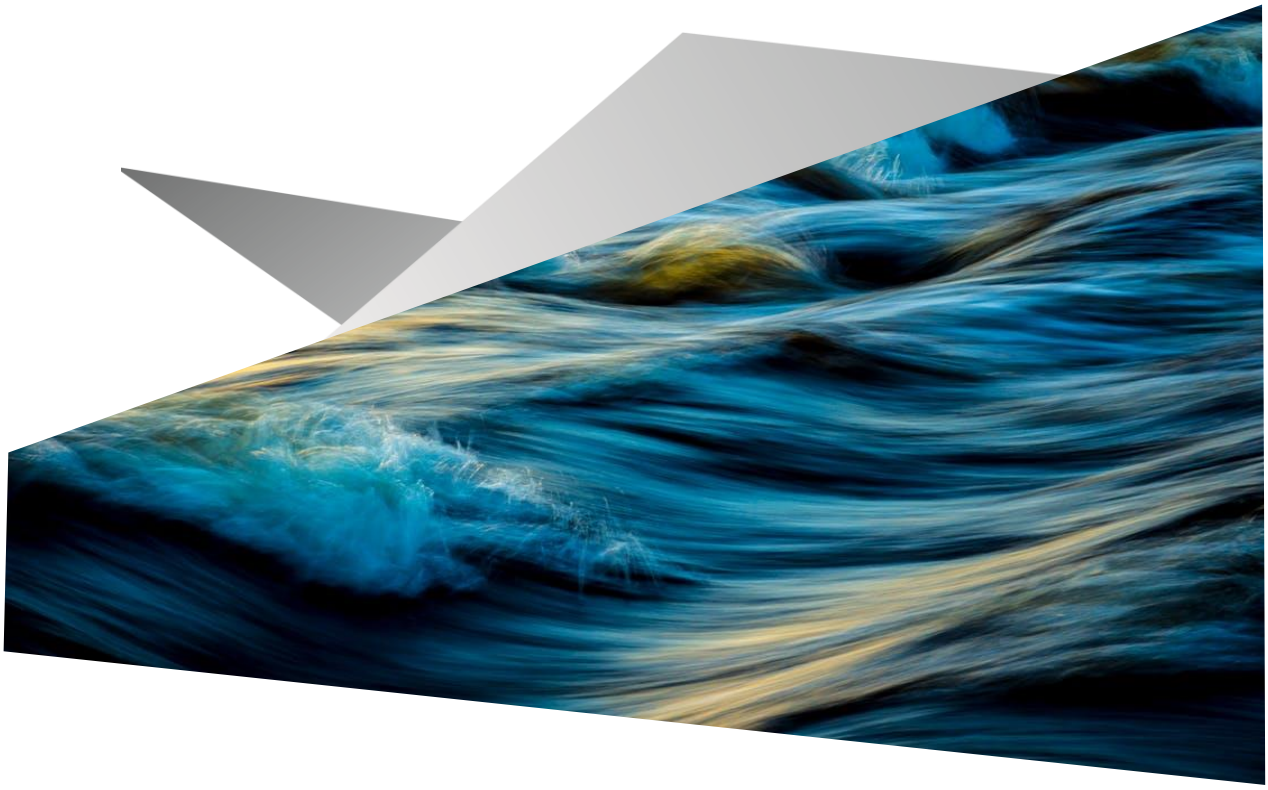
MONTENEGRO, MINISTRY OF AGRICULTURE, FORESTRY AND WATER MANAGEMENT

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

JANUARY 2023

ENVIRONMENTAL AND SOCIAL MONITORING AND MANAGEMENT PLAN (ESMMP) - LIM RIVER REGULATION – BREZOJEVICE – PLAV

- REVISED VERSION FROM JANUARY 2023-



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ENVIRONMENTAL AND SOCIAL MONITORING AND MANAGEMENT PLAN (ESMMP)

LIM RIVER REGULATION – BREZOJEVICE – PLAV

- REVISED VERSION FROM JANUARY 2023-

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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, Forestry and Water management
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. The main objective of this Program is to improve flood protection and enable transboundary water cooperation in the Sava and Drina River Corridor.

The first phase includes sub-projects with high relevance to the program objectives, high feasibility, and readiness (with detailed designs and tender documents likely ready by Effectiveness): their implementation would be completed during the 2020-2026 period. A second phase features sub-projects of similar relevance and feasibility, but lower readiness: their preparation would be carried out during the first years of the program for their implementation to be completed in the period 2023 to 2030.

To address the Project's potential environmental and social concerns by the World Bank Environmental and Social Standards requirements, an Environmental and Social Management Framework (ESMF) was prepared and approved for the whole SDIP in February 2020. ESMF is used, as the most appropriate tool, for addressing environmental and social aspects of sub-projects identified in the course of project preparation and implementation.

The specific activities including civil works related to water training works and flood protection may contain significant environmental risks and impacts including impacts to the watercourse, management of excavated and dredged materials and solid waste generated, generation of dust, noise, and air pollution, and possible impacts on the flora and fauna of the waterway and adjacent areas. All of the documentation to feed into the future phases will consider the relevant environmental and social issues from an impact perspective and a project design perspective.

The Project's ESMF is serving to screen every sub-project for potential social and environmental impacts and then develop specific mitigation plans as needed. All of the subsequent ESMMPs will be developed fully by the Project's ESMF, provisions of the World Bank ESF, and all of the Environmental and Social Standards (ESS). The Plans are site and sub-project specific and will cover the most likely impacts described above.

One of the subprojects that are 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. Each sub-project will have its ESMMP prepared

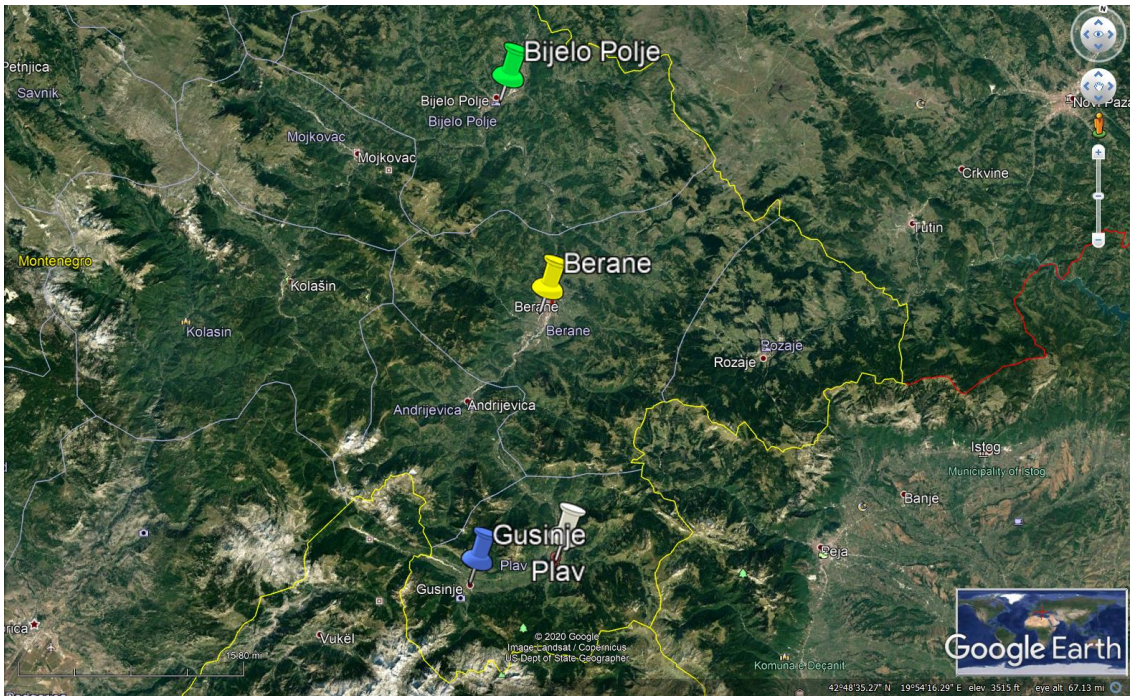


Figure 1 Project locations, Montenegro

Montenegro is, which, like all Balkan countries is particularly sensitive to future climate and precipitation change in Europe with weather-related events becoming more frequent and intense. Montenegro is already vulnerable to climate change, with signs of a trend toward a more extreme precipitation regime. The whole country suffered damages and losses amounting to around €44 million (1.4percent gross domestic product) from the 2010 flood. Future flooding potentially threatens 250 square kilometers 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 the Grncar River) to mittigate the impact of climate change.

This document presents the Environmental and Social Management and Monitoring Plan (ESMMP) for the design and construction of the flood protection structure in Brezojevice, Municipality of Plav. The earlier version of the ESMMP was first time prepared in November 2020with the framework of a 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 updated and revised by the Project Implementation Unit (PIU) of the Ministry of Agriculture, Forestry and Water Management (MAFWM)[1] in the period August 2020- January 2023 to reflect the recent status of the Project**.

[1] Former Ministry of Agriculture and Rural Development.

This ESMMP aims 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 ESMMP is a Project level document applicable to all activities under the SDIP in Montenegro.

The SDIP is rated with an overall High Risk for both Environment and Social. However, following the ESMF's prescribed screening procedure, this sub-project is screened as one with moderate risk based on the identified environmental and social impacts in the pre-construction, construction, and operational phase as follows:

- *In the pre-construction phase*, the identified social impact is related to the possible acquisition of land at the locations of the works.
- *In the construction phase,* the social impacts are mainly related to community health and safety during construction; minor negative impacts could be expected through the human presence and the nature of construction works at the site, which are limited to the location of works or its surrounding vicinity. A large influx of workers from outside communities is not expected. The regulation of the riverbed and the possible need for stabilization of active landslides may have certain impacts on the environment/water resources during construction/reconstruction and removal of materials. Analyses to be performed should provide the best available materials for the collection and separation of waste impact of transporting machinery to the site; noise during construction; waste, noise, dirt, and dust at the location and the access roads.
- *In the operational phase,* the expected impacts are mainly related to the maintenance of these structures and have a similar effect on the environment as the construction works as they involve the presence of workers and machinery on the site.

The proposed actions are to:

- prepare a site-specific ESMMP,
- in case of any land acquisition issues are identified, prepare a site-specific Resettlement Plan in line with the guidance given in the Resettlement Framework developed for the SDIP project,
- implement the developed Labor Management Procedure, and update it as necessary,
- undertake stakeholder engagement and disclose appropriate information by the Stakeholder Engagement Plan developed for the SDIP project,
- conduct monitoring and reporting on the E&S performance of the SDIP project against the program-specific ESMF, RPF, SEP, and LMP.

Therefore, this site-specific ESMMP serves to identify the key environmental and social impacts that will result from the sub-project related to the construction of flood protection structures in the Plan Municipality and propose 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 ensuring compliance with environmental and social requirements as set out in 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 the inclusion of this ESMMP in Tender Documents, contracts, and subcontracts, and through direct oversight and supervision by the MAFWM. Procurement under the Project will be carriedout by the World Bank Procurement Regulations for IPF Borrowers "Procurement in

Investment Project Financing for goods, works, non-consulting services and, Consulting Services" (July 2016, revised Nov 2017 and Aug 2018). 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.

2 Project description

2.1 Location

The Lim River is formed by the outflow of the waters of Plav Lake. The length of the stream from the exit from Plav Lake to the mouth of the Drina is 219 km. Of that, 83 km is on the territory of Montenegro. The length of the Lima stream should also include the 12.5 km long tributary of the Plav Lake Ljuca, the river flows from which the Ljuca River originates - Skrobotusu 7.5 km, Ljumi, and Vermosit 9.5 km and Grncar 8.5 km, as well as the length of the Plavsko lake of 1.5 km, which increases the total length of the Lima River by 39 km. The extended Lim River valley downstream of Piva Lake, especially in the places where tributaries flow in, enabled the development of a larger number of settlements.

Above mentioned anthropogenic factors are just an addition to the natural features of the Lim River basin, suitable further 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, tributary's discharge at the confluence can be greater than the discharge in the Lim River which (larger) the 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 increasing the vulnerability of the upstream river banks.

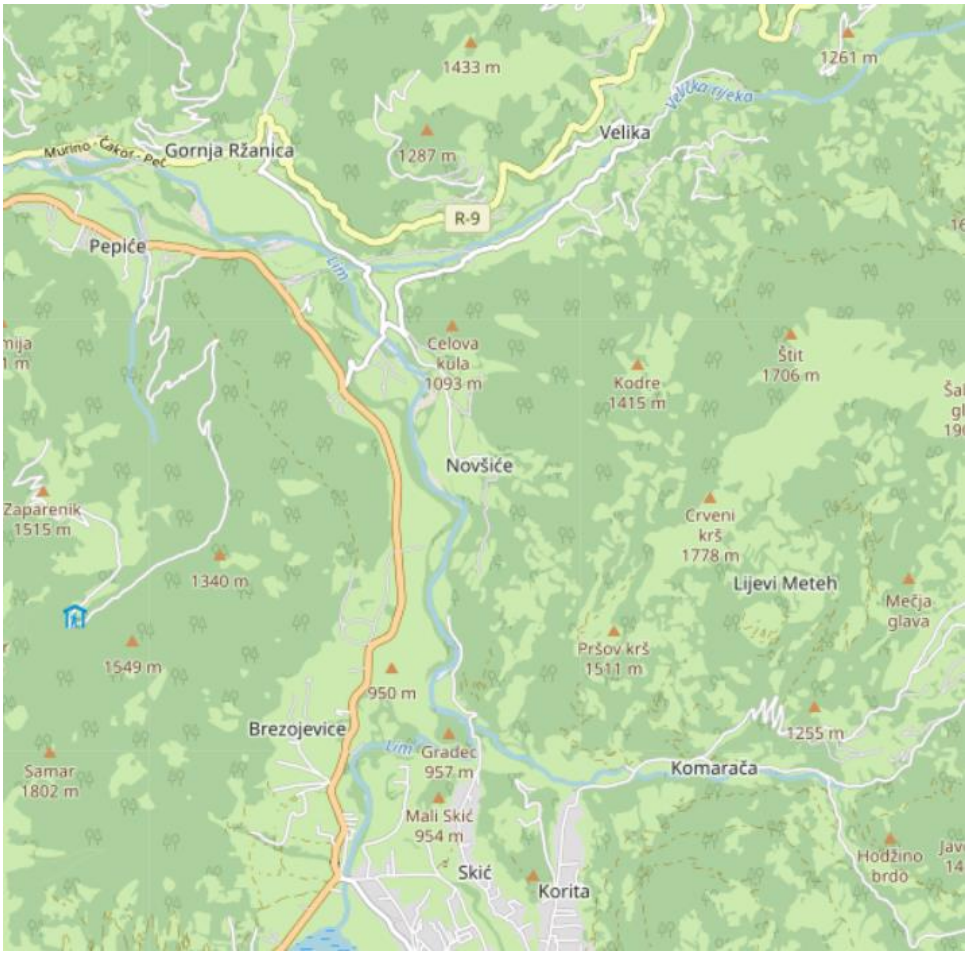


Figure x: Geographical view of the terrain

The existing configuration of the banks of the Lim River on a wider stretch, which includes the subject regulation, is characterized by a narrow gorge downstream from the city, between the confluence of the Komaracka and Djuricka rivers, and a valley with left lower and right upper banks in the city. Both inundation surfaces are endangered, especially the left one.

The existing poor conditions 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 the following factors:

- Lack of river training structures for the management of flow regime and prevention and mitigation of floods in the entire project area;
- Previous exploitation of river deposits granted by state regulations have been conducted without adequate project documentation that would clearly define the obligations and constraints to the concessionaires to prevent riverbed degradation. An 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 a newly established minor bed 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 the degradation of the riverbed downstream from the concession site. Quantities and types of deposits that can be taken out are generally not determine based on appropriate investigations;

- Sediment exploitation has also been carried out illegally.

The Project in Brezojevice, the Plav Municipality, refers to the construction of a regulatory structure in the length of 1.323 m on the Lim River and 37 m on the Bijeli Potok stream. The Bijeli Potok stream is a torrential tributary of the Lim River and flows into the river Lim 92 m downstream from the Plav Bridge. The Project area stretches from a point at the downstream end which is approximately 650 m upstream of the Djuricka river confluence to a profile approximately 43 m downstream of the Plav bridge. The Bijeli Potok stream.

The right and left river banks in this section are covered sporadically with households and a small number of commercial buildings. So far, objects for flood protection have not been constructed in this section.

The project is being implemented on parts of the following cadastral parcels: 1049/1, 1255/1, 801/1, 781/1, 2849, 782, 621/1, 621/2, 620/2, 620/1, 620/3, and 1263 (K.O. Brezojevice 1); 2344, 2345, 2346, 2352, 2353, 2440/1, 2440/2 and 2439/2 (K.O. Plav).

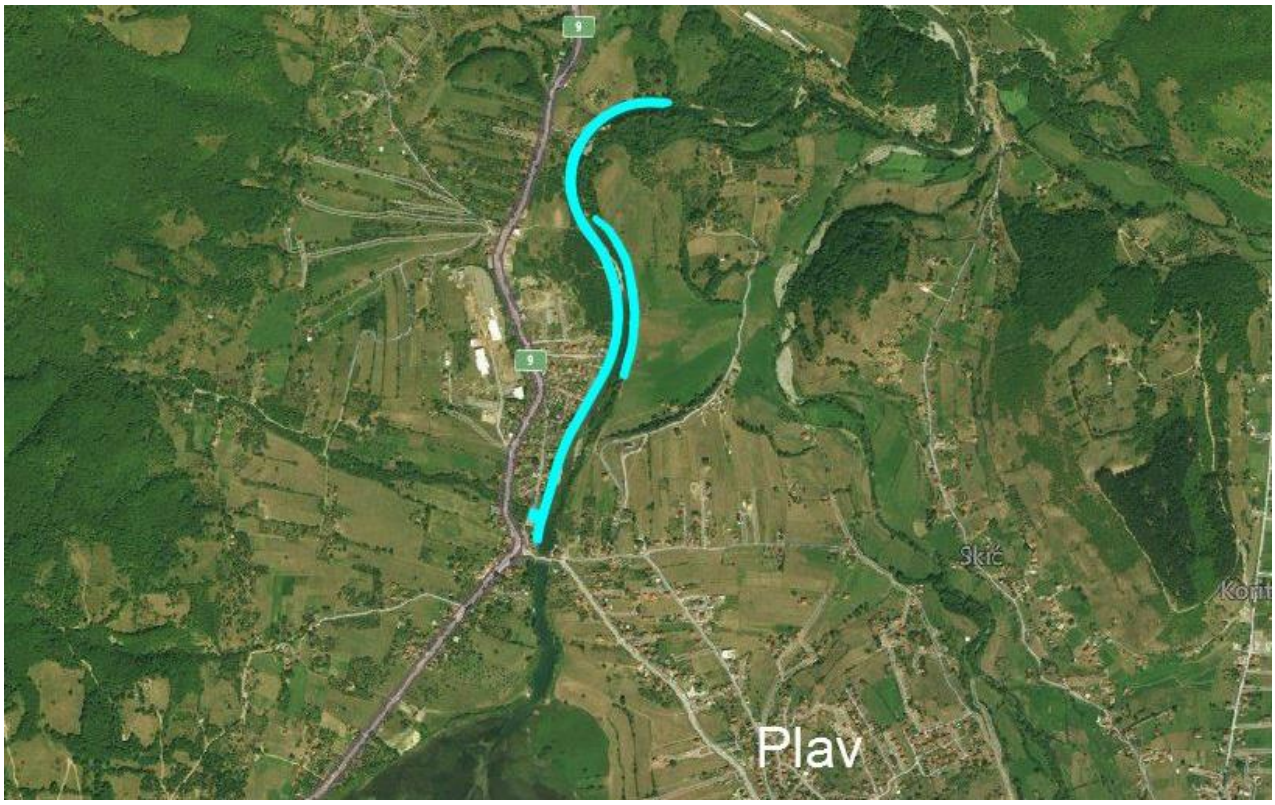


Figure 2 Project micro-location – Plav

2.2 Existing situation with the flooding

During January and November 2010, the area of Montenegro was affected by frequent and very abundant precipitation, accompanied by extremely high air temperatures for that period of the year, which caused a sudden melting of the snow cover. These factors resulted in a sudden inflow of water and a rise in the water level, which led to the spilling of the watercourse from the base bed and flooding of the coastal area, and as a result of the withdrawal of water.

In conditions of heavy rainfall or melting snow, flows can increase significantly, so that the minor trough is not able to evacuate them, so the water spills out of it and floods the surrounding area. In the watercourse itself, processes of erosion of the bottom and banks and deposition of sediments take place, which has the effect of changing the morphology of the bed.

This section of Lim River valley is prone to frequent flooding due to insufficient capacity of the minor riverbed. In its current state, it is a meandering river flow and the terrain in the left and right shore zone has a variable configuration. Upstream of the Komaracka River, Lim River has a short curve in the gorge followed by the confluence of Djuricka River. The total width of the Lim River floodplain along the section varies from 60 to 180 m under existing conditions, and is particularly wide and threatens the workers' settlement on the left bank from km 0 + 400 to km 1 + 200 in relative position.

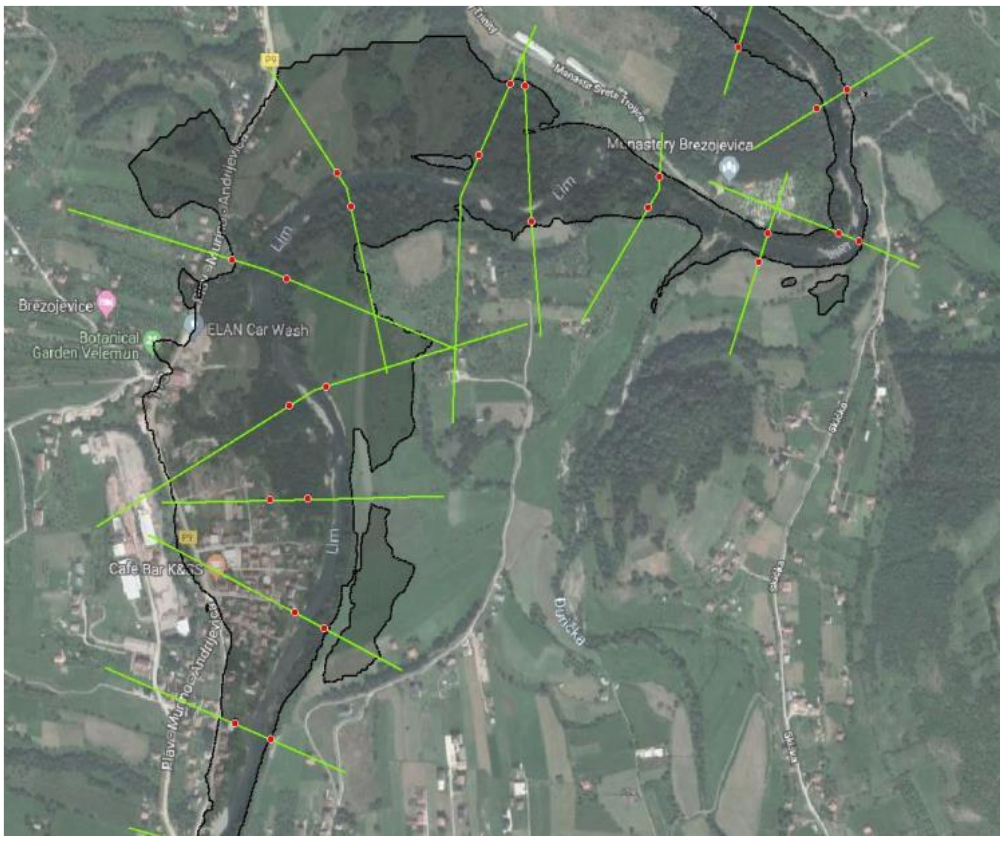
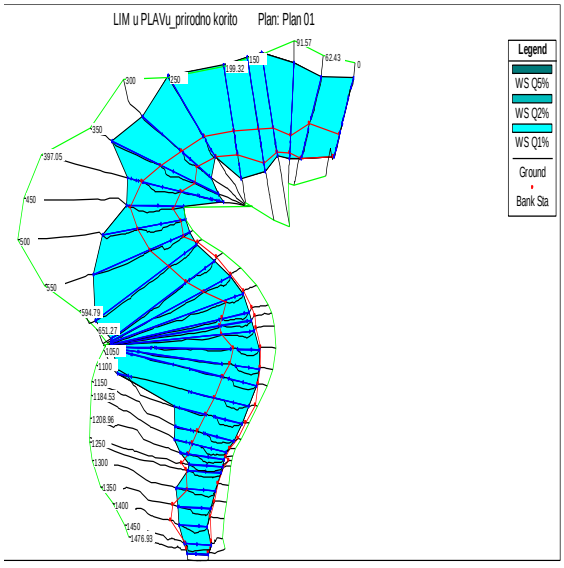


Figure x – Flood zone for the existing state – Q1%

Existing riverbed



Designed riverbed

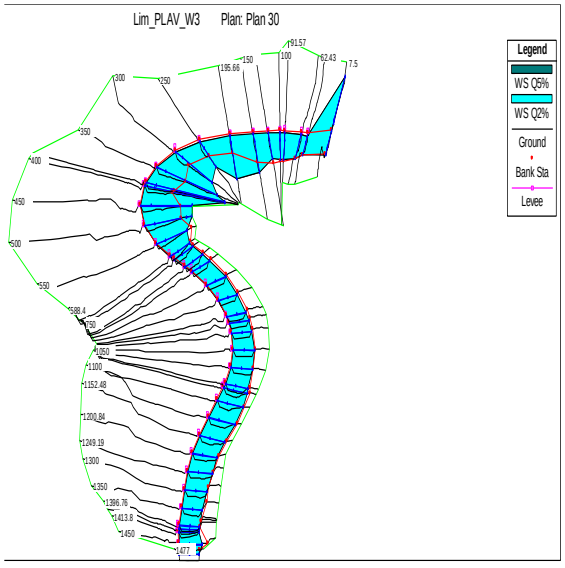


Figure 3 Situation with the existing (left) and regulated (right) riverbed

The upper part of this section is the only urbanized region of the municipality of Plav with direct contact with the Lim River. Several households on the left bank are prone to frequent flooding. According to local

representatives, an unfavorable angle of Lim's left tributary Bijeli Potok at the confluence causes the formation of a large sediment bar in the Lim River, which presents a substantial obstacle during the flood events.

2.3 Description of technical solution

The technical solution for the flood protection measures includes river training works in the length of 1.323 m on Lim River, and 37 m on Bijeli Potok. The total flow profile is dimensioned at Q1/50 with corresponding overhangs of the left defensive embankment obtained by hydraulic calculation .This works consists of formation of compound - two-sided cross section consisting of a minor riverbed, 30 m wide at the bottom and 2.0 m deep, and an inundation belt of 3.0 m wide, with an elevation of banks that ensures the protection from 20-year flood event ($Q_{5\%}$ = 273.3 m^3/s), given that the surrounding area falls under the category of settlements with less than 5000 inhabitants, and agricultural land. In addition, control check was performed for the 50-year flood event ($Q_{2\%}$ = 304.4 m^3/s) in order to prevent overflow.

The original solution proposed by the Preliminary Design envisaged river regulation in the form of a "one-sided" riverbed with a uniform cross-section on the entire section. Following the discussion with the representatives of the local community, that solution was modified, to avoid potential damages of the riverbed bottom and the right bank in its natural state. The design measures on the right bank, on the final curve, are defined only in the limited zone of curve 3, from para.0 + 588.40 to st.0 + 984 where it is endangered by erosion.

The riverbed dimensions are designed for the capacity to withhold 50-year floods. Design documentation gives a solution with 2 different typical profiles:

Type - 1 riverbed with <u>the embankment on the left riverbank</u>

A riverbed with the regulated left bank and an embankment with a crown width of 2.50 m is designed. The width of the designed minor river bed in the bottom is cc 30m, and the slope of the regulated riverbed is set to 1: 1.5. This type of riverbed is applied to the following sections:

- From chainage st.0+160.70 to st.0+588.40
- From chainage st.1+000.00 to st.1+410.00

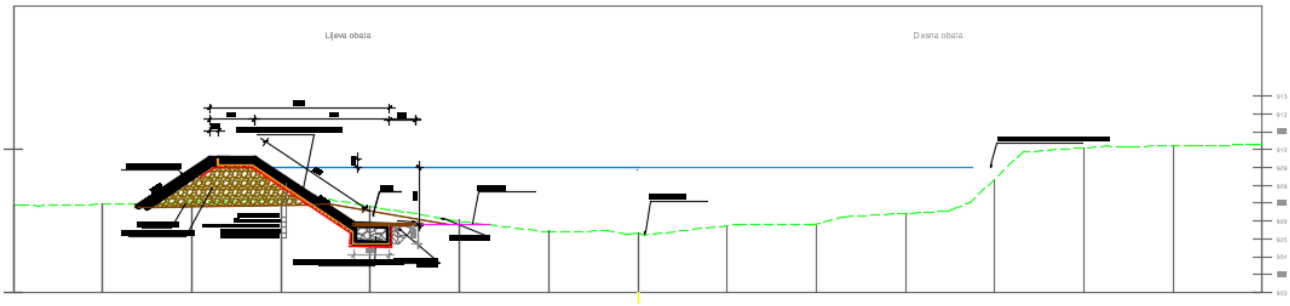


Figure 4 Normal cross-section Lim - type 1

The slopes of the embankment (with an inclination of 1:1.5) are protected with a 0.3m thick reno mattress. The lining is fastened and tied with steel wires. Woven geotextile is placed under the mattress, with a role to prevent the washing of a finer fraction of sand from the hillside. The foot of the bank protection is a longitudinal gabion, measuring 2x2x1 m. The gabion is completely buried under the level of the riverbed.

Type – 2 riverbed with the embankment on the left riverbank and stabilization of the curve on the right riverbank

The riverbed section envisaged for the implementation of type 2 stretches from chainage 0+588.40 to 1+000.40.

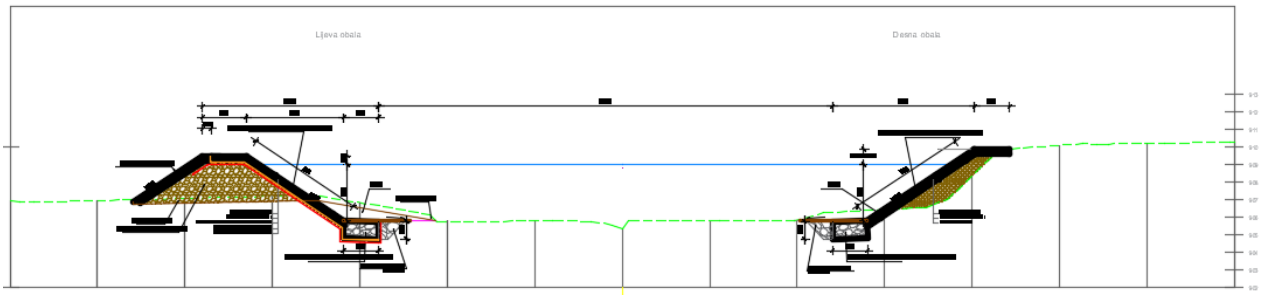


Figure 5 Normal cross-section Lim - type 2

In addition to the embankment on the left bank (which is the same as in Type 1), the endangered section of the right bank will be protected with a 0.3m thick reno mattress in a 1:1.5 slope. The lining is fastened and tied with steel wires. Woven geotextile is placed under the mattress. The foot of the bank protection is a longitudinal gabion, measuring 2x2x1 m. The gabion is completely buried under the level of the riverbed.

Confluence of Bijeli Potok

The left tributary, Bijeli Potok, has a torrential character and is formed after heavy rains. For the safe introduction of Bijeli Potok into the watercourse of the Lim River, the facility of the estuary at station 1 + 385.0 is planned.

The Design gives the solution for training works on it, in the zone of the confluence in the length of app 35m.

A trapezoidal channel is planned, with a bottom width of 1.5m, a slope of 1: 1.5, and a minimum depth of 2.5 m. Channel invert at the confluence is 1.2m above the river's bottom. At the upstream end, a cascade sill is planned to fit into the existing riverbed as well as to stabilize the bottom.

The lining of the slopes is a stable, 30 cm thick rigid lining of stacked stone in concrete, placed on a 15 cm filter layer - selected sand from the excavation.

To ensure the stability of the stream bed, two stabilization thresholds made of solid concrete are installed at stations 0 + 020.0 and 0 + 043.0.

3 Legislative framework and permitting requirements

3.1 Obtained permits

3.1.1 Decision on the need for the EIA

The Law on Environmental Impact Assessment (Official Gazette of Montenegro, No. 75/18) regulates the complete process of evaluation of the 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 governing the EIA in Montenegro. Laws stipulate the implementation on the central and local levels. The Law is accompanied by a set of bylaws.

Within the Montenegro regulation on EIA, projects are classified into two groups (lists)[2]: projects included in the List 1 are all subjects to compulsory EIA while for projects included ie 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 approving the EIA Study.

The 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 in List 2. The opinion on the need for EIA is sought from the Municipality of Plav, which is the responsible authority for this project in line with Article 5 of the Law on EIA. On 18 February 2022, **the Municipality Plav issued the Decision based on which EIA for this project is not required** (Decision no. 35-16). 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 the case of a project which includes e.g., the construction of flood protection facilities, as well as any other activity which may affect the 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

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

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 ceases to be valid after one year, unless a duly filed application for the issuance of a Water 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 a local self-government unit depending on the 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 10th of June, 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.

3.1.3 Waste Management Requirements

Waste management permit is not required for this project. The potential spoil disposal site are agreed in between local administration (municipality) and the selected construction company. The municipality is proposing the site for spoil disposal in line with the spatial planning documents and project location. Since the waste on this project it is not hazardous, but the construction waste, the municipality must have a defined location for the disposal of this type of waste, and the contractor can dispose excavation waste there. If this is not the case, the municipality should determine the location where it will take the waste. If this is not the case either, the contractor can sign a contract with a natural entity, ie. the owner of the land, to dispose of the material on his plot with the consent of the municipality.

Law on Waste Management[3] regulates construction waste management, in Article 54. “Management of communal and non-hazardous construction waste”, organized by the local self-government unit on its territory. Construction waste that does not contain hazardous substances and that cannot be processed is disposed of at a landfill for inert waste, which is defined by local spatial planning documentation. The producer of construction waste generated from a building, whose volume together with earth excavation exceeds 2,000 m^3, is obliged to draw up a construction waste management plan. Consent to the construction waste management plan, from paragraph 6 of this article, gives (i) Environmental Protection Agency, if the construction permit is issued by the competent administrative body, or (ii) the local government body, if the building permit is issued by the competent local government body.

3.2 Permits to be obtained prior to the start of works

3.2.1 Water Consent

Water Consent (WC), which is necessary before the 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 complies 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

[3] Law on waste management, ("Official Gazette of Montenegro", No. 064/11 dated 29.12.2011, 039/16 dated 29.06.2016)

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 wastewater, 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 affect the water regime. The WP is valid up to a maximum of 10 years.

3.2.2 Opening 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, a building permit is issued by a decision based on: 1) preliminary design, i.e. main design, certified by 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 investor 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 riverbed and special construction techniques shall be employed.

3.2.3 Expropriation procedure

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 will be conducted by the Municipality of Plav by 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 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 Action Plan (RAP) for Municipality Plav** is developed in May 2022. The RAP has been prepared by the applicable legislation in Montenegro, as well as the WB

requirements outlined in ESS5. It is based on the **Resettlement Framework** (developed in February 2020 and approved by the Ministry and WB) which outlines the general principles, procedures, and entitlement framework with regard to the potential impacts of land acquisition required for the project.

This RAP provides more precise details on Project Affected People (PAP), the eligibility criteria and the procedures to be followed by the Ministry and the Municipality of Plav, and the actions they will take to properly compensate affected people and communities.

The RAP is approved by the World Bank and publicly disclosed on the websites of the Ministry (https://www.gov.me/clanak/javne-konsultacije-u-plavu-povodom-predstavljanja-dokumenta-akcioni-plan-preseljenja-rap) and the Municipality (https://www.plav.me/finansiranje-regionalnog-programa-integrisanog-razvoja-koridora-save-i-drine-sdip/). The document serves as a set of guidelines that must be followed throughout stages of realization of the expropriation procedure.

The RAP was presented at public consultations organized by the PIU and the MAFWM, held on the 6th of September in Plav.

3.3 Relevant environmental and social standards

WB's Environmental and Social Framework which became effective in October 2018 sets out the Bank's commitment to sustainable development, through a Bank Policy and a set of Environmental and Social Standards (ESS) which set out the mandatory requirements that apply to the Borrower's projects.
WB has defined specific ESSs designed to avoid, minimize, reduce or mitigate the adverse E&S risks and impacts of the project.

The Environmental and Social Standards (ESS) relevant to the actual sub-project and their short description is given in the table below.

ESS		Relevance to the project
ESS1	Assessment and Management of E&S Risks and Impacts	This standard guides the preparation of E&S instruments including those that have been prepared for SDIP: (i) ESMF, (ii) SEP, (iii) RPF (iv) LMP, and appropriate risk assessment for individual activities implemented under the project.
ESS2	Labor and Working Conditions	This standard guides the creation of sound worker-management relationships. The primary labor risk is the risk of informal work. The risks of unpaid and underpaid work, work overload, poor terms, and conditions of engagement, lack of occupational health and safety measures, and denied access to social security, pension, or health insurance are associated with informal work. Labor Screening and Compliance Checklist, and Monitoring and Evaluation procedures have been developed to be included as mandatory in the tender documentation providing compliance of third parties i.e. different contractors to the ESS2 requirements.
ESS3	Resource Efficiency and Pollution Prevention and Management	This standard sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle. Considering that most of the activities involve construction works, the major risk is that Contractors will not be aware of best practices to avoid or minimize pollution from project activities or avoid or minimize adverse impacts on human health and the environment. The site-specific ESMMP will guide contractors to implement adequate pollution prevention and management measures.
ESS4	Community Health and Safety	This ESS sets out the requirements to avoid or minimize community exposure to project-related traffic and road safety risks, diseases, and hazardous materials and to have in place effective measures to address emergency events. The works anticipated in this project will be carried out

		mostly in remote or publicly restricted areas and will not employ use or generation of hazardous substances and waste. The main risk associated with the project is related to workers health and safety that is addressed by ESS2.
ESS5	Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	This ESS guides the procedures to avoid or implement involuntary resettlement and economic displacement with least possible impacts. The SDIP involves the possibility of land acquisition and economic displacement. To minimize the risk, an appropriate RPF has been developed at the project level, while a site-specific RAP will be developed where needed. The main risk is associated with appropriate implementation of the RPF.
ESS6	Biodiversity Conservation and Sustainable Management of Living Natural Resources	The project area is the whole country, which includes several nationally and internationally recognized natural and critical habitats, protected areas, wetlands and Ramsar sites as well as hundreds of locally designated nature sites. The activities will be assessed for relevant risks, and the mitigation hierarchy will be applied. Development of site-specific ESMMPs will be considered as part of screening and approval procedure. Environmental screening will ensure that no activities with potential negative impacts are eligible for funding in natural or critical habitats. In case of activities to be funded by the project and to be implemented in modified habitats, the project-level will present requirements to avoid or minimize the respective impacts on biodiversity and implement mitigation measures as appropriate.
ESS8	Cultural Heritage	Information that are available in the project appraisal phase indicate that it is very unlikely that there will be any interaction of construction works with known cultural heritage sites. In the event of chance finds, the Borrower will deal with it taking into account national legal requirements that are fully consistent with UNESCO and good international practice.
ESS10	Stakeholder Engagement and Information Disclosure	This ESS guides the inclusion of relevant stakeholders in the project lifecycle. In line with the requirements of this ESS, a Stakeholder Engagement Plan including a Grievance Mechanism has been developed for this project. The main risk is associated with appropriate implementation of SEP.

4 Environmental and social baseline

4.1 Description of the existing conditions of the micro-location

The section of the Lim River, for which the regulation is being designed, extends from the point at the downstream end, which is about 650 m upstream from the mouth of the Djuricka River, to the profile that is about 43 m downstream from the Plav bridge. The length of the projected section is about 1.315m.

On the left bank of the regulated riverbed, the Bijeli stream, flows into the Lim River about 90 m downstream from the Plav bridge. For the safe introduction of the Bijeli Potok into the watercourse of the Lim River, at the mouth, regulation works are planned, a length of approx. 35 m.

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)*.

Until 2019 (from 2005), water monitoring was carried out in accordance with the Regulation on Classification and Categorization of Surface and Groundwater, which determined the water class (A, A1, A2, A3 and out of class) by analyzing the physical-chemical, microbiological and sapro-biological characteristics of water.

Until 2018, surface water monitoring was carried out at one place in the town of Plav, and the water of Lim upstream of Berane is classified in A1 class, and downstream, in A2 class. The upper part of the Lim River, which includes the area of the municipality of Plav, belongs to the very protected class A1, so the deviation from the maximum allowed concentration is greater and many parameters pass to A2.

In addition to this monitoring, the Water Quality Index indicator was developed in the Agency for Nature and Environmental Protection, which is intended for reporting to the public. The indicator is based on the Water Quality Index method, according to which ten parameters of physico-chemical and microbiological quality (oxygen saturation, BOD5, ammonium ion, pH value, total nitrogen oxides, orthophosphates, suspended matter, temperature, electrical conductivity and coliform bacteria) are aggregated into composite indicator of surface water quality.

Adopted values for the descriptive quality indicator WQI = 0-38 very poor, WQI = 39-71 poor, WQI = 72-83 good, WQI = 84-89 very good and WQI = 90-100 excellent. In accordance with the aforementioned, the waters of the Lim River are rated as “Excellent” (WQI=94).

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)*.

Namely, with the project "Strengthening capacity in order to implement the Water Framework Directive", which is implemented by the Ministry of Agriculture, Forestry and Water Management, the delineation of surface and underground waters was carried out and the zero state of water quality was carried out, and in

particular the monitoring of underground and surface waters was improved, in accordance with requirements of the EU legislation in the field of water. Defining the ecological state of surface waters is determined on the basis of biological, hydro-morphological, chemical and physical-chemical elements.

Surface water monitoring is carried out according to priorities, and all localities will be covered in a period of 3 years. During 2019, an initial focus of testing was conducted, primarily in zones or parts of the river basin that have primary priority. During 2020, the second phase of testing was carried out in zones or parts of the river basin that have a secondary priority.

The Lim River, as tributary of Drina River, belongs to the Black Sea basin. The latest water quality monitoring results are available for 2020[4]. The monitoring on Lim was performed at three measuring points, upstream from Vinicka (the 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.

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

The closest point of observation for this Project is upstream from Vinicka (Berane), however the results are not relevant for Plav municipality which stays far upstream from Berane.

The information on water quality of the Bijeli Potok stream are also not available as the monitoring on this creek is not performed.

4.3 Biodiversity and protected areas

The Lim River is the habitat to 24 different fish species from cold water riverine salmonids to lake dominant species. This habitat is natural spawning grounds for: grayling *(lat.Thymalus thymalus)*, huchen *(lat.Hucho hucho)*, chub *(lat.Leuciscus cephalus),* nase *(lat.Chondrostoma nasus),* pigo *(lat.Rutilus pigus),* lampray *(lat.Petromyzontidea), etc.*

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

Fly fishing is popular throughout Lim. In Plav, fishing activities are mainly organized on Plav Lake which is located upstream from Brezojevice. Any fish caught must be returned to the water and the permitted fishing tools and equipment are *fly fishing*.

The degree of protection in the area has been adapted precisely because the listed fish species that are the most endangered and/or most important for the ecosystem and sport recreational fishing live and reproduce in that part of Lima. Those are: huchen *(lat.Hucho hucho),* burbot *(lat.Lota lota)*, northern pike *(lat. Esox Lucius)*, lampray *(lat.Petromyzintidae)*, noble crayfish *(lat. Astacus astacus),* european otter *(lat.*Lutra lutra).

The subject area of the Lim River regulation in Brezojevice 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.

As already explained, during the low water season, intensive erosion in the upper section makes the migratory movement of biota difficult.

4.4 Cultural heritage

There are no cultural heritage within the project area.

4.5 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). The Plav Municipality belongs to Nort Air Quality Zone where the new monitoring station is set up in Bijelo Polje. There are no measuring stations in the vicinity of Project area. According to the Development Strategy of Municipality Plav 2013-2017, the air quality in Plav is considered to be unpolluted.

4.6 Land acquisition

A total of 11 land plots, from two cadastral municipalities (CM Plav and CM Brezojevice 1) will be affected by the Project, all of which are privately owned. Five land plots are located in CM Brezojevice 1, while 6 land plots are located in CM Plav. The survey covered a total of 11 PAPs, i.e. owners of all the 11 affected land plots (as defined in the expropriation study). Census of the affected land plots showed that none of the owners of the subject 11 land plots live on these land plots. Two land plots are in co-ownership, while all land plots are going to be partially affected by land acquisition – total surface of 54.5% land plots are going to be affected less than 10%.

Two houses were identified on the affected land plots, whereby owners of the house do not live in Montenegro and they did not even state that there are any objects on the affected land since these residential objects are located at a significant distance from the part of the land which is going to be acquired for the purpose of project implementation. The owners who do not live in Montenegro were interviewed via phone and provided all the relevant information. The site visit and observation of the affected land plots showed that there are no orchards or any crops in the project area, thus no agricultural land is going to be

affected due to land acquisition. An overview of the location of the project area and the land plots which are going to be subject to land acquisition is shown below (Figure 8).

No state-owned land plots are affected by the Project. The Project also does not include state-owned land plots that are ceded to natural or legal persons.

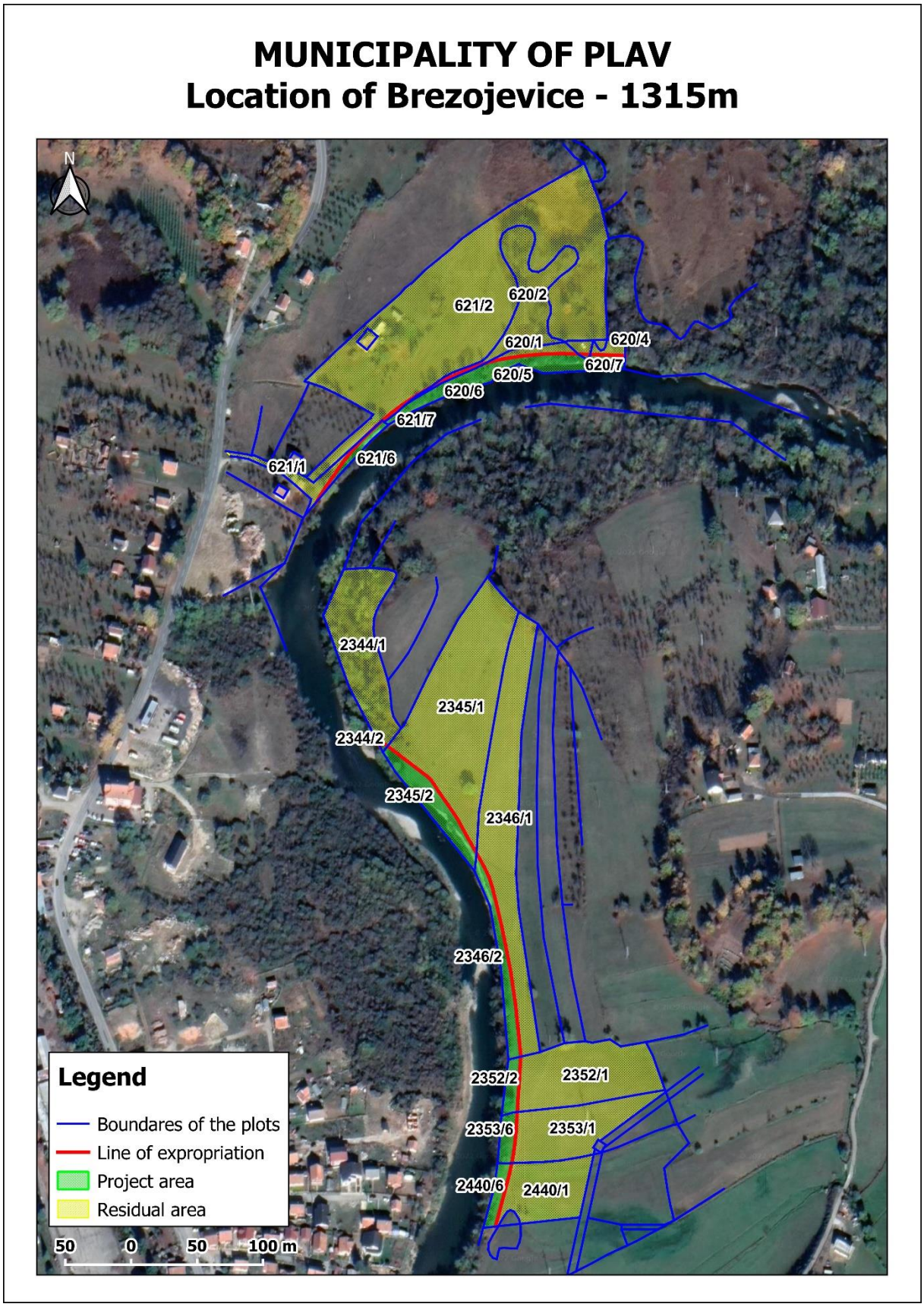


Figure 6 Presentation of the Project area and the affected land

5 Environmental and Social Impact Assessment

5.1 General overview of potential impacts

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

Community safety hazards from construction activities. The major risks tied to Community health and Safety relate to injuries on or near construction sites due to tools and materials falling outside the site boundary, falling into trenches and being struck by moving vehicles. Influx of workers or people providing support services into an area is not expected. The risk for Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH), or communicable diseases is rated as low for all activities under the Project. 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 implementation of Resettlement Action Plan 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. Still the chance find procedure will be recommended in the E&S management plan.

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 activities

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 acquisition - the identified social impacts are related to possible acquisition of land for the locations of temporary and permanent works.
Construction phase	Soil compaction and erosion Dust emission Noise Soil and water pollution

Phase	Type of impact
	Impact on aquatic ecosystem Degradation of riparian vegetation caused by construction work Community safety risks from unfenced and unlabeled construction site Health and safety risk for workers on the construction site A large influx of workers from outside communities is not expected
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 labor and local material suppliers.

It is expected that it will be necessary to temporarily occupy private and state- owned land plots for constructing access roads and placement of staff, machines and material. In the event of state-owned land, the right to use such plots will be regulated through an agreement with the Municipality or the Government of Montenegro. In the event of privately owned land, separate contracts with owners of such land will be concluded (lease contracts or other form of transfer of ownership or use rights in accordance with the Law), and adequate compensation will be paid in line with the Entitlement Matrix provided in the RAP.

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.	ESS3	minor

Impact	Assessment of impact	ESS triggered	Impact significance
	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.		
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. Removal of vegetation will be carried out inside the river and in the maximum belt of 25 m from the bank. Impacts can be offset or mitigated by limiting vegetation removal to the construction area and by replanting after construction works are completed. There will be no negative impacts on protected areas due to nature of works.	ESS6	moderate
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 toxic chemicals. Impact can be mitigated by following GEMM procedures. Materials supply will be organized from the licensed material suppliers that possess valid environmental permits. If the constructor will open any borrow pits this must be done in agreement with the concerned municipality with all appropriate consents and licenses obtained. Complete restauration of these sites will be required.	ESS3	moderate
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	ESS3	moderate

Impact	Assessment of impact	ESS triggered	Impact significance
	types of construction waste needs to be managed properly in line with the mitigation measures prescribed in Chapter 6.		
Cultural and religious issues	There is no cultural heritage in the project area where the construction works will take place. However there is always a possibility of chance find during the excavation activities in the river bed. The impact can be mitigated implementing measures prescribed in Chapter 6.	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. 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 injuries on or near construction sites due to tools and materials falling outside the site boundary, falling into trenches and being struck by moving vehicles. Influx of workers or people providing support services into an area is not expected. The risk for Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH), or communicable diseases is rated as low for all activities under the Project.	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. Child Labor is not expected in association with 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. This aspect is addressed in the RAP.	ESS3, ESS4	moderate

6 Environmental and social mitigation measures

6.1 Overview of mitigation measures during the pre-construction phase

6.1.1 Land Acquisition

Impact – A total of 11 plots will be affected by land acquisition. The land acquisition process has not started yet. Expropriation Study[5] required under local law has been prepared, but no other activities (such as valuation of properties) have been undertaken to date. Expropriation Study was developed by an authorized geodetic organization on the basis of the Detailed Design[6]. The expropriation study was prepared and verified on 27 November 2020. The Municipal Assembly of Plav adopted the Decision on determining public interest for the complete expropriation of property for the construction of the embankment on the Lim River on 31st March 2022.

Following verification of the Expropriation Study by the Administration for Cadastre and State Property (the Administration)[7], and publication of the Decision on determining public interest, Municipality of Plav is going to initiate the property valuation procedure at the local cadastral office. The Central Evaluation Committee (the Committee)[8] will determine the amount needed for land acquisition, which will be then deposited by the Municipality to the special account of the Ministry of Finance and Social Welfare. Additionally, even though the financial resources for expropriation have not yet been deposited to the special account of the Ministry of Finance and Social Welfare, Municipality Plav has already allocated the amount of around 40.000EUR in their Investment Plan 1/18 for the purpose of expropriation which is going to be carried out for this project.

Mitigation measure – implement the RAP.

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

[5] Prepared by "Geo Friends" Ltd. Podgorica, November 2020
[6] Designer: "CESTRA" d.o.o. Beograd, June 2020.
[7] As of January 5, 2021, the Real Estate Administration and the Administration for Property have merged into the Administration for Cadastre and State Property, on the basis of the Decree on the Organisation and Operation of Public Administration.
[8] The Committee is appointed ex officio by Administration and has 5 members, of which at least three members must be court experts of appropriate professions. The valuation methodology is defined by the Rulebook on Methodology for Assessing Property Value (Official Gazette of Montenegro, No. 64/18)

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 and soil 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 / Labor Risks

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 odor;
- 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 - The Contractor shall implement the LMP in the area of OHS, 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[9]. The work of contractor will be supervised by OHS supervision engineer.

The Contractor shall establish a worker specific grievance mechanism for project workers in line with the LMP. 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

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

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.

6.2.9 Community Safety Risks

Impacts - the public commonly suffer injuries on or near construction sites due to tools and materials falling outside the site boundary, falling into trenches and being struck by moving vehicles. These impacts mainly stem from poorly organized construction site as well as increased traffic on haulage routes from and to potential borrow and deposit areas to be used by the Contractors during construction works. It is responsibility of the Contractor to reduce these risks and promote good health and safety on and around the site.

Mitigation Measures – The Contractor shall prepare the Construction Site Organization Plan and include reference to safe construction practices and safety procedures to ensure that the site activities are properly organized and risk reduces to minimum. One of the main things to be addressed in the CSOP are the appropriate definition of the site physical boundaries and managing the site access. The site boundaries must be defined clearly and physically with suitable fencing. A fence can help to prevent people from entering the site and prevent particular objects from escaping. Traffic Management Plan shall be prepared to determine the appropriate haulage routes that will create minimum risk and nuisance to local community.

6.2.10 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.

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.

6.2.11 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.

7 Environmental and social mitigation and monitoring plan

The Annex 3 contains the table with detailed mitigation and monitoring activities and responsibilities over the implementation during execution of this sub-project.

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.

8 Implementation arrangements

8.1 Roles and responsibilities

The main responsible party involved in the implementation and monitoring of the ESMMP is the MAFWM through 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 works contract later on. Within its usual monitoring activities, the PIU shall perform monitoring (including on-site monitoring, regular/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 one expert for the environmental and one for the social aspects of the entire Project. The environmental and social experts (ESEs) shall be the responsible person for ensuring that the provisions of the ESMMP are complied with during the life of the contract. The ESEs will be responsible for issuing instructions to the Contractor and where environmental and social considerations call for action to be taken. The ESEs shall submit regular written reports to MAFWM, but not less frequently than once a month. The ESEs will also support PIU reporting to the WB on project implementation.

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 implementation results.

The Contractor will nominate the Environmental and Social Advisor (ESA) and OHS Advisor for the Project. The two experts will be site-based and shall be the responsible person for implementing the environmental, social and OHS provisions of the construction contract based on their expertise. ESA should have relevant education background in environment protection and social issues. OHS Advisor should have relevant education background in health and safety. When Contractor presents the C-ESMMP for approval by the Supervision Engineer it should include also the CV of ESA and OHS Advisor. As such, the Supervision Engineer can accept or reject the proposed experts.

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., 15 months.

8.3 Environmental, Social and Health & Safety Training and Awareness

A training needs analysis shall be conducted by the ESEs 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 riverbed).

After the training needs assessment the ESE will prepare and present the training plan, main participants, who will deliver special modules, and other details related to training implementation.

In addition, 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.

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 and social impacts, throughout the life cycle of the Project. The Contractor shall comply with the emergency preparedness and incident and accident-reporting requirements.

8.5 Grievance Redress Mechanism

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 Labor'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 Project. 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 and Reporting

A formal Project monitoring and regular reporting needs to be conducted on a regular basis. The regular (weekly, monthly) reports shall be produced by the Supervising Engineer based on the day-to-day activity on site and delivered to the PIU's responsible person (ESE). The PIU has the obligation to submit the Progress Report further to the Bank's Project Team.

The purpose of the monitoring and reporting 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 monitoring and reporting is in keeping with the principle of continual improvement.

9 Cost of Implementing the ESMMP

This ESMMP refers to the construction of flood protection structure on the Lim River. 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 Annex 3.

10 Public consultations and public disclosure of the ESMMP

The WB standard on Stakeholder Engagement and Information Disclosure 10 ("ESS10") recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice.

The public consultations, prior to which the draft version of the updated ESMMP was publicly disclosed, were organized by the Project Implementation Unit of the Ministry of Agriculture, Forestry and Water Management on September 6th 2022, in the meeting hall of the Municipality of Plav.

The call for public consultations was announced on the website of the Municipality Plav on August 30th (https://www.plav.me/javne-konsultacije-u-plavu-povodom-predstavljanja-dokumenata-akcioni-plan-raseljavanja-rap-i-plan-upravljanja-zivotnom-sredinom-i-socijalnim-pitanjima-esmmp/).

The minutes from the public consultations with an accompanying list of participants and photographs is included in Annex 4.

Annex 1. Scoping Decision

Crna Gora
MINISTARSTVO POLJOPRIVREDE, ŠUMARSTVA I VODOPRIVREDE
PODGORICA

Primljeno: 25-02-2022				
Org. jed.	Jedinstveni klas. znak	Redni broj	Prilog	Vrijednost
07	- 319	21 -	361	/16

CRNA GORA
OPŠTINA PLAV
-Sekretarijat za uređenje prostora i imovinu
Br. 35-16
Plav 18.02.2022. godine.

Sekretarijatu za uređenje prostora i imovinu Opštine Plav,obratilo se Ministarstvo poljoprivrede,šumarstva i vodoprivrede, Direktorat za vodoprivredu, sa zahtjevom br. 35-16 od 16.02.2022 godine, za izdavanje ekološke saglasnosti za izvođenje radova na rijeci Lim,za projekat „Glavni projekat regulacije rijeke Lim na lokaciji Brezojevice-opština Plav" u opštini Plav, u dužini od 1315m i površine 87812m2.

Na osnovu člana 24, Zakona o procjeni uticaja na životnu sredinu („Sl.list RCG", br. 12/96,), te člana 37 stav 1 alineja 2 Zakona o zaštiti životne sredine („Sl.list RCG", br. 12/96 i 55/00) te člana 2,3 i 4 Pravilnika o sadržaju,obliku i načinu vođenja javne knjige o postupcima o odlukama o procjeni uticaja na životnu sredinu („Sl.list RCG", br. 14/07), izdaje:

R J E Š E N J E

Za izdavanje ekološke saglasnosti za izvođenje radova na rijeci Lim,za projekat „Glavni projekat regulacije rijeke Lim na lokaciji Brezojevice-opština Plav" u opštini Plav, u dužini od 1315m i površine 87812m2.

O b r a z l o ž e n j e

Podnosilac zahtjeva Ministarstvo poljoprivrede,šumarstva i vodoprivrede, Direktorat za vodoprivredu, sa zahtjevom br. 35-16 od 16.02.2022 godine, za izdavanje ekološke saglasnosti za izvođenje radova na rijeci Lim,za projekat „Glavni projekat regulacije rijeke Lim na lokaciji Brezojevice-opština Plav" u opštini Plav, u dužini od 1315m i površine 87812m2.

Nakon prijema zahtjeva ovaj organ je konstatovao da nije potrebna izrada Elaborata o procjeni uticaja na životnu sredinu za izvođenje planiranih radova.

Na osnovu prithodnog riješeno je kao u dispozitivu.

PRAVNA POUKA:Protiv ovog Rješenja može se izjaviti žalba Glavnom administratoru opštine Plav, u roku od 15 dana od dana prijema rješenja.

Žalba se podnosi u dva primjerka sa dokazom o uplati ,5,00€ opštinske administrativne takse, na žiro račun br.510-102513-88 opštine Plav,shodno odluci o lokalnim administrativnim taksama („Sl.list RCG"-opštinski propisi ,br.10/04 i „Sl.list CG""-Opštinski propisi, br. 22/08,77/08,03/09,40/10,73/10,20/11,26/11,56/13 i 45/14) i Zakona o administrativnim taksama („S.list RCG"br. 55/03,46/04,81/05 i 02/06).

OBRADIO:
Samostalni Savjetnik
Dzevat Šarkinović

SEKRETAR
Hasim Radončić

DN-o: 1x Nosiocu projekta
1x a /a
1x predmetu
1 x a/a

MONTENEGRO
MUNICIPALITY OF PLAV
Secretariat for spatial planning, property
and environmental protection
No: 35-16
Palav, 18.02.2022

Secretariat for Spatial Planning, Property and Environmental Protection of Plav Municipality, addressed Municipality of Agriculture, Forestry and Water Management, Water directorate, with the request no. 35-16 from 16.02.2022, for the issuance of an environmental permit for the performance of works on the Lim River, for the project „The main project Lim regulation on the location Brezojevice-municipality of Plav“ in the municipality of Plav, with the length of 1.315m and an area of 8.7812m$^{2.}$

Based on Article 24, of the Law on Environmental Impact Assessment (“Official Gazette of the Republic of Montenegro” No. 12/96) and Article 37, paragraph 1, indent 2 of the Law on Environmental Impact Assessment ("Official Gazette of the Republic of Montenegro ", No. 12/96 and 55/00), then Articles 2,3,4 rulebook on the content, form, and manner of keeping the public book on procedures on decisions on environmental impact assessment ("Official Gazette of the Republic of Montenegro ", No. 14/07), brings:

D E C I S I O N

For the issuance of an environmental permit for the performance of works on the Lim River, for project “The main project Lim regulation on the location Brezojevice- municipality of Plav“ in the municipality of Plav, with a length of 1.315m and an area of 8.7812m^2.

E X P L A N A T I O N

Applicant Ministry of Agriculture, Forestry and Water Management, Directorate of Water Management, with the request no. 35-16 since 16.02.2022, for the issuance of environmental consent for execution of works on the Lim River, for the project “The main project of the regulation of the Lim River on-site Brezojevice-municipality of Plav" in the municipality of Plav, with a length of 1.315m and an area of 8.7812m^2.

After receiving the request, this body stated that it is not necessary to prepare an Elaboration on Environmental Impact Assessment for the execution of the planned works.

On the basis of the above, it was resolved as in the enacting clause.

Legal instruction: An appeal against this Decision can be filed with the Chief administrator within 15 days from the day of receipt of this decision.

The appeal is submitted in two copies with proof of payment of the €5.00 municipal administrative fee, to giro account no. 510-102513-88 of the municipality of Plav, in accordance with the decision on local administrative fees ("Official Gazette of the Republic of Montenegro "- municipal regulations no. 10/04 and “Official Gazette of the Republic of Montenegro” - Municipal Regulations, No. 22/08,77/08,03/09,40/10,73/10,20/11,26/11,56/13 and 45/14) and the Law on administrative taxes (“Official Gazette of the Republic of Montenegro” No. 55/03, 46/04, 81/05 and 02/06).

Proceeded by:
Independent advisor
Dzevat Sarkimevic

Secretary
Hasim Radoncic

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: 060-327/22-02011-80

10.06.2022.

Uprava za vode, na osnovu čl. 114 i 115 stav 1 tačka 11 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 Plav – Direkcije javnih radova, br. 359-61 od 10.03.2022. godine, a u ime nosioca projekta regulacije rijeke Grnčara i Lima - Ministarstva poljoprivrede i ruralnog razvoja, radi utvrđivanja vodnih uslova za izradu tehničke dokumentacije za regulaciju rijeke Lim, koja se proteže od tačke na nizvodnom kraju od Limskog mosta do ušća Komaračke rijeke u Lim, ukupne dužine 1315m, donosi

R J E Š E NJ E

o utvrđivanju vodnih uslova

UTVRĐUJU SE OPŠTINI PLAV – Direkciji javnih radova, u postupku izrade Glavnog projekta regulacije rijeke Lim, koja se proteže od tačke na nizvodnom kraju koja je nizvodno od Plavskog mosta, u dužini od 1340 m, na kat. parcelama br. 1263, 1262 i 1261 KO Brezojevice i kat. parceli br. 399 KO Skić, Opština Plav, **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 profilacije, 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 zadovolje sljedeće uslove:
   - utvrditi osnovne mjere odbrane od velikih voda rijeke kojim će se definisati način zaštite obala, priobalnog zemljišta i objekata na identifikovanom potezu;
   - spriječiti meandriranje korita rijeke 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 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, imajući u vidu aspekt zaštite velikog broja izvora u neposrednom okruženju, kao i nesmetanog protoka na pritokama i
- obezbijediti tehničko rješenje regulacije rijeke, 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 Plav – Direkcija javnih radova, zahtjevom br. 359-61 od 10.03.2022. godine, a u ime nosioca projekta regulacije rijeke Grnčara i Lima - Ministarstva poljoprivrede i ruralnog razvoja, radi utvrđivanja vodnih uslova za izradu tehničke dokumentacije za regulaciju rijeke Lim, koja se proteže od tačke na nizvodnom kraju od Limskog mosta do uliva Komaračke rijeke u Lim, ukupne dužine 1315m.

Uz predmetni zahtjev dostavljeni su Urbanističko - tehnički uslovi za izradu tehničke dokumentacije za pilot projekat "Priprema idejnog rješenja za zaštitu od poplava, regulaciju i navodnjavanje sliva rijeke Lim (rijeka Grnčar) s ublažavanjem uticaja klimatskih promjena i održivog korišćenja prirodnih resursa", u zahvatu PUP-a opštine Plav do 2020. godine, a shodno priloženoj situaciji koja čini sastavni dio ovih uslova. Dionica rijeke Lim za koju se projektuje regulacija, proteže se od tačke na nizvodnom kraju koja je nizvodno od Plavskog mosta, ukupne dužine 1340m. UTU za izradu tehničke dokumentacije izdati su od strane Opštine Plav – Sekretarijat za uređenje prostora i imovinu br. 35-149 od 02.07.2019. godine.

Uprava za vode, rješavajući po predmetnom zahtjevu i uvida u spise predmeta, utvrdila 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 stav 1 tačka 11 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

DIREKTORICA

Dostavljeno:

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

Obradila: Nataša Rakočević, Samostalna savjetnica I

a

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

No. 060-327/22-02011-80 10.06.2022.

Water Administration, based on Art. 114 and 115 paragraph 1 item 11 of the Law on Water ("Official Gazette of the Republic of Montenegro", No. 27/07, "Official Gazette of Montenegro", No. 73/10, 32/11, 47/11, 48/15, 52 /16, 55/16, 2/17, 80/17 84/18) and Art. 18 of the Law on Administrative Procedure ("Si list of Montenegro", no. 56/14, 20/15, 40/16 and 37/17), resolving at the request of the Municipality of Plav, Directorate of public works, no. 359-61 from 10.03.2022, and on behalf of the applicant - the Ministry of Agriculture and Rural Development, holder of the project for the regulation of the Grncar and Lim, in order to determine the water conditions for the preparation of technical documentation for the Regulation of the Lim River, which extends from the point at the downstream end of the Lim bridge to the mouth of the Komaracka River in Lim, with a total length of 1.315m, brings

DECISION
on determining water conditions

The following water conditions are determined for the Directorate of Public Works of the Municipality of Plav, in the process of developing the Main Project for Regulation of the Lim River, which extends from the point at the downstream end of the Lim bridge, with a total length of 1340m, on the cadastral plots no. 1263, 1262 and 1261 CM Brezojevice and cadastral plot 399 CM Skić, Municipality of Plav:

1. The main project must be done in accordance with the valid technical and legal norms for this type of work.

2. Technical documentation should contain:
- general data on planned regulatory works (location, position, length, type of the characteristic elevations of the elements of the natural planned regulated bed, characteristic flows, other objects on the regulated section of the river);
- an overview of the situation of the location in a suitable scale;
- basis for designing with a representation of the existing state in a suitable scale(geodetic, hydrological, hydro-geological);
- technical conditions for the performance of works;
- bill of quantities of works.

3. Technical characteristics of the designed solution for the regulation of the Lim riverbed, must be such that they satisfy the following conditions:
- determine the basic measures of defence against high waters of the Lim River, which will define the method of protection of the banks, coastal land and buildings on the identified section;
- prevent the meandering of the riverbed on the section in question;
- define the conditions and the possibility of using the available material for the purpose of forming bank stabilizations and embankments for protection against flood waves;

- define the necessary periodical measures for the maintenance of the river basin, which would maintained the flow power of the bed;
- apply measures to protect water and protect against the harmful effects of water and preserve natural regime of underground and surface waters, bearing in mind the aspect of protection of a large number springs in the immediate environment, as well as unhindered flow on tributaries
- to provide a technical solution for the regulation of the river, in scope that will ensure the hydraulic flow and stability of the riverbed.

4. The term of validity of this decision is one year from the date of its issuance. The investor is obliged to submit a proper application for the issuance of a water permit within the specified period, in accordance with art. 118 and 119 of the Water Law. The Main Project and the Technical Control Report (revision) of the Main Project should be attached to the request.

Explanation

The Municipality of Plav - Directorate of Public Works, addressed the Water Administration, with request no. 359-61 dated 10.03.2022, on behalf of the applicant Ministry of Agriculture and Rural Development, for the purpose of establishing water conditions for the preparation of technical documentation for the Regulation of the Lim River , which extends from the point at the downstream end of the Lim bridge to the mouth of the Komaracka River in Lim, with a total length of 1.315m.

The following documentation was submitted with the request in question-the urban planning and technical conditions for the preparation of technical documentation for the pilot project "Preparation of the conceptual design for flood protection, regulation and irrigation of the Lim river basin (Grncar River) with mitigating the impact of climatic changes and sustainable use of natural resources, in the scope of PUP municipality of Play until 2020, and in accordance with the attached situation, which is an integral part of these conditions.

The section of the Lim River for which the regulation is planned, extends from the point at the downstream end, which is downstream of the Plav bridge, with a total length of 1340m. UTC for the preparation of technical documentation are issued by the Municipality of Plav-Secretariat for Spatial Planning and Property No. 35-149 dated July 2, 2019.

When deciding on the subject request for inspection of the case files, it was determined that due to the complexity of the decision, it is necessary to prescribe water conditions for the preparation of project documentation at the level of the Main Project in accordance with Art. 114 115 paragraph 1 point 11 of the Law on Water.

Based on the above, it was decided as in the enacting clause of this decision.

For the adoption of this decision, the applicant is exempt from paying an administrative fee in accordance with the Law on Spatial Planning and Building Structures.

Instruction on legal protection: Against this decision, an appeal can be filed with the Ministry of Agriculture, Forestry and Water Management, within 15 days from the date of receipt of the decision. The appeal can be submitted through the Water Administration, directly or by mail.

Delivered:
To the applicant, Water inspector, Administrative service of the WA

THE DIRECTOR: Vesna Bajović

Annex 3. Environmental and Social Mitigation and Monitoring Plan (ESMMP)

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 RAP	› Yet to be calculated	› MAFWM/PIU
Pre-construction (Planning/Designing)	Preparation of documentation/design not fully compliant with environmental, social, construction related legislation and standards Tender documents prepared without access to or use of this ESMMP and other framework documents produced in line with the WB E&S requirements.	› The technical design and detailed design should consider all necessary measures/solutions for environment protection as mentioned in the approved ESMMP for the project. › 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. The Bill of Quantities (BoQ) as part of the Bidding Documents should include a separate item(s) regarding implementation of the environmental & social mitigation measures during the contract execution. › 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, as well as requirement for the contractor to prepare a Code of Conduct for the workers. › Obtain a construction permit › Obtain water consent › Inform the local population about the construction works	› Included in the tendering procedure	› MAFWM/PIU
		›	›	›

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
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 riverbed, as well as foreseen identification and fencing of site physical boundaries. › 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) › 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 (to meet the requirements of the SEP) › Contractor to install at the site where works will be executed the project billboard with all main information related to the respective contract: beneficiary, contractor/subcontractor, construction permit #, duration of works, contacts (from GRM) › Provide on-site medical services and supplies for any emergency, through institutional and administrative arrangements with the local health unit	› 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
		› 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 › 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	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction	Limited public access to and through the construction area			
Construction site				

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
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
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.	› Included in the bill of quantities	› Construction contractor to implement

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
		› Provide absorbing material in case of fuel spills. Used oiled materials and agents should be managed in line with the Construction Waste Management Plan. ›		› 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 Vegetation/biodiversity potential damage Destruction of flora and fauna habitats by the movement of machinery, uncontrolled waste disposal and accidental leakage of hazardous waste (oil, etc.) from vehicles; Disturbances of animals; Cleaning and removal of vegetation (trees, shrubs, etc.) for construction works	› 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

Phase	Possible Impact	Mitigation measures	Cost of mitigation (if substantial)	Institutional responsibility
Construction	Possibility of encountering an archaeological site – chance finds	In case of any chance finds 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; › 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.	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to 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 riverbed, as well we use of protective equipment appropriate to the works conducted. › Provide OHS training and consultations 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 › The OHS Supervision Engineer to carry daily oversight of construction works implementation	› Included in the 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
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
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.	› 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
		› 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.		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. › 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.	› Included in the bill of quantities	› Construction contractor to implement › Engineering Supervision to control on behalf of MAFWM
Construction completion	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 › Revegetation of the banks will be performed with autochthone flora species. If needed, replenishing the fish population will be carried out in cooperation with fisherman association in the area.	› 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
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

Table 4 Monitoring plan

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
ENVIRONMENTAL ASPECTS							
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	Baseline surface water quality: total suspended solids and mineral oils	River Lim, downstream from the location of the works	Certified Laboratory testing of nearby water stream	During setting up the construction camp, prior to start of construction works	Effective cost will be included in the works contract	Construction contractor Supervisor Engineer	
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	Effective cost will be included in the works contract	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	Effective cost will be included in the works contract	Construction contractor Supervisor Engineer	
Construction phase	Construction waste generation and management	Working site	Visual inspection, disposal records in line with	Monthly during the execution of	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
			Construction Waste Management Plan	the works, as appropriate. Amount and disposal records internal reports will be made daily and monthly			
Construction phase	Biodiversity	River Lim Around the working site	Visual inspection, talks with the local fisherman association	Monthly. In case of a reported problem, daily inspections are needed	Included in bid price	Construction contractor Supervision engineer	
Post-construction	Stability and functionality of flood protection structures	On and around the flood protection structure	Visual observation	2 times per year or whenever high water levels are forecasted	-	Owner of the flood protection structure	
SOCIAL ASPECTS							
Pre-construction phase	Land acquisition completed in line with RAP	Municipality Administrative office of the PIU Monitoring to be performed in line with requirements from the RAP.	Visual insight in the files	In line with the timeline and milestones defined in the RAP.	-	PIU	

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	Include into Employers Requirement (tender documents) the obligation for Contractors to implement ESMMP, 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	
Construction phase	Implementation 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	
Construction phase	Community Health, Safety and Security	At the construction site and including associated facilities, if any	› Visual inspection of the construction site organization › Records of complaints from residents through the grievance mechanism	Weekly	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	Occupational Health and Safety of Workers	At the construction site	› Visual observation of the compliance of respecting of health 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	Daily	Included in Construction and design/ supervision cost	Engineering Supervision of 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	At the construction site	› Evaluate the working contracts, social and health insurance, are regulated in respect to Montenegrin legislation and much with ESS. › Observe and record any discrepancy in working hours, holidays, medical reports with working contracts and legislation	Daily	Included in Construction and design/ supervision cost.	Engineering Supervision on behalf of MAFWM	
Construction phase	Cultural Heritage	Chance finds	› Observe and report any chance finds, and monitor their related procedures according to national/local	› Daily monitoring of impacts on cultural, religious, and	Included in Construction and design/ supervision cost,	Contractor 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
			related legislation and approved procedures. › Record any chance finds and report on its management procedures.	heritage sites or objects Frequent observing, recording, and informing on chance finds and their management			

Annex 4. Minutes of meetings

Minutes of meetings

Public consultations on the occasion of the presentation of RAP and ESMMP for the Municipality of Plav

DATE: 06.09.2022
TIME: 11 AM
PLACE: Meeting hall in the Municipality of Plav
ORGANIZER: Ministry of Agriculture, Forestry and Water Management, Directorate for Water Management, Implementation Unit (PIU)

SUMMARY:

Public consultations are organized by the Implementation unit of the Ministry of Agriculture, Forestry and Water Management, Directorate for Water Management to inform the public with documentation created for the needs of the realization of the project, by the rules of the World Bank. The documentation is approved by WB and published on the Ministry and Municipality website, providing to the public and all the interested sides, relevant information.

During consultations, technical solutions on the project area are presented, a Resettlement action plan (RAP), an Environmental and Social Monitoring and Management plan, and also the current status of expropriation.

DISCUSSION

Mr. Zeljko Furtula, Director of the Directorate for Water Management gave the introductory word by introducing participants of the presentation and greetings, and also the director of Direktotrat for investments in Plav, **Mr. Fuad Feratovic.**

Mr. Vladan Dubljevic, the project manager, introduced the attendees with more detail about the work program below, emphasizing the importance of consultation and communication with interested parties, stating that the goal of the project is not to make a profit but a matter of realizing a common good, enabling everyone to actively participate in the implementation through consultations. He also introduced attendees to the entire project and its realization from the beginning, stating that it is regional with a value of over 300 million euros and that the Montenegrin share in it amounts to 15 million.

Mr. Feratovic described the previous activities related to the realization of the prerequisites for the start of the works, which related to the adoption of the Decision on determining the public interest, communication with the Property Administration, establishing an appeal mechanism, publishing the necessary information onthe website of the Municipality, as well as invited all potentially interested parties to take part in these consultations.

Mrs. Zdenka Ivanovic, an engineer on the project, started the presentation by presenting the location where the envisages the execution of works which extends from the point at the downstream end, which is about 650 m upstream from tributary of the Djuricka River, to a profile that is about 43 m downstream from the Plav bridge, both on the left and right banks. The goal is to fit the regulation at the downstream end into a stable section where "wandering" of the bed is not possible and prevent the return impact of large waters on the settlement of Brezojevice. The length of the projected section is about 1.315m. She also stated that in this section the Lim River receives a torrential tributary from the left - Bijeli Potok at about 92 m downstream from

the Plav bridge. She described in detail the technical solution and the way in which the protection will be carried out**.**

To the question of **Mr. Dasic Radosav**, president of the local community, whether the beach on the left side will be kept, Mrs. Ivanovic answered that if the beach is located between 40m from the bridge where it starts and the entrance to Bijeli Potok (at a length of approx. 50m), there will be no beach left. Mr. Dasic emphasized that there are sewage outlets in the section where the works are planned. Mr. Omar Bašić states that there is a sewage system every 5 m on the left side. However, Mrs. Zdenka states that this was not the subject of the project and that, accordingly, the sewage system is an illegal object. There was also a discussion about whether, after regulation, potentially fast water will threaten the part where the cemetery is located, to which Mrs. Zdenka replied that these works will not affect the flow and that primarily it will not be fast water, because natural conditions will not be disturbed.

Mr. Omar Basic, president of the Sports Fishing Club Plavsko jezero, states that the club gave suggestions on the conceptual project in the initial stages of the project, which, as he notes, were not fully considered as part of the Main Project. The suggestions related to environmental protection and fish.
Mr. Basic made comments on the main project, which were related to the following:
- Lake Plav has 25 fish species, and the original part of Lim is a natural breeding ground for a protected species. The length of 6.5 km in this area is treated as a special fishing area. He states that it is not mentioned at the meetings, held in the previous phases of the project, that the project will include the beach on the left bank. He also states that on the coast, on the treated area, are located hundred-year-old willows and that there is no need for erosion protection on that stretch.

Mrs. Natalija Loncarevic, the owner of the affected plot, states that there is erosion at that location and believes that that part should be protected.

Mrs. Ivanovic states that the solution was given on the basis of hydraulic calculations, that an analysis was done, and a hydraulic model was made. It simulated the flow of water through the trough that was made. On the basis of the above, it came to the point that one should start not at the mouth of Bijelo potok, but 40m upstream from it. She states that the municipality gave an opinion that it is not necessary to carry out an environmental impact assessment, in accordance with domestic legislation.

Mr. Dubljevic states that the project is not of a profit type nor that anything will be done if there is a devastation of the community, in any way. He also believes that it is within the competence of the community itself to set priorities in accordance with their needs.

Mrs. Loncarevic, whose property has already been partially taken away by Lim, believes that the restoration of both, the left and right, banks is of great importance and that the fish, which will certainly be restored, can be protected. Primarily, in order to protect the fish, it is necessary to direct attention to the regulation of illegal sewage discharges into the lake and the river. She states that her property is threatened and she stands up for construction.

Mr. Dasic, as a representative of the local community, fully supports the municipality and the implementation of the project.

Mr. Basic stands up for the protection of a certain part of the right bank and states that he is the one who started this story. He also states that he initiated the resolution of the problem of illegal sewage in the Municipality. Also, he believes that it was necessary for the municipality to carry out an assessment of the impact on the environment and that he will be informed about the issue by the municipal officials.

Mrs. Ivanovic states that the Municipality gave its opinion in accordance with the legal procedure, based on

the documentation submitted by the Implementation Unit with the request, as well as all the other municipalities involved in the project.

Mr. Dubljevic stated that, regardless of the fact that the Municipality gave the opinion that an environmental impact assessment is not necessary, as part of the regular activities on the project, and in accordance with the requirements of the World Bank, a special document defining negative impacts and measures was prepared for mitigating those impacts, which will be presented later in the meeting.

Mrs. Marija Sindjic, a representative of the E3 company, who was in charge of the making of the Resettlement Plan in the municipality of Plav, started presenting it. She stated that the document is public, approved by the World Bank, available on the websites of the Ministry and the Municipality, and serves as a set of guidelines that must be followed during the implementation phase of the expropriation procedure. She described how to input data obtained in the development of the RAP that treats private plots affected by the project, both formal and informal, and the impacts on the various types of property of the affected owners. She stated that, according to all the described impacts, the Real Estate Administration, together with the Municipality, must consider special measures when determining compensation for expropriation, emphasizing that these measures are more comprehensive compared to national legislation, and everything is in line with the approach of the World Bank. She also emphasized that all information about the project must be transparent for all interested parties to participate in its implementation. She particularly referred to the importance of the use of the grievance mechanism established in the relationship between the Municipality and the Implementation Unit, and clearly defined through already prepared documents. She directed all those interested to contact **Mrs. Marina Bulatovic**, as the contact person for all information regarding the social aspect of the project.

Mr. Basic states that as a beneficiary of the fish, he was not contacted by the interviewer, and that as a concessionaire he believes he has the right to compensation, even though this is not included in the RAP.
Ms. Sindjic answers the question and states that the document dealt with those persons whose property is the subject of expropriation, but not with the beneficiaries of the fish fund, and notes that the possibility of further consultations with them is not excluded, as well as that all questions can be directed through the established appeals mechanism.

Mrs. Loncarevic asked whether the compensation refers to the cadastral state or to the real state, given that Lim has already taken part of the estate.
To the question, **Mrs. Sindjic** replied that official data from the Real Estate Administration was taken as the main input and that it was relevant data.

Mrs. Irem Silajdzic, a senior consultant for the environment and social issues on the project, started with the presentation of the Environmental and Social Issues Monitoring and Management Plan, and also she answer the previous question. She described the process of updating the document by the requirements of the World Bank, to recognize the key impacts of the project through all its phases. The project itself is characterized as having a moderate impact, and this document also includes proposed measures to mitigate negative impacts that will have to be implemented. She states that the document is a mandatory part of the tender documentation and the contractor is obliged to implement it.
She states that the Municipality has decided that for this type of work it is not necessary to assess the impact on the environment, by domestic legislation, but by procedures of the bank, this document certainly had to be done to protect the environment. Through the document, the Project Implementation Unit was given the authority to closely cooperate with the fishing society to find measures that will mitigate any negative impact on the fish stock in the project area, with the help of experts. She states that the document is available on the Ministry website.

After **Ms. Silajdzic's** presentation, **Mr. Basic** expressed his desire to receive the ESMMP document. He states that, based on the submitted document, he will request a re-action and submit the data he has, which concerns the fish fund.

Mr. Dubljevic states that the English versions have been published and that the translation into Montenegrin is underway.

Mrs. Sindjic repeats that the RAP document only dealt with the owners of the plots, and that is why **Mr. Basic** was not contacted during the survey, but that this communication was certainly recorded, as will be every future one, and there is certainly an established appeals mechanism, so if he thinks that something additional needs to be done, he can freely use those communication channels.

Mr. Dubljević emphasized that in the near future the plan is to expand the Project Implementation Unit by one more member of the team - an ecologist, who will be engaged in the field, precisely in order to bring the project to an end, in the satisfaction of all, and in the best possible coordination with the interested parties.

Mr. Basic addressed a question to Ms. Zdenka, which refers to the clarification of the term "cleaning the trough" and to which part this term refers.
Mrs. Zdenka states that there is actually no cnd that it is only a matter of establishing a level.

Mr. Bašić, stating that there is no erosion on the left bank, asks if there is a possibility that the beginning of the embankment is not built in the bed itself.
Mrs. Zdenka believes that this is a question for the designer, who was working on both the Concept and the Main Project, who carried out the research. The goal is flood protection above all, there are no changes at this stage, and the tender will be announced according to existing tender documentation.

Mr. Feratovic said that the Municipality sent a request to the Real Estate Administration to assess the parcels in question, but that the process is going slower due to constant changes in the management staff. He states that the Municipality already has certain funds for expropriation purposes andthat the missing funds will be provided as soon as possible.

JAVNE KONSULTACIJE

06.09.2022. godine

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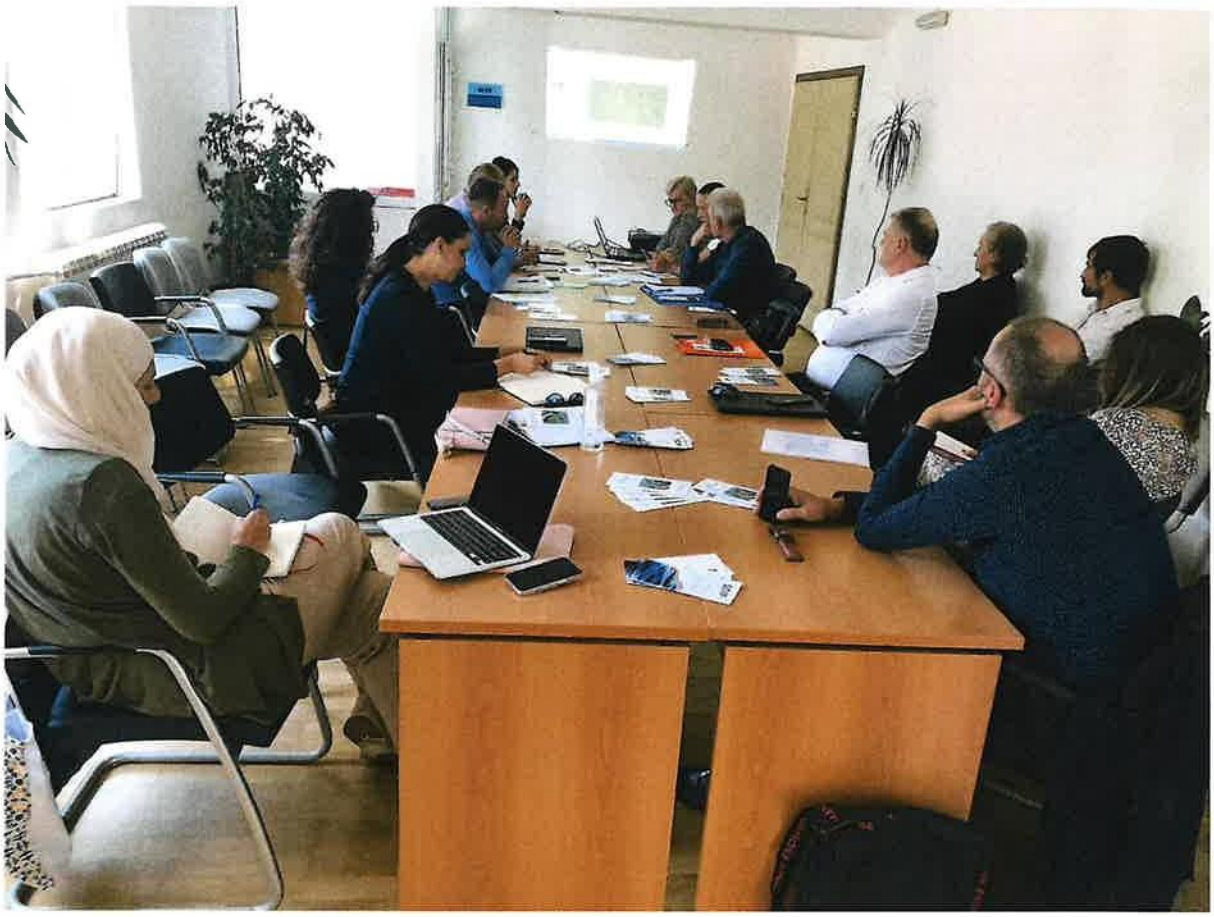


Ovjde možete odložiti primjedbe i prijedloge vezano za implemetaciju Projekta izgradnje obalouto vde na rijeci Lim.
SDIP