izvještaj o tehničkoj kontroli (reviziji) Glavnog projekta.

O b r a z l o ž e n j e

Upravi za vode obratila se Opština Bijelo Polje – Sekretarijat za uređenje prostora, br. 06/4-319/22-708 od 22.02.2022. godine, a u ime Investitora Direkcije za izgradnju i investicije, radi utvrđivanja vodnih uslova za izradu tehničke dokumentacije za uređenje lijeve obale rijeke Lim na potezu od „Vatrogasnog doma" do ulice Limske u Bijelom Polju, na katastarskim parcelama br. 2350, 2353/1, 1347, 1333/1, 1333/2, 1332, 2353/2, 1292, 1234/1, 1233, 1225, 1223, 156, 157, 226, 236/2, 227/4, 236/4 i 303/1 KO Bijelo Polje u zahvatu Izmjena i dopuna Detaljnog urbanističkog plana Centralne zone Bijelo Polje.

Uz predmetni zahtjev dostavljeni su Urbanističko - tehnički uslovi za izradu tehničke dokumentacije za izgradnju pješačke saobraćajnice (šetališta) uz rijeku Lim od zgrade „Vatrogasnog" do granice obrađivanog područja DUP-a Centralne zone (pumpe Lukoila) preko katastarskih parcela br. 2350, 2353/1, 1347, 1333/1, 1333/2, 1332, 2353/2, 1292, 1234/1, 1233, 1225, 1223, 156, 157, 226, 236/2, 227/4, 236/4 i 303/1 KO Bijelo Polje, u zahvatu Izmjena i dopuna Detaljnog urbanističkog plana Centralne zone - Bijelo Polje („Sl. list Crne Gore-opštinski propisi", br. 11/18), izdati od strane Opštine Bijelo Polje, broj: 032-352-419-06/2-11/5 od 05.03.2019. godine.

Rješavajući po navedenom zahtjevu i uvida u spise predmeta utvrđeno je da je zbog složenosti rješenja potrebno propisati vodne uslove za izradu projektne dokumentacije na nivou Glavnog projekta u skladu sa čl. 114 i 115 Zakona o vodama.

Na osnovu izloženog riješeno je kao u dispozitivu ovog rješenja

Za donošenje ovog rješenja podnosilac zahtjeva oslobođen je plaćanja administrativne takse u skladu sa Zakonom o planiranju prostora i izgradnji objekata.

Uputstvo o pravnoj zaštiti: Protiv ovog rješenja može se izjaviti žalba Ministarstvu poljoprivrede, šumarstva i vodoprivrede, u roku od 15 dana od dana prijema rješenja. Žalba se predaje preko Uprave za vode, neposredno ili putem pošte.

Vesna Bajović

V.D. DIREKTORICA

Dostavljeno:

- Podnosiocu zahtjeva;
- Inspektoru za vode;
- Službi uprave;
- a/a.

Obradila: Nataša Rakočević, samostalna savjetnica I