

Public Water Management Company Srbijavode
European Bank for Reconstruction and Development

Environmental and Social Impact Assessment, Climate Change Assessment and Technical Assessment for Pambukovica Dam in Serbia

Introduction & Context

Reference: 2025/06

Final | 12 August 2025



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Abbreviations

Abbreviation	Definition
CBA	Cost-Benefit Analysis
CBD	Convention on Biological Diversity
CIA	Cumulative Impact Assessment
E&S	Environmental and Social
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EEC	European Economic Community
EIA	Environmental Impact Assessment
EP	Equator Principles
EPRP	Emergency Preparedness and Response Plan
ESAP	Environmental and Social Action Plan
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
ESP	Environmental and Social Policy
EU	European Union
EUFIWACC	European Union Financing Institutions Working Group on Adaptation to Climate Change
GHG	Greenhouse Gas
GIS	Geographic Information System
H&S	Health and Safety
ICOLD	International Commission on Large Dams
IFC	International Finance Corporation
IUCN	International Union for Conservation of Nature
JASPERS	Joint Assistance to Support Projects in European Regions
MAFWM	Ministry of Agriculture, Forestry and Water Management
NGO	Non-Governmental Organization
PM	Project Manager
PR	Performance Requirements
QA/QC	Quality Assurance/Quality Control
R&D	Research and Development
SEA	Strategic Environmental Assessment
SEP	Stakeholder Engagement Plan
UN	United Nations
WMD	Water Management Directorate

1. Introduction and context

1.1 Introduction to the Project

This document – the Environmental and Social Impact Assessment (ESIA) has been prepared by ARUP (“Consultant”) for the Public Water Management Company “Srbijavode”, which operates under the Water Management Directorate (WMD), which in turn is an administrative authority of the Ministry of Agriculture, Forestry and Water Management (MAFWM).

This document presents the results of the environmental and social impact assessment of the “Pambukovica Dam” Project (hereinafter “Project”) in line with the lenders requirements, European Bank for Reconstruction and Development (the “EBRD”).

The main purpose of the Pambukovica Dam construction is to alleviate flood risks in the surrounding areas. It should also provide irrigation for up to approximately 2,225 hectares of agricultural land.

Table 1 - Main parties involved in the project

Position	Parties
Lender	European Bank for Reconstruction and Development
Client	Ministry of Finance (Loan signatory) Ministry of Agriculture, Forestry and Water Management (Assignment Contract signatory) / Water Management Directorate Public Water Management Company Srbijavode (Assignment Contract signatory)
Beneficiary	Public Water Management Company Srbijavode
Consultant	Arup
Other relevant authorities (not exhaustive list)	Putevi Srbije / Roads of Serbia (for Road Safety Audit / reconstruction of State Road IB no. 21)

1.2 Purpose of the ESIA

The main purpose of conducting the Environmental and Social Impact Assessment (ESIA) for the Pambukovica Dam is to evaluate the potential environmental and social impacts of the project and to develop measures to mitigate any adverse effects. This assessment ensures that the project complies with national and international environmental and social standards and regulations, and it helps in identifying and addressing any concerns related to the environment, biodiversity, water resources, and the local communities.

Consideration of the environmental and social factors throughout the entire lifecycle of the Project (planning and design (pre-construction), construction, operations, and decommissioning) is an essential prerequisite to Project implementation in accordance with the sustainable development concept. Undertaking environmental and social impact assessment in early stages of the Project is recognized as the most effective way to ensure such consideration.

The ESIA is an iterative process that involves forecasting and assessing the potential effects of the Project on the "physical" and "biological" elements (indicators) of the environment, as well as on social and socioeconomic aspects.

1.3 Overview of the ESIA approach

1.3.1 Brief summary of previous studies

In the Preliminary Flood Risk Assessment from 2012, the Kolubara basin was identified as significant at the level of the Republic of Serbia. The severity of the problem was highlighted by the flood in May 2014, when

the population, economy, infrastructure, and natural resources along the Kolubara and its tributaries suffered very significant damage.

In April 2016, a conceptual design for the Pambukovica dam was created by "Energoprojekt-Hidroinženjering", Belgrade. This design analysed the proposed dam profile and defined its parameters and those of the future reservoir. Preliminary analyses confirmed the suitability of the proposed profile for the construction of the dam and the formation of the reservoir, taking into account all existing constraints and adhering to the set criteria. In July 2018, a preliminary project for the Pambukovica dam with a reservoir on the Ub river was developed by "Energoprojekt-Hidroinženjering", Belgrade. This project elaborated on the technical solutions for the dam and accompanying structures, based on the conceptual design, and defined the estimated investment value required for their realization.

Previous studies also include Preliminary Design developed in October 2020 and the Feasibility Study prepared in July 2018. Furthermore, Environmental Impact Assessment has been issued in May 2020 and approved by Ministry of Environmental Protection in June 2020. EIA was publicly disclosed in November and December 2019, in line with requirements of the Serbian legislation.

EIA provided a detailed analysis of the baseline environmental conditions, including hydrological, geological, and ecological aspects. It also considered the socio-economic conditions of the local communities. The EIA identified and evaluated the potential impacts on various environmental components such as water quality, air quality, noise levels, biodiversity, and land use. It also assessed the social impacts on local communities, including potential displacement and changes in livelihoods. The ESMP (Environmental and Social Management Plan) has been developed as part of the local EIA, detailing the implementation of mitigation measures, monitoring programs, and responsibilities of various stakeholders. It ensures that the project complies with local environmental regulations and standards.

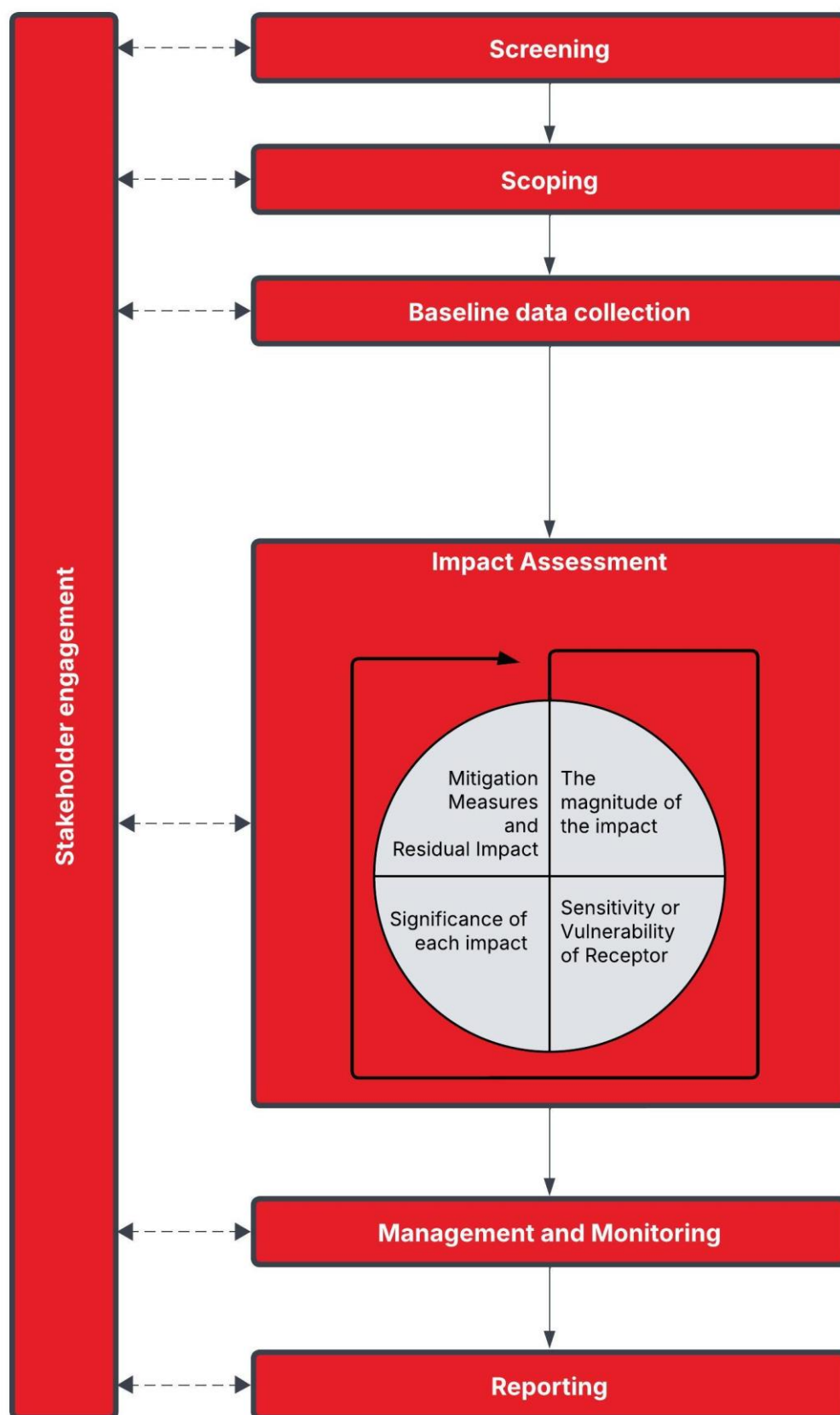


Figure 1 ESIA Approach

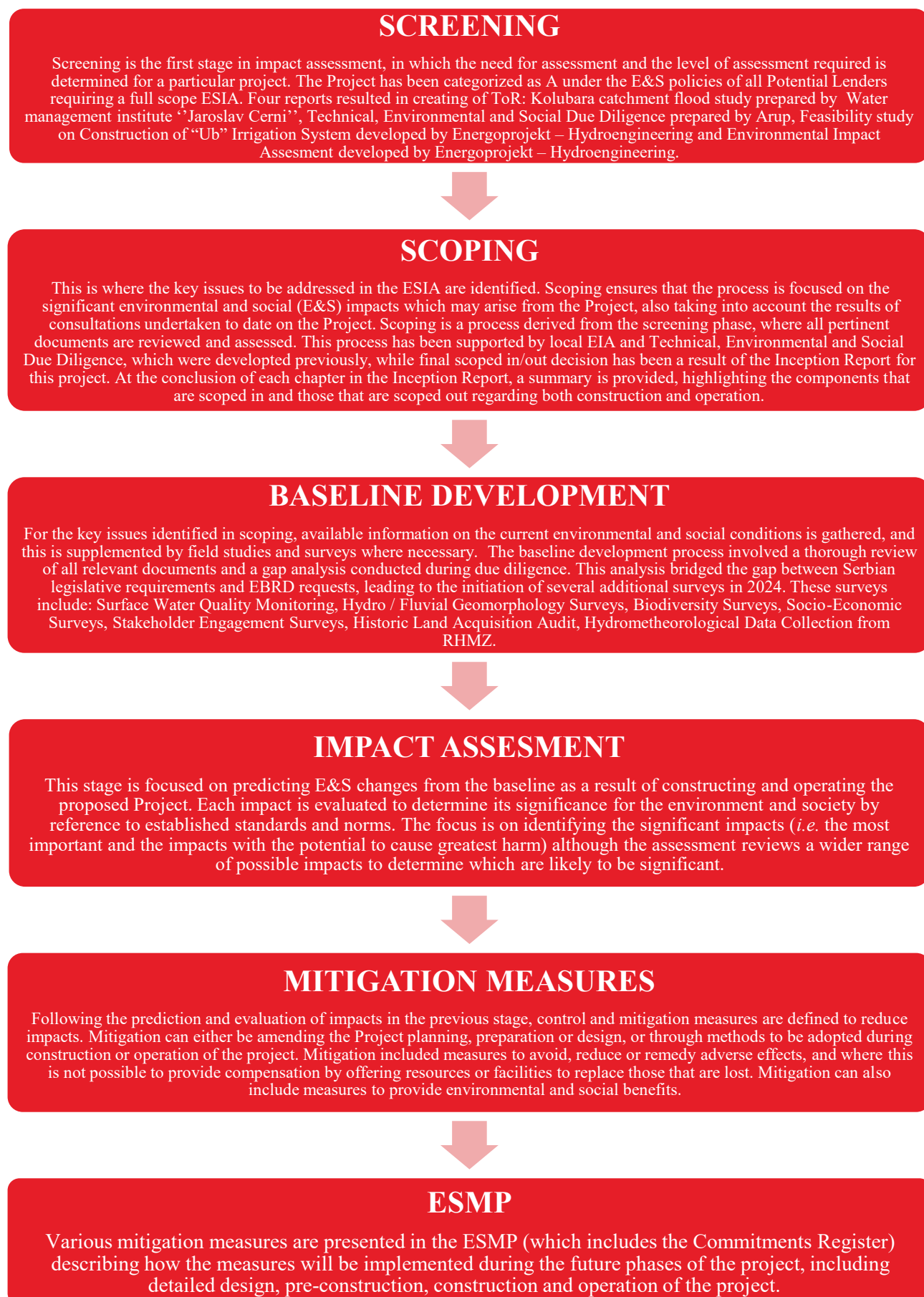


Figure 2 Overview of the ESIA Process with Descriptions of Each Phase

1.4 Structure of the ESIA Package and Report

- Volume I – Environmental and Social Impact Assessment Report
 - Book 1 – Introduction (including ESIA Methodology, Legislation Framework, Assumptions and Limitations)
 - Book 2 – Project Description (including Analysis of Alternatives, Overview of Climate, Climate Change and Hydrology)
 - Book 3 - Surface Water
 - Book 4 – Biodiversity Impact Assessment
 - Book 5 – Environment (excluding surface water), Health and Safety, Cultural Heritage, including:
 - Air Quality
 - Noise and Vibration
 - Soil and Groundwater
 - Resources and Material Management
 - Waste and Wastewater
 - Cultural Heritage
 - Health & Safety
 - Landscape and Visual
 - Book 6 – Social Impact Assessment
- Volume II – Management Plans
 - Emergency Preparedness and Response Plan
 - Environmental and Social Management Plan
 - Commitments Register
 - Stakeholder Engagement Plan
 - Audit of Historical Land Acquisition with Corrective Action Plan
 - Biodiversity Action Plan
 - Environmental and Social Action Plan
- Volume III – Cumulative Impact Assessment
- Volume IV - Non-Technical Summary

Table 2 Summary of key ESIA chapters, plans and supporting documents and their content

Section / Plan	Summary of Content
Project Description	<p>Description of the Project across its lifecycle, including:</p> <ul style="list-style-type: none"> • the Project area of influence and specific location(s) at which Project activities will take place; • Project design, size, lifespan; • Project Construction, Operation and Maintenance, and Decommissioning phase activities and • Associated facilities, • Overview of climate, climate change and hydrology (assessed in detail as part of the Technical and Green Assessments). <p>Maps will be included as relevant in order to illustrate the geographic location of the project and its key components.</p>
Analysis of Alternatives	Analysis of reasonable alternatives including:

	<ul style="list-style-type: none"> • an analysis of reasonable alternatives, in terms of project location, technology, size, scale and design, mitigation options and • the “without project” scenario alternative. <p>Provides an assessment for the option chosen taking into account this option’s environmental and social effects.</p>
Analysis of Applicable Requirements	<ul style="list-style-type: none"> • Overview of legislation and standards. • Identification of applicable local, regional and national environmental and social laws and regulatory requirements. • Analysis of local /national /regional /strategic level assessment and permitting requirements, as well as applicable environmental and social requirements. • Definition of Project Standards. • Additional permitting requirement (identified as a part of the topic specific assessment and presented in the ESMP and Commitments Register).
ESIA Methodology	<p>Methodology that determines the scale and significance of impacts.</p> <p>All Project activities (construction, operation, decommissioning) are assessed in terms of the significance of the impact on the receiving environment or social receptor (pre- and post-mitigation).</p>
Baseline Conditions	<p>Comprehensive description of the current state and likely evolution of the physical, biological and socio-economic environments present in the Project impact area.</p> <p>Consistent with requirements of the EU Habitats Directive and Birds Directive, the assessment it identifies any nature protection areas that could be affected by the Project (including Natura 2000 network, Emerald sites and other sites such as Key Biodiversity Areas and Important Bird Areas).</p>
Assessment of Impacts	<p>Assessment of the potential environmental and social impacts and risks of the Project across its lifecycle will be developed (preconstruction, construction, operations, decommissioning/closure), in accordance with the EBRD’s ESP (2019), as well as opportunities that the Project may provide.</p>
Mitigation and Monitoring	<p>Based on the baseline conditions and impact assessment defines control and mitigation measures, as well as detailed monitoring requirements, as applicable.</p>
Supporting Plans / Documentation	
Section / Plan	Summary of Content
Environmental and Social Management Plans (ESMP)	<p>Describes the avoidance, minimisation, mitigation, compensation and monitoring measures aimed at improving the Project and avoiding and reducing identified E&S impacts.</p> <p>ESMP includes:</p> <ul style="list-style-type: none"> • High-level description of the Environmental and Social Management System; • Resources, roles and responsibilities; • Management of supply chains; • Training or capacity-building required; • Performance indicators; • Monitoring plan; • Change management procedure.

Commitments Register (as a part of the ESMP)	Commitments register includes: <ul style="list-style-type: none"> the mitigation measure/commitment; application (whether it applies to the entire Project or specific sub-section(s)); the phase of the Project in which it should be implemented; the responsible entity for implementation; and reference to the section of the ESMP in which it is located.
Biodiversity Action Plan	Developed based on the biodiversity impact assessment and its findings, capturing required mitigation. Biodiversity Action Plan will include a framework for demonstrating the technical and financial feasibility of achieving No Net Loss and/or Net Gain of identified features.
Stakeholder Engagement Plan (SEP)	Developed in line with the Applicable Requirements and includes a grievance mechanism, non-compliance with PR10 and the specific requirements for Category A Projects (clauses 21-25 and 28).
Audit of Historical Land Acquisition /	Assessment of historical land acquisition for the Project undertaken to date by the Client against the Requirements of PR5.
Land Acquisition Corrective Action Plan	Preparation of the land acquisition corrective action plan, to address gaps identified as a result of the assessment against requirements of PR5.
Cumulative Impact Assessment (CIA)	<p>Cumulative impact assessment of the of the Project, associated facilities, projects proposed in the 2018 Catchment Study and any other large projects planned upstream or downstream.</p> <p>Carried out in compliance with the EU EIA Directive and will adopts the methodology established in the IFC Good Practice Handbook (2013) Cumulative Impact.</p>
Emergency Preparedness and Response Plan (EPRP)	Emergency Preparedness and Response Plan template based on the Community Safety Risk Assessments (CSRAs) of normal and abnormal / emergency operations for the Project and Dam Break Analysis (DBA).
Environmental and Social Action Plan (ESAP)	Addresses gaps and issues identified during the preparation of the ESIA.
Non-Technical Summary	A concise, over-arching, illustrated, standalone NTS that summarises the ESIA documents.

1.5 Scope of the ESIA

The ESIA aims to provide stakeholders with comprehensive insights into the Project, encompassing its potential environmental and social impacts, and proposed mitigation measures. The impacts associated with the construction, operation and decommissioning phases of the Project will be described taking into account direct, indirect, and cumulative considerations of environmental and social values, and evaluating the potential extent of these impacts.

Scope of the ESIA has been determined as part of the ESIA Inception Report and is presented in Appendix A.

2. Impact Assessment Methodology

2.1 Impact Assessment

Impact assessment involves identifying and evaluating the environmental and social impacts of the Project. The primary objective of the ESIA process is to develop and outline measures to avoid, minimise, mitigate, or compensate for adverse impacts while maximising benefits that are technically and economically feasible.

The impact assessment compares the predicted impacts of the project with the established baseline conditions, following internationally recognised standards and best practices for a robust evaluation. A ranking system is applied to assess the magnitude and significance of these impacts, guiding the prioritisation of mitigation measures. All project activities are evaluated in terms of their potential impacts on the receiving environment, such as air quality, water quality, and biodiversity, as well as their impact on local communities, including livelihoods, health, culture, and employment.

Impact assessment phase involves an analysis of potential impact sources related to the project and the sensitivity of receptors in both natural and human environments. This analysis is based on:

- Project description and activities of each component.
- Identification of the project's area of influence and various potential receptors.
- Studies of the environmental and social context in its baseline condition, to assess the sensitivity of the receiving environment,
- Information from the Technical and Green Assessment of the Project.
- Collaboration with the Client's team, relevant institutions and other parties (as applicable), to assess how the project may generate environmental and social impacts, and, where/if applicable, identify potential alternatives.

2.2 Impact identification

Based on the EBRD¹ definition, environmental impacts include (i) landscape and morphology, (ii) geology (iii) soils, (iv) seismicity, (v) climate change, (vi) air, (vii) noise, (viii) surface waters, (ix) groundwater and (x) biodiversity and protected areas, while social impacts include (i) labour standards and terms of employment (ii) community impacts such as public health, safety, security, gender equality, impacts on indigenous peoples and cultural heritage, land acquisition or potential reduction in people's livelihoods as a result of project activities (iii) occupational Health and Safety. It also includes disproportionate impacts on vulnerable groups/gender, involuntary resettlement, and affordability of basic services.

Following the identification and analysis of impacts and mitigation measures, these are consolidated into a management plan. This plan serves as the framework for managing E&S impacts throughout the project's lifecycle.

2.3 Impact Magnitude

The **magnitude of the impact** is the degree of change to natural and social environments, i.e. scale of impact, from all phases of the project. In this regard the impacts can be large, medium, small, and negligible.

The **magnitude of the impact** includes all dimensions of the predicted impact and will be assessed using the indicators as listed below.

- The type of impact is classified as:
 - *Direct* – Impacts resulting from the immediate interaction between the project and the resource/receptor.

¹ Source: EBRD Environmental and Social Risk Categorisation List – Revised 2014

- *Indirect* – Impacts resulting from the project's interaction with the environment, due to secondary interactions that occur thereafter.
- *Cumulative* – Impacts arising from other activities associated with or following the project.
- The spatial scope of the impact evaluates the geographic reach of the impact, considering the communities and natural environments potentially affected. By this virtue impact can be categorised as:
 - *Local* – Impacts limited to the project area and its immediate surroundings.
 - *Regional* – Impacts felt beyond the local area, extending to a broader region.
 - *Transboundary* – Impacts occurring across national borders, potentially affecting other countries.
- Duration or time dimension is the timeframe over which an impact will be experienced. It may include:
 - *Temporary* – Impacts lasting for a short period, typically from hours to weeks.
 - *Short-term* – Impacts lasting only during drilling and construction, up to around 2 years.
 - *Medium-term* – Impacts lasting between 2 years and the end of the project (up to 20 years).
 - *Long-term* – Impacts extending beyond the project's duration but expected to cease in time.
 - *Permanent* – Impacts causing a lasting change to the resource or receptor, extending well beyond the project's lifetime.

The description and criteria used to define the magnitude of an impact due to Project development are listed in the table below.

Table 3 Magnitude of Impact and Typical Descriptors

Magnitude of Impact	Typical criteria descriptors
Major	<u>Adverse</u> : Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements
Moderate	<u>Adverse</u> : Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements
Minor	<u>Adverse</u> : Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
Negligible	<u>Adverse</u> : Very minor loss or detrimental alteration to one or more characteristics, features or elements.

2.4 Sensitivity or Vulnerability of Receptor/Resource

The sensitivity or vulnerability of a receptor or resource refers to its capacity to withstand or adapt to impacts caused by project activities. This can apply to physical, biological, cultural, or human environments.

Receptors/resources can be classified based on their sensitivity or vulnerability to impacts as presented in the table below.

Table 4 Sensitivity Value and Typical Descriptors

Sensitivity/Vulnerability Value	Typical criteria descriptors
Low	The receptor/resource is resilient and can withstand or adapt to changes with minimal impact. It may not require significant protection or management.
Medium	The receptor/resource has some capacity to absorb changes, but notable effects may occur. It may require targeted mitigation or management measures to ensure its protection.

Sensitivity/Vulnerability Value	Typical criteria descriptors
High	The receptor/resource is highly sensitive or vulnerable to changes. Even small impacts can cause significant harm, and special protection or adaptation measures are required.

2.5 Impact Significance

After the characterisation of Impact Magnitude and Sensitivity/Vulnerability of the receptor, the Significance of each impact is determined. This evaluation is based on a combined function of the Impact Magnitude and the Sensitivity or Vulnerability of the affected receptors.

Four significance categories are used to assess the significance of each impact. These categories, along with their typical descriptors, are presented in the following table.

Table 5 Impact Significance Identification

		Sensitivity / Vulnerability of the Receptors		
		Low	Medium	High
Magnitude of Impact	Negligible	Negligible	Negligible	Negligible
	Minor	Negligible	Minor	Moderate
	Moderate	Minor	Moderate	Major
	Major	Moderate	Major	Major

Table 6 Impact Significance Categories and Typical Descriptors

Significance category	Typical criteria descriptors
Major	<p>A major impact occurs when the acceptable or allowable standards may be exceeded, or when high-intensity impacts can significantly affect resources or receptors of high quality, importance, or sensitivity. ESIA aims to achieve an outcome where the project does not associate with any major residual impact, any impact that would remain in the long term or have significant extent. However, in some instances, major residual impacts may be present after exhausting all mitigation measures, at which point the level of impact should be as low as reasonably achievable. An example of this could involve weighing negative factors against positive aspects. It is important to balance these differing influences when assessing the overall impact of a project.</p> <p>They represent key factors in the decision-making process. These impacts are generally, but not exclusively, associated with sites or features of international, national or regional importance that are likely to suffer a most damaging impact and loss of resource integrity. However, a major change in a site or feature of local importance may also enter this category.</p>
Moderate	<p>An impact is deemed moderate when its intensity falls within the established standards, yet it is positioned between a threshold below which the impact is classified as minor and a level that approaches a legal violation. For moderate impacts, efforts should focus on reducing the impact to a level that is as low as reasonably practicable. This does not imply that moderate impacts must necessarily be downgraded to minor impacts; rather, they should be managed efficiently and effectively.</p> <p>These adverse impacts may be important but are not likely to be key decision-making factors. The cumulative impacts of such factors may influence decision-making if they lead to an increase in the overall adverse effect on a particular resource or receptor.</p>
Minor	<p>An impact is classified as minor when receptor is affected, but the intensity of the impact is sufficiently low to remain within the limits of applicable standards (i.e., relevant regulations and guidelines). In the absence of specific standards, this classification applies when the sensitivity, vulnerability, or importance of the resource or receptor is low.</p> <p>These are unlikely to be critical in the decision-making process but are important/significant in enhancing the subsequent design of the project.</p>

Significance category	Typical criteria descriptors
Negligible	<p>An impact is considered negligible when a receptor is assigned an insignificant level in relation to a particular activity or when the intended effect is deemed "imperceptible" or indistinguishable from the natural background.</p> <p>No impacts or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.</p>

2.6 Mitigation Measures

Impact assessment aims to ensure that project decisions take into account the likely impacts on the environment and society while identifying mitigation measures that can be implemented to keep these impacts as low as possible.

For impacts initially assessed in the ESIA as having major magnitude, changes in the project design are typically necessary to prevent, reduce, or mitigate these impacts, after which their magnitude will be re-evaluated. For impacts classified as having moderate magnitude, the proposed mitigation measures, their implementation, and the rationale for their selection (e.g., in terms of technical feasibility and cost/benefit analysis) will be discussed. Impacts assessed as having minor magnitude are generally managed through industry best practices, operational plans, and procedures.

The ESIA aims to contribute to informed project decision-making by fully understanding the likely impacts on the environment and society.

Hierarchy of Mitigation Measures

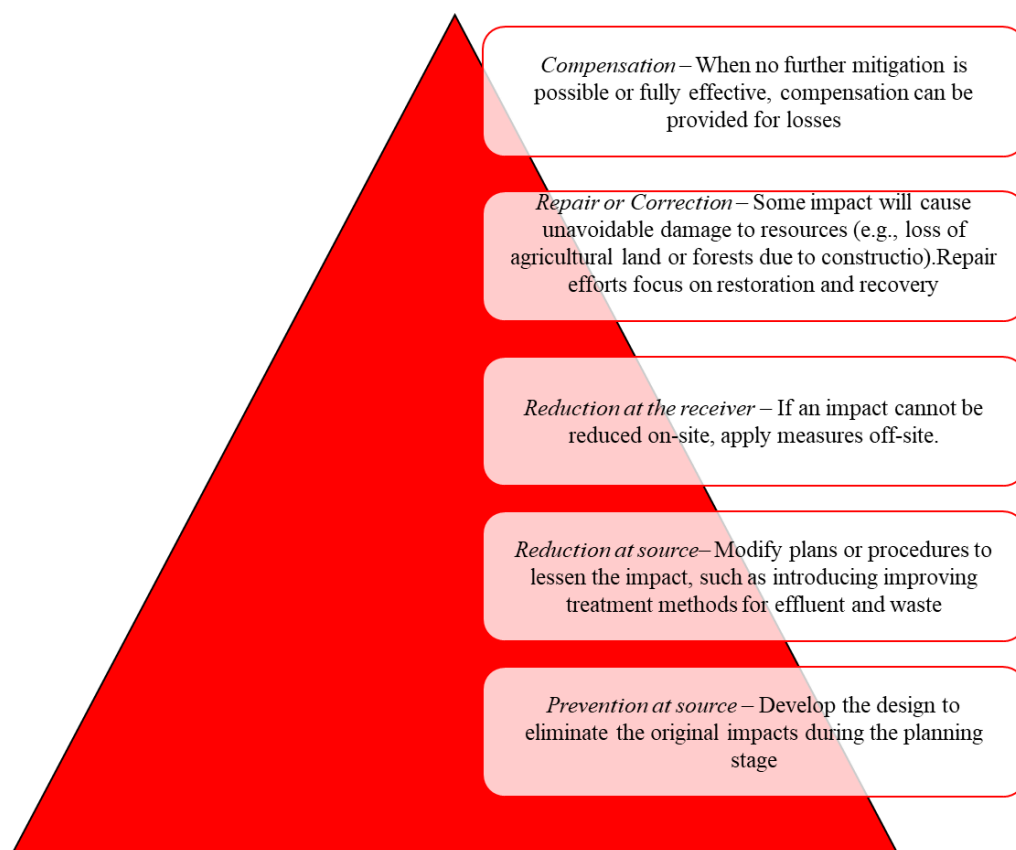


Figure 3 - Hierarchy of Mitigation Measures

2.7 Residual Impacts

The importance assigned to residual impacts indicates their relevance in the project decision-making process.

Residual impacts of major level, whether positive or negative, carry substantial weight compared to other environmental, social, and economic costs and benefits. Conditions should be set to control and monitor negative impacts while ensuring benefits are realised.

Residual impacts of moderate level are less important in the decision-making process but still require special attention for mitigation and monitoring. This ensures that appropriate measures are implemented to achieve the desired outcomes from both technical and financial perspectives.

Residual impacts of minor level are noted but considered to have little or no influence on the decision-making process. They will be managed using best practices, and monitoring will be necessary to confirm that impacts align with predictions.

2.8 Impact Assessment Approach

A matrix is used to assess the potential interactions between the project's activities and the environmental and social components.

Subsequently, based on the identified potential impacts, the magnitude of the impacts on the environmental and social environment will be defined. Depending on the subject, the assessment may be qualitative, quantitative, or based on professional judgment.

Impact assessment is an iterative process aimed at reducing impacts to an acceptable level or as low as reasonably possible. This iterative approach involves re-evaluating the intensity of the impacts if changes are made to the project characteristics or mitigation measures.

Determination of mitigation measures will be discussed with the Client and the entire project team and all interested parties through iterative processes during the ESIA. The objective is to:

- Propose effective mitigation measures.
- Suggest technically and financially feasible mitigation measures.
- Limit the impact to a level as low as reasonably possible.
- A schematic evaluation for each potential impact will be presented in a table that includes:
 - The environmental aspect or social consideration (e.g., soil, air, biodiversity, population, etc.);
 - The specific project component (e.g., land use, atmospheric emissions, transport, etc.);
 - A description of the impact;
 - The magnitude of the impact and receptor sensitivity;
 - The significance of the impact;
 - Proposed mitigation measures;
 - The significance of the residual impact after mitigation.

Once all identified mitigation measures are implemented, a final reassessment of impacts is conducted to determine the significance of residual impacts. If the significance of an impact remains major after applying all mitigation measures, a compensation approach will be considered.

2.9 Management and Monitoring

In the final stage of the impact assessment process, the essential management and monitoring measures are established to determine whether: a) the remaining impacts or their related Project elements comply with the relevant standards; and b) the mitigation measures are successfully addressing the impacts, and the compensatory measures and offsets are reducing the effects as anticipated.

3. Assumptions and Limitations

3.1 Available information

The report is based on the information available at the time of preparation of this report. List of key documents includes:

- Environmental Impact Assessment Study of the Multi-Purpose Reservoir Project Pambukovica Dam, Energoprojekt-Hidroinženjering a.d., 2020
- Study of Improvement of Water Protection in the Kolubara River Basin, Institute for Water Management "Jaroslav Černi", 2018,
- Design for Construction Permit for the Construction of Pambukovica Dam with Reservoir, Energoprojekt-Hidroinženjering a.d., 2023
- Conceptual Design of the dam, Energoprojekt-Hidroinženjering a.d., 2020,
- Conceptual Design of the road, Energoprojekt-Hidroinženjering a.d., 2022,
- Construction of “Ub” Irrigation System, Feasibility Study, Energoprojekt-Hidroinženjering a.d., 2018,
- Baseline Biodiversity Surveys – Final Report Baseline Biodiversity Surveys – Preliminary Critical Habitat Assessment, Arup 2024,
- Expropriation of a reservoir dam, Energoprojekt-Hidroinženjering a.d., 2020,
- Hydrological study for Pambukovica Dam with accumulation on the Ub river, Energoprojekt-Hidroinženjering a.d., 2020,
- Site visit to hydrological stations of the Ub river, cross-sectional view of the dam, piezometer locations, locations susceptible to landslides, area to be flooded and parts of Gola Glava settlement that will be expropriated, 3 July 2024

Full list of documents received by the Consultant is presented in Appendix B.

3.2 List of Assumptions and limitations

Table below presents topic specific Limitation and Assumptions, additional to these listed above.

Table 7 - Topic specific Assumptions and Limitations

Topic	Assumptions and Limitation
General	<ul style="list-style-type: none">• The findings presented represent those at the time of survey and reporting, and data collected from available sources.• Assessment has been conducted using conservative assumptions and best-practice to ensure a realistic evaluation of potential impacts.• The exact number and distribution of sensitive receptors within the potentially affected area are uncertain due to a lack of detailed demographic and health data, resulting in general assumptions based on population density and land use patterns.• The assessment assumes that the dam and associated infrastructure will be constructed as per design specifications.• The Contractor will adhere to planned construction schedule.• Changes to the Project design or construction schedule may necessitate revision in E&S assessment or require supplementary assessment.• Exact number and type of construction vehicles and equipment to be used is not known at this phase of the Project.• Estimated emissions are based on typical scenarios.• All Project parties will have adequate / required level of capacity and expertise across all relevant skills / topics to ensure implementation control and mitigation measures.

	<ul style="list-style-type: none"> Implementation of the control and mitigation measures is contingent upon rigorous monitoring and compliance.
Data Availability and Quality	<ul style="list-style-type: none"> The baseline environmental and social data gathered from relevant authorities, local governmental and non-governmental organizations is assumed to be comprehensive and up-to-date. Limitations include potential data quality and completeness issues. The hydrological data available from the Republic Hydrometeorological Institute is assumed to be accurate and sufficient for the project's needs. Data on future developments in the area may be incomplete, limiting the accuracy of cumulative impact predictions.
Regulatory Compliance	<ul style="list-style-type: none"> The Project will comply with all relevant national and international environmental and social regulations, including EBRD's Environmental and Social Performance Requirements. The Project will adhere to the guidelines and standards set by the International Commission on Large Dams (ICOLD) and other relevant bodies. In case of discrepancies between national regulations and international standards, more stringent standards will be implemented. Changes in environmental or construction regulations during the project's lifecycle could require revision of the assessment.
Water	<ul style="list-style-type: none"> Determination of baseline water quantity and quality using site visits, satellite imagery, and available land use data, with the assumption that no significant changes will occur before construction. The assessment assumes that the dam and associated infrastructure will be constructed as per design specifications, including planned mitigation measures such as sediment traps and ecological releases. Limitations include potential data quality and completeness issues, particularly regarding historical records and the accuracy of cumulative impact predictions. Seasonal variations in water levels and weather conditions may influence the actual impacts.
Biodiversity	<ul style="list-style-type: none"> We have relied on professional judgment to identify important habitats and species, the use of automated static detectors for bat activity surveys, and the inclusion of various habitats such as hedgerows, woodlands, grasslands, scrub, and arable areas as significant for bats. Post-construction habitat restoration will ensure long-term stability and resilience of habitats affected by operational changes, and that effective control and eradication of non-native species will be implemented in newly restored or sensitive habitats. Regular monitoring of habitat quality, flora, and fauna health is assumed to ensure restoration success and identify emerging threats. Ecological surveys are constrained by factors such as time of year, migration patterns, and weather conditions, which can impact the presence and behaviour of species. The absence of evidence should not be taken as conclusive proof of species absence or future absence. Grid references obtained through handheld GPS devices are approximate and should be used as a guide only. The survey schedule was affected by major flooding in Central Serbia in May 2023, which impacted the timing and scope of the surveys. Adaptive management and long-term monitoring will be implemented to address unforeseen impacts and ensure timely interventions. The findings presented represent those at the time of survey and reporting, and data collected from available sources.
Air Quality	<ul style="list-style-type: none"> Lack of readily available baseline ambient air quality data at the project site. Data from the nearest monitoring station used as a reference.
Noise and Vibration	<ul style="list-style-type: none"> Lack of baseline noise and vibration measurements at the Project location. No official data is available for the Project location. Assumptions have been made based on general environmental conditions and information available in the Environmental Impact Assessment (EIA) study.
Soil and Groundwater	<ul style="list-style-type: none"> Limitation in precise definition of soil and groundwater contamination risks due to the variable composition of potential contaminants from construction activities, which depends on specific equipment, materials, and management practices.

	<ul style="list-style-type: none"> Assessment of groundwater flow changes is based on general hydrogeological principles and existing documentation. Long-term impacts of dam removal on soil and groundwater during the decommissioning phase are uncertain, as the decommissioning strategy has not yet been fully defined.
Resources and material management	<ul style="list-style-type: none"> Assumption that the clay, terraced, alluvial, and rocky materials available at the identified borrow pits and quarries meet the required specifications for construction, although final evaluations may reveal variations in quality. The designated temporary and permanent disposal sites are assumed to have sufficient capacity and stability to accommodate the estimated volume of unsuitable materials. No unforeseen geological or hydrological issues anticipated at these locations. Cement, steel, wood, fuel, and other supplementary materials will be available from local suppliers with the required permits and licenses, with no expected disruptions in supply chains. Additionally, the proposed mitigation measures are assumed to be implemented effectively, ensuring compliance with environmental regulations and minimizing impacts. Detailed site-specific investigations by the Contractor may lead to adjustments in material quantities, extraction methods, or disposal strategies. The quality of materials excavated during construction may vary, potentially resulting in higher-than-anticipated volumes of unsuitable material for disposal. Extreme weather events or community concerns, could impact the feasibility of using certain resources or sites.
Waste and Wastewater	<ul style="list-style-type: none"> Adequate disposal and recycling facilities at the municipal / regional level for hazardous and non-hazardous waste will be accessible during both the construction and operational phases, meeting local and international standards. Estimated volumes of waste and wastewater may change due to unforeseen factors such as changes in construction methods, project delays, or variations in workforce size.
Cultural Heritage	<ul style="list-style-type: none"> Community engagement / involvement can affect understanding and implementation of proposed measures. Regulatory and legal restrictions may hinder access to certain cultural heritage sites or information.
Health & Safety	<ul style="list-style-type: none"> Unforeseen environmental or social conditions could also impact the project's health and safety outcome.
Landscape and Visual	<ul style="list-style-type: none"> Assumptions include determining existing landscape characteristics and visual baseline using site visits, satellite imagery, and land use data, assuming no significant landscape changes before construction. Visibility modelling assumes clear atmospheric conditions and a standard observer height. Receptor sensitivity is based on existing land use, local planning policies, and stakeholder input. The assessment also assumes that the dam and associated infrastructure will be constructed as per design specifications, including planned mitigation measures such as vegetation screening and landform restoration. Public and stakeholder views on landscape and visual impacts have been inferred based on general consultation principles. Seasonal variations in vegetation cover, water levels, and weather conditions may influence the actual visual impact. Visual representations of the project, such as photomontages, are based on available project design data and may not fully capture on-site perspectives or future landscape modifications. Temporary visual impacts during construction have been estimated based on standard practices but may vary due to unforeseen logistical and scheduling changes.
Social impact	<ul style="list-style-type: none"> The socio-economic baseline for the project is based on data from the 2022 national census, site visits, and surveys conducted in December 2024, assuming no significant socio-economic changes before construction. Community engagement programs and stakeholder consultations are expected to be effectively implemented, ensuring local communities are informed and involved. The assessment assumes that economic compensation for affected households and proposed mitigation measures, such as community development programs and livelihood diversification, will be implemented as planned.

	<ul style="list-style-type: none"> • It is assumed that the Project will create local employment opportunities, particularly during the construction phase, and that job training and reskilling programs will be provided. • Temporal and spatial boundaries may restrict the accuracy of assessments due to limited historical records or incomplete coverage of adjacent areas. • Challenges in community engagement, such as lack of participation in public consultations and reliance on informal communication channels, may affect the understanding of local cultural values and impacts.
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4. Legislation Framework / Applicable Requirements

This chapter describes the environmental and social requirements applicable to the Pambukovica Dam Project.

The EBRD seek to ensure that the projects they finance are designed and operated in compliance with applicable regulatory requirements and good international practice related to sustainable development. The requirements covering key areas of environmental and social impacts and issues are established in the EBRD E&S policies and specific standards. The goal is to ensure that Serbian environmental legislation is fully aligned with EU directives, which will contribute to improving environmental quality and sustainability in the country.

4.1 National Legislation

4.1.1 Context

Republic of Serbia is actively working to align its environmental protection laws with those of the European Union. This process involves adopting new regulations and updating existing ones to meet EU standards. Key areas of focus include waste management, air quality, and water protection. Serbia has made significant progress, but the harmonization process is ongoing and requires continuous efforts. The goal is to ensure that Serbian environmental legislation is fully compliant with EU directives, which will help improve environmental quality and sustainability in the country.

Most recently, the Law on Environmental Impact Assessment (“Official Gazette of RS”, No. 94/2024) and the Law on Strategic Environmental Impact Assessment (“Official Gazette of RS”, No. 94/2024) came into force on December 6, 2024. These laws were adopted to achieve greater alignment of national regulations with relevant European Union directives in the field of environmental protection – Directive 2011/92/EU, amended by Directive 2014/52/EU, and Directive 2001/42/EC. Their implementation is expected to bring significant changes in the regulation of environmental protection, with the aim of improving protection, increasing public participation, and enhancing administrative efficiency.

4.1.2 Key applicable national legislation

Below is selection of key laws under Serbian legislation relevant for the environmental and social assessment of the Project, which have been considered for this Assignment:

- Law on Strategic Environmental Impact Assessment - Ensures environmental protection is integrated into planning and development. For a flood alleviation dam project, it mandates a thorough evaluation of potential environmental impacts to promote sustainability.
- Law on Environmental Impact Assessment - Mandates a thorough evaluation of projects that may significantly impact the environment. For a flood alleviation dam project, it requires an Environmental Impact Assessment (EIA) Study to identify, assess, and mitigate potential environmental effects, ensuring sustainable development.
- Law on Environmental Protection - Establishes a comprehensive system for safeguarding the environment, ensuring sustainable development and balanced economic growth. For a flood alleviation dam project, it mandates measures to prevent, control, and mitigate environmental pollution, ensuring the project's sustainability and minimal adverse impact.
- Law on Planning and Construction - Streamlines the process for obtaining construction permits and promotes sustainable development. For a flood alleviation dam project, it ensures that all necessary

permits are obtained efficiently, and that the project complies with planning and environmental regulations.

- Law on Waters - Regulates the use, protection, and management of water resources. For a flood alleviation dam project, it ensures sustainable water management and protection of water quality.
- Law on the Spatial Planning - Governs land use planning and development. It ensures that the dam project aligns with spatial plans and sustainable land use practices.
- Labour Law - Sets standards for employment conditions, workers' rights, and safety. It ensures fair labour practices and safe working conditions during the dam's construction and operation.
- Expropriation Law - Allows the government to acquire private property for public use with fair compensation. It facilitates land acquisition necessary for the dam project.
- Law on Nature Conservation - Protects natural habitats and biodiversity. It ensures that the dam project minimizes impacts on protected areas and species.
- Law on Disaster Risk Reduction and Emergency Management - Establishes frameworks for disaster preparedness and response. It ensures the dam project includes measures to mitigate flood risks and enhance community resilience.
- Law on Occupational Safety and Health - Ensures safe and healthy working conditions. It mandates safety protocols for workers involved in the dam's construction and operation.
- Law on Forests - Regulates forest management and conservation. It ensures that the dam project considers impacts on nearby forests and implements mitigation measures.
- Law on Air Protection - Regulates air quality and emissions. It ensures that the dam project minimizes air pollution during construction and operation.
- Law on Environmental Noise Protection - Controls noise pollution to protect public health. It mandates noise reduction measures for the dam project.
- Law on Soil Protection - Protects soil from degradation and pollution. It ensures that the dam project includes measures to prevent soil erosion and contamination.
- Law on Waste Management - Regulates waste disposal and recycling. It ensures proper waste management practices during the dam's construction and operation.
- Law on Cultural Heritage - Protects cultural and historical sites. It ensures that the dam project does not adversely affect cultural heritage sites.

The above list is not exhaustive. Full list of relevant legislation in the Republic of Serbia is provided in the Appendix C.

4.2 International Standards and Requirements (EBRD and other relevant)

The EBRD operates under the number of policies, including the Environmental and Social Policy (2019).

The EBRD requires that all projects it finances shall have an environmental and social appraisal that *"will be appropriate to the nature and scale of the project, commensurate with the level of environmental and social impacts and issues, and with due regard to the mitigation hierarchy"*.

The EBRD E&S Policy states that the EBRD categorizes each project to determine the nature and level of environmental and social investigations, information disclosure and stakeholder engagement required. This will be commensurate with the nature, location, sensitivity and scale of the project, and the significance of its potential adverse future environmental and social impacts. Past and present environmental and social issues and risks associated with project-related existing facilities will be subject to environmental and social appraisal regardless of the categorization.

4.2.1 EBRD E&S Performance Requirements

The Environmental and Social Policy (2019) is the key document that guides the EBRD's commitment to promoting "environmentally sound and sustainable development" in the full range of its investment and technical cooperation activities. It sets out how they implement this commitment in practice and on projects.

EBRD has adopted a comprehensive set of specific PRs for key areas of environmental and social sustainability that projects are required to meet. Central to the PRs is the application of the mitigation hierarchy and good international practice. As the Project will involve funding from EBRD, in addition to

compliance with the Republic of Serbia's legal requirements, the Project will also need to meet the following specific PRs defined in EBRD's E&S Policy:

EBRD Performance Requirement	Short Summary
PR1 - Assessment and Management of Environmental and Social Impacts and Issues;	<p>Requires clients to identify and manage environmental and social (E&S) risks and impacts through a structured assessment process and the establishment of an Environmental and Social Management System (ESMS).</p> <p>This PR ensures that E&S considerations are embedded across the entire project lifecycle, including planning, construction, operation, and decommissioning.</p>
PR2 - Labor and Working conditions;	<p>Ensures respect for workers' rights, fair treatment, non-discrimination, and safe and healthy working conditions, including protections for vulnerable groups, prohibition of child and forced labour, and mechanisms for grievance redress.</p> <p>Clients must also promote sound worker-management relationships and uphold international labour standards in direct operations and core supply chains.</p>
PR3 - Resource Efficiency and Pollution Prevention and Control;	<p>Aims to reduce project-related resource consumption and pollution through efficient practices and technologies, addressing air, water, and land emissions and promoting cleaner production.</p> <p>It also encourages climate change mitigation and adaptation by reducing greenhouse gas emissions and improving energy and water efficiency.</p>
PR4 – Health, Safety and Security;	<p>Focuses on protecting the health and safety of workers, affected communities, and consumers by implementing preventive and protective measures aligned with international standards.</p> <p>Clients must assess security arrangements to ensure they do not compromise human rights or cause harm, especially in conflict-prone or high-risk areas.</p>
PR5 - Land Acquisition, Involuntary Resettlement and Economic Displacement;	<p>Seeks to avoid or minimize displacement, ensure compensation at full replacement cost, and provide support to restore livelihoods and standards of living of displaced persons.</p> <p>Particular attention is given to vulnerable groups to ensure they are not disproportionately affected and are provided with meaningful support during resettlement.</p>
PR6 - Conservation and Sustainable Management of Living Natural Resources;	<p>Requires clients to conserve biodiversity, avoid critical habitat degradation, and sustainably manage natural resources, using the mitigation hierarchy and international good practice.</p> <p>This includes applying science-based approaches and, where necessary, biodiversity offsets to achieve no net loss or a net gain in biodiversity values.</p>
PR8 - Cultural Heritage;	<p>Aims to protect tangible and intangible cultural heritage from adverse impacts of projects and ensure stakeholder engagement and proper management of chance finds.</p> <p>Clients are required to consult with affected communities to identify and manage heritage that may have social, spiritual, or cultural significance.</p>
PR10 - Information Disclosure and Stakeholder Engagement.	<p>Promotes transparent, timely, and culturally appropriate engagement with stakeholders, particularly affected communities, and requires disclosure of E&S information and accessible grievance mechanisms.</p> <p>Effective stakeholder engagement is expected throughout the project cycle to support social license to operate and strengthen project outcomes.</p>

Performance Requirements 7 and 9 (Indigenes Peoples and Financial Intermediaries) are not applicable for this Project.

4.2.2 EU Directives and International Standards

Following key standards and legislation has been identified as applicable and relevant for the Project.

4.2.2.1 EU Directives (Key ones related to EIA and SEA):

- Directive 2001/42/EC – SEA Directive (Strategic Environmental Assessment) - requires environmental assessments for certain plans and programs to ensure high levels of environmental protection and sustainable development. For a flood alleviation dam project, it mandates evaluating potential environmental and social impacts during planning, promoting informed decision-making and minimizing adverse effects
- Directive 2011/92/EU, amended by Directive 2014/52/EU – EIA Directive (Environmental Impact Assessment) - mandates comprehensive environmental assessments for significant public and private projects. For a flood alleviation dam project, it requires evaluating potential environmental and social impacts, ensuring informed decision-making and minimizing adverse effects.
- Directive 92/43/EEC – Habitats Directive (Conservation of natural habitats, wild fauna and flora) - Protects natural habitats and wild fauna and flora. For a flood alleviation dam project, it ensures the protection of biodiversity and minimizes impacts on protected habitats and species.
- Directive 2009/147/EC – Birds Directive - Conserves all wild bird species and their habitats. It mandates measures to protect bird populations and habitats affected by the dam project.
- Directive 2000/60/EC – Water Framework Directive - Establishes a framework for water protection. It ensures the dam project maintains good water quality and sustainable water management practices.
- Directive 2007/60/EC – Floods Directive - Requires assessment and management of flood risks. It mandates measures to reduce flood risks and protect human health, the environment, and economic activities.
- Directive 2008/98/EC – Waste Framework Directive - Sets principles for waste management. It ensures proper waste handling and recycling during the dam's construction and operation.
- Directive 2002/49/EC – Environmental Noise Directive - Addresses noise pollution. It requires noise assessments and management plans to minimize noise impacts from the dam project.
- Directive 2008/50/EC – Ambient Air Quality Directive - Establishes air quality standards. It mandates measures to ensure the dam project does not adversely affect air quality.
- Directive 2004/35/EC – Environmental Liability Directive - Implements the polluter-pays principle for environmental damage. It ensures the dam project takes preventive and remedial actions for any environmental harm caused.

4.2.2.2 Occupational Safety, Equality, and Non-discrimination:

- Directive 1989/654/EEC – Minimum safety and health at the workplace - Establishes minimum safety and health requirements for workplaces. It ensures safe working conditions during the dam's construction and operation.
- Directive 1992/57/EEC – Safety at temporary/mobile construction sites - Sets safety and health requirements for temporary or mobile construction sites. It mandates safety measures to protect workers on the dam construction site.
- Directive 89/391/EEC – Framework on Safety and Health at Work - Introduces measures to improve safety and health at work. It ensures comprehensive risk assessments and preventive measures for the dam project.
- Directive 83/391/EEC – Risk Assessment at Work - Requires employers to conduct risk assessments to protect workers' safety and health. It mandates identifying and mitigating risks associated with the dam project.
- Directive 2006/54/EC – Equal treatment in occupational social security schemes - Ensures equal treatment for men and women in occupational social security schemes. It promotes gender equality in employment conditions related to the dam project.
- Directive 2000/43/EC – Anti-discrimination (race/ethnicity) - Implements the principle of equal treatment irrespective of racial or ethnic origin. It prohibits discrimination in employment and access to services for the dam project.
- Directive 2000/78/EC – Anti-discrimination (workplace) - Establishes a framework for equal treatment in employment and occupation. It ensures non-discriminatory practices in hiring and working conditions for the dam project.

- Directive 2004/113/EC – Equal access to goods/services (gender) - Ensures equal treatment between men and women in access to goods and services. It mandates gender equality in access to resources and services related to the dam project.
- Directive EC 2019/1936 – Road Safety Management (amending 2008/96) - Requires procedures for road safety impact assessments and audits. It ensures safe road infrastructure around the dam project.
- Proposal for Directive (EU) 2019/1937 – Corporate Sustainability Due Diligence - Focuses on identifying, preventing, and mitigating adverse impacts on human rights and the environment. It mandates sustainability practices in the dam project's operations.

4.2.2.3 *International Agreements & Conventions*

- The Espoo Convention – Environmental Impact in a Transboundary Context - Requires environmental impact assessments for projects likely to cause significant adverse transboundary environmental effects. For a flood alleviation dam project, it ensures that potential cross-border environmental impacts are evaluated and mitigated through international cooperation.
- Bern Convention (1979) – Conservation of European Wildlife and Natural Habitats - Aims to conserve wild flora and fauna and their natural habitats. It ensures that the dam project minimizes impacts on protected species and habitats, promoting biodiversity conservation.
- Convention on Biological Diversity (CBD) – Implied in application of SEA/EIA processes - Focuses on the conservation of biological diversity, sustainable use of its components, and fair sharing of benefits from genetic resources. It mandates integrating biodiversity considerations into the SEA/EIA processes for the dam project, ensuring sustainable development and protection of ecosystems.

4.2.2.4 *International Standards & Guidelines*

- IFC Performance Standards (2012) - Provides guidance on managing environmental and social risks and impacts. For a flood alleviation dam project, it ensures comprehensive risk management and stakeholder engagement throughout the project's lifecycle.
- IFC General Environmental, Health, and Safety Guidelines (2007) - Offers technical reference documents with examples of good international industry practice. It ensures the dam project adheres to high standards of environmental, health, and safety performance.
- World Bank Environmental and Social Framework (ESF) (2018) - Sets out the World Bank's commitment to sustainable development through ten Environmental and Social Standards. It ensures the dam project addresses environmental and social risks, promoting green, resilient, and inclusive development.
- World Bank's Operational Manual, BP4.37 – Safety of Dams - Provides procedures for ensuring dam safety. It mandates safety measures and independent reviews to ensure the dam's structural integrity and operational safety.
- EBRD Green Economy Transition Technical Guide (2022) - Supports the transition to low-carbon economies. It ensures the dam project aligns with climate resilience and sustainability goals.
- EBRD Paris Agreement Alignment Methodology - Provides a framework for aligning EBRD investments with the Paris Agreement goals. It ensures the dam project contributes to climate mitigation and adaptation.
- International Hydropower Association – Best practice on climate risk - Offers guidelines for assessing and managing climate risks in hydropower projects. It ensures the dam project incorporates climate resilience measures.
- ICOLD Guidelines – International Commission on Large Dams - Provides best practices for dam safety and management. It ensures the dam project adheres to international standards for safety and environmental protection.
- Canadian Dam Association Guidelines for Public Safety Around Dams (2011) - Addresses public safety risks associated with dam operations. It mandates measures to protect the public from hazards related to the dam.
- United States FEMA 64 – Emergency Planning for Dams - Provides guidelines for emergency planning and response for dam-related incidents. It ensures the dam project includes robust emergency preparedness plans.

- IUCN Red List (Global and Europe) – For biodiversity assessments - Identifies species at risk of extinction. It ensures the dam project considers impacts on biodiversity and implements conservation measures.
- EP4 – Equator Principles (2020) - Establishes a framework for managing environmental and social risks in project finance. It ensures the dam project adheres to high standards of environmental and social governance.
- EUFIWACC/JASPERS – Guidance on climate risk - Provides guidance on assessing and managing climate risks in infrastructure projects. It ensures the dam project incorporates climate risk management strategies.
- IFC Good Practice Handbook: Environmental Flows for Hydropower Projects (2018) - Offers best practices for maintaining environmental flows in hydropower projects. It ensures the dam project supports sustainable water management.
- IFC Handbook for Preparing a Resettlement Action Plan (2002) - provides guidance on planning and implementing resettlement in a way that protects the rights and livelihoods of displaced persons.

4.3 Project categorisation

EBRD categorises each project to determine the nature and level of environmental and social investigations, information disclosure and stakeholder engagement required. This will be commensurate with the nature, location, sensitivity and scale of the project, and the significance of its potential environmental and social impacts, which are new and additional.

Projects are typically classified into three main categories:

Category A	Category B	Category C
EBRD²		
A project is categorised A when it could result in potentially significant environmental and/or social impacts, including direct and cumulative environmental and social impacts, which are new and additional and, at the time of categorisation, cannot readily be identified or assessed. Projects categorised as A require a formalised and participatory environmental and social impact.	A project is categorised B when its potential environmental and/or social impacts are typically sitespecific, and/or readily identified and addressed through effective mitigation measures. The scope of environmental and social appraisal will be determined by EBRD on a case-by-case basis.	A project is categorised C when it is likely to have minimal or no potential adverse environmental and/or social impacts.

According to the EBRD's Environmental and Social Risk Categorisation List, Category A projects are those that involve developments on "greenfield" land or major extension or transformation-conversion projects, which may give rise to significant or long-term environmental and social risks and impacts. These projects require a full ESIA disclosure in line with EBRD Policy requirements and ESIA standards.

The Pambukovica Dam project fits these criteria as a greenfield project that involves the construction of a new dam and reservoir, which will have significant impacts on the environment and local communities. The project aims to provide flood protection and irrigation benefits, but it also requires careful management of potential adverse effects on biodiversity, water quality, and social aspects.

Furthermore, EBRD E&S Policy defined the “*Large dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds 10 million cubic metres.*”. The Policy defines “large dam” in line with the International Commission on Large Dams (ICOLD), as a dam with a height of 15 metres or more from the foundation. Although Pambukovica Dam has been designed for storing approximately 8.15 million cubic meters, its height exceeds threshold of 15m defined by ICOLD.

² EBRD Environmental and Social Policy 2019

Considering the above, Pambukovica Dam Project is categorised as “Category A” under the EBRD Environmental and Social Policy.

4.4 Project standards

All relevant national legislation and international standards relevant for environmental and social aspects of the development of the flood alleviation dam project, with additional purpose of irrigation and ensuring ecological flow, are considered as Project Standards.

In line with presented in this Chapter (Legislation Framework), all legislation and standards deemed applicable are forming the part of the Project Standards. These include, but are not limited to:

- National legislation (**Chapter 4.1.2**).
- EBRD E&S Policy and pertaining Performance Requirements (**Chapter 4.2.1**).
- EU Directives, relevant for SEA and EIA (**Chapter 4.2.2.1**)
- EU Directives relevant for Occupational Safety, Equality, and Non-discrimination (**Chapter 4.2.2.2**)
- International Agreements and Conventions (**Chapter 4.2.2.3**)
- International Standards and Guidelines (**Chapter 4.2.2.4**)

Extensive list of relevant legislation and standards are presented in the Appendix C.

Appendix A

Scope of the ESIA

A.1 ESIA Scoping Opinion / Appraisal

Full ESIA Scoping Opinion / Appraisal Table is presented below illustrating the key potential impacts of the Project and identifying whether the environmental or social topics are scoped in or out in the ESIA. The scoping appraisal has defined topics that will be taken forward for detailed assessment as part of the full ESIA.

Table is not designed to provide an extensive list of all potential impacts and those listed are designed to provide a high-level summary for the purposes of informing a scoping opinion.

In the context of construction or operation phases, SCOPED IN signifies that a particular aspect is expected to have an impact on the relevant topic and will be addressed in the ESIA. SCOPED OUT indicates that the topic will not be affected. However, it is important to clarify that this exclusion from consideration during construction or operation does not mean that the topic is excluded from the ESIA report. Instead, it implies that the topic will be appropriately addressed within the scope of the assessment.

Topic	Potential Impacts	Scoped IN/OUT		Summary Approach to ESIA
		Construction	Operation	
Air Quality	Increased levels of air pollution due to emissions from construction machinery and transportation vehicles, as well as from the raising of dust.	IN	OUT	This Chapter will be thoroughly addressed in the ESIA. Mitigation measures and monitoring requirements will be included in the ESMP. Contractor will be responsible to further detail mitigation measures in the CESMP.
Noise	Potential impact on noise levels during the construction phase, from machinery and transportation vehicles.	IN	OUT	This Chapter will be thoroughly addressed in the ESIA. Mitigation measures and monitoring requirements will be included in the ESMP. Contractor will be responsible to further detail mitigation measures in the CESMP.
Soil and Groundwater	Potential impact (pollution) during the construction phase as result of machinery malfunctioning, hydrocarbon spillage or inadequate management of material.	IN	IN	This Chapter will be thoroughly addressed in the ESIA. Findings from geotechnical assessment cross-referenced and used to further inform this section. Mitigation measures and monitoring requirements will be included in the ESMP. Contractor will be responsible to further detail mitigation measures in the CESMP.
Surface water	Potential impact on water quality (pollution) and water levels/quantity during construction and operation phase.	IN	IN	This Chapter will be thoroughly addressed in the ESIA. Cross-references to the Biodiversity Assessment and the Hydrology, Hydrogeology, and Hydrogeomorphology Assessment will be made. In parallel, findings from these assessments will be used to inform this chapter. Mitigation measures and monitoring requirements will be included in the ESMP. Contractor will be responsible to further detail mitigation measures in the CESMP. Operational Plan will be developed as part of this Assignment. Surface Water ESIA Chapter will be used to inform Operation Plan. Operational Plan will contain relevant mitigation measures to limit impacts on surface water.
Waste and Wastewater	Generation of waste and wastewater due to activities during both construction and operation phase.	IN	IN	This Chapter will be thoroughly addressed in the ESIA. Geotechnical study report will be cross-referenced and used to further inform this section. Mitigation measures and monitoring requirements will be included in the ESMP.

				Contractor will be responsible to further detail mitigation measures in the CESMP.
Cultural Heritage	Loss of access or damage caused to local archaeological sites, cultural sites, disruption to intangible cultural heritage during construction.	IN	OUT	This Chapter will be thoroughly addressed in the ESIA. Institute for Protection of Cultural Monuments (IPCM) in Valjevo (relevant Authority for both schemes) has been consulted and mitigation measures have been proposed. Contractor will be responsible to further detail mitigation measures in the CESMP.
Occupational Health and Safety	Potential impact during construction and operation phase on the workers.	IN	IN	Potential impacts risk for workers engaged in the construction and operation and maintenance phase will be in detail assessed in the ESIA, mitigation and control measures defined/proposed. ESIA will include further requirements for development of the OHSMP (as a part of the CESMP or a standalone document). Contractor will be responsible to further detail mitigation measures in the CESMP
Community Health and Safety	Potential impact on community members during construction and operation phase.	IN	IN	Potential impacts risk for community in the construction and operation and maintenance phase will be in detail assessed in the ESIA, mitigation and control measures defined/proposed. ESIA will include further requirements for development of the Community Safety and Security Management Plan (as a part of the CESMP or a standalone document for construction phase) and as part of Operational Management Plan. Contractor will be responsible to further detail mitigation measures in the CESMP.
Traffic Safety	Potential impacts on workers and community during construction phase.	IN	OUT	Potential impacts risk for workers engaged in the construction and operation and maintenance phase will be in detail assessed in the ESIA, mitigation and control measures defined/proposed. ESIA will include further requirements for development of the TMP (as a part of the CESMP or a standalone document). Contractor will be responsible to further detail mitigation measures in the CESMP.
Emergency Response	Risks and impacts on workers and community relevant for the emergency scenarios.	IN	IN	Potential impacts risk for workers engaged in the construction phase will be in detail assessed in the ESIA, mitigation and control measures defined/proposed. ESIA will include further requirements for development of the Construction Emergency Preparedness and Response Plan (as a part of the CESMP or a standalone document). Contractor will be responsible to further detail mitigation measures in the CESMP. Operational emergency response will be covered as part of the Dam Safety and Emergency Preparedness and Response Plan in ESIA. The Consultant will prepare detailed template of Emergency Preparedness and response for the operation phase as part of this Assignment.
Biodiversity	Permanent habitat loss/change due to all envisaged Project works (dam construction, reservoir commissioning, access roads, and irrigation pipework).	IN	IN	ESIA Biodiversity Chapter will include: <ul style="list-style-type: none"> • Further surveys • Baseline (including survey methodologies, limitations, and results/analysis) • Critical Habitat (an PBF) Assessment • Appropriate Assessment Screening (HRA Stage 1) and potential detailed (Stage 2) assessment, if required.
	Temporary habitat loss associated with construction (including construction compounds and access roads).	IN	OUT	
	Direct loss of river aquatic habitats, a section of which will lost and replaced with lentic reservoir habitat.	IN	OUT	

	Pollution/degradation of terrestrial habitats in proximity the construction zones.	IN	OUT	<ul style="list-style-type: none"> Biodiversity Impact Assessment (using Source-Pathway-Receptor methodology including mitigation and monitoring requirements) Biodiversity Action Plan (BAP) – this will outline the requirements for future monitoring and assessment covering pre-construction, construction and operation. Cumulative Impact Assessment (Biodiversity element) Ecosystems Services Assessment (Biodiversity element)
	Pollution/degradation of freshwater habitats downstream of the construction zones.	IN	OUT	
	Introduction and/or spread of invasive non-native species.	IN	IN	
	Disturbance/displacement of mobile terrestrial species (birds, bats, amphibians, mammals, terrestrial invertebrates) due to construction activities giving rise to noise/vibration and increased traffic levels.	IN	OUT	
	Disturbance/displacement of mobile aquatic species (aquatic invertebrates, including freshwater mussels and fish) due to construction activities giving rise to noise/vibration and pollution.	IN	OUT	
	Effects of altered hydrology on freshwater biodiversity, both adverse (reduction in net river flows downstream) and beneficial (increased resilience to summer drought through delivery of a minimum summer environmental flow)	OUT	IN	
	Effects of altered water quality on freshwater biodiversity; particularly nutrient enrichment during early reservoir.	OUT	IN	
	Effects of altered fluvial geomorphology on freshwater biodiversity; changes in sediment composition and transport.	IN	IN	
	Effects of sediment flushing of on freshwater biodiversity Affect Disturbance/displacement of mobile aquatic species (aquatic invertebrates, including freshwater mussels and fish)	OUT	IN	
	Severance of terrestrial habitat continuity and the effect of mobile terrestrial species.	IN	IN	
	Severance of freshwater habitat continuity and the effect of mobile freshwater species.	IN	IN	
	Beneficial effect of reservoir creation of water dependent terrestrial species.	OUT	IN	
PR1	Socio economic impact assessment of the affected communities	IN	IN	<p>Reliance on secondary desktop data – statistic information and other publicly available documentation.</p> <p>Primary data collection to include gender segregated data:</p> <ul style="list-style-type: none"> Demographic data (age, household structure, ethnicity)

				<ul style="list-style-type: none"> Economic data (education, employment status for all household members) Reliance on agriculture Reliance on ecosystems services Reliance on the local road being reconstructed as part of the project <p>To include identification and assessment of specific gender impacts. To identify risks to human rights. To identify any groups or individuals particularly vulnerable to poverty risks.</p>
PR2	Assessment of the required workforce	IN	OUT	Number and skill set of the workforce to be used during construction
	Capacity of the local workforce and local employment opportunities	IN	OUT	Assess the secondary benefits from the project by engaging the local workforce during construction.
	Influx of workers – workers accommodation and resilience of the host community	IN	OUT	In case of workers influx assess the capacity of the host community to provide accommodation for the workforce without causing disruption to the market. Alternatively set out requirements for the workers accommodation at camp.
	Human rights violations within contractors and subcontractors' organizations. Violations within the supply chain.	IN	OUT	Assessment of human right violations occurring within these organization, relative to the implementation of the project. Review of management systems and procedures. Outline of the requirements for managing identified risks.
	Contractor Management	IN	OUT	Review of management systems and procedures. Outline of the requirements for managing identified risks.
	Supply chain management	IN	OUT	Review of management systems and procedures. Outline of the requirements for managing identified risks.
PR5	Loss of property	IN	IN	Confirm the data from expropriation study through household survey of affected land owners.
	Loss of access to property	IN	IN	Desktop review of documentation and household survey to confirm potential limitations to accessing private property due to project related activities.
	Loss of ability to continue agricultural production (primary source of income, secondary source of income or household supplement)	IN	OUT	Review opportunities to reestablish agricultural production through the review of available agricultural land on the market within the affected communities. Household survey to identify any limitations to the household to continue agricultural production.
	Physical displacement	IN	OUT	Confirm whether there was any physical displacement. Interview owners of identified residential structures to assess the impact and identify any additional mitigation measures.
	Economic displacement	OUT	OUT	No business identified within the affected area (excluding agriculture).
	Loss of access to public property	IN	OUT	Desktop review of documentation and household survey to confirm potential limitations to accessing public property and public services due to project related activities.
	Ecosystem services	IN	IN	Household survey to identify if any of the affected households use the project affected area to reap benefits from ecosystem services and what impact that has on their household's economic status.

				Contact with various associations in the area (beekeepers, hunters, fishermen, etc.) to discuss potential impact on ecosystem services to the wider community (in addition to the PAPs).
	Active consultation and community participation	IN	IN	Desktop review of statistical data. Household survey to include specific questions regarding poverty risks to identify vulnerable groups and individuals and suggest additional tailored support based on their vulnerability.
PR10	Lack of consultations with local community on design options for the irrigation system	IN	OUT	Identify gaps in the consultation and stakeholder engagement process and develop a strategy for the consultations to support Srbijavode.
	Timely disclosure of information	IN	IN	Identify activities conducted to date with regards to disclosure of information, Confirm public's awareness of disclosed documents through interviews.
	Active consultation and community participation	IN	IN	Stakeholder engagement strategy for the ESIA development stage and for the next stages in the process.

Appendix B

Document Register

B.1 Document Register

	File name ENG	Full name	Date Received/Sent	From
Conceptual design of the dam and road	Conceptual design of the dam and road	Conceptual design of the dam and road	17.06.2024	Srbijavode
IDR brana sa akumulacijom Pambukovica	Pambukovica Dam with Accumulation	Conceptual Design of Pambukovica Dam with Accumulation	17.06.2024	Srbijavode
Glavna sveska	Main Volume	17130-PII-00 Glavna sveska r.1	17.06.2024	Srbijavode
Hidroloska studija	Hydrological study	17130-PII-02 Hidroloska studija	17.06.2024	Srbijavode
Projekat saobracajnica	Traffic project	17130-PII-02-S Projekat saobracajnica r.1	17.06.2024	Srbijavode
Hidrotehnicki projekat	Hydrotechnical project	17130-PII-03 Hidrotehnicki projekat	17.06.2024	Srbijavode
Elektroenergetski projekat	Electrical power project	17130-PII-04 Elektroenergetski projekat r.1	17.06.2024	Srbijavode
Spisak katastarskih pacela	Cadastral parcel list	SPISAK KATASTARSKIH PARCELA PAMBUKOVICA r.1	17.06.2024	Srbijavode
IDR Put	Road		17.06.2024	Srbijavode
Glavna sveska Pambukovica	Main Volume Pambukovica	0. IDR - Glavna sveska Pambukovica	17.06.2024	Srbijavode
Projekat saobracajnica	Traffic project	2-2. IDR - Projekat saobracajnica	17.06.2024	Srbijavode
Koceljeva and Pambukovica Dams TESDD Report 101220 Final Issue	Koceljeva and Pambukovica Dams TESDD Report 101220 Final Issue	Koceljeva and Pambukovica Dams TESDD Report 101220 Final Issue	17.06.2024	Srbijavode
Environmental impact assessment	Environmental impact assessment	19049-203-Studija-potpisano	17.06.2024	Srbijavode
Netechnicki rezime	Nontechnical resume	19049-203-Netechnicki rezime-potpisano	17.06.2024	Srbijavode
PGD Dam Pambukovica - Phase 1 dam and reservoir facilities	PGD Dam Pambukovica - Phase 1 dam and reservoir facilities	PGD Dam Pambukovica - Phase 1 dam and reservoir facilities	17.06.2024	Srbijavode
Glavna sveska	Main Volume	22003-I-A-00_Glavna sveska	17.06.2024	Srbijavode

Arhitektura	Architecture	22003-I-A-01_Arhitektura	17.06.2024	Srbijavode
Konstrukcije	Construction	22003-I-A-02-1_Konstrukcije	17.06.2024	Srbijavode
Geotehnicke konstrukcije	Geotechnical construction	22003-I-A-02-2_Geotehničke konstrukcije	17.06.2024	Srbijavode
Pristupni putevi	Access roads	22003-I-A-02-3_Pristupni putevi	17.06.2024	Srbijavode
Organizacija gradjenja	Construction organization	22003-I-A-02-4_Organizacija građenja	17.06.2024	Srbijavode
Tehnicko osmatranje	Technical observation	22003-I-A-02-5_Tehničko osmatranje	17.06.2024	Srbijavode
Hidrotehnika	Hydraulic	22003-I-A-03_Hidrotehnika	17.06.2024	Srbijavode
Elektroenergetske instalacije	Electrical power installations	22003-I-A-04_Elektroenergetske instalacije	17.06.2024	Srbijavode
TK I signalne instalacije	Signal installations	22003-I-A-05-1_TK i signalne instalacije-Upravljanje	17.06.2024	Srbijavode
Masinske instalacije	Mechanical installations	22003-I-A-06_Mašinske instalacije	17.06.2024	Srbijavode
Elaborat o izvršenim geodetskim radovima	Elaborate on completed geodetic works	22003-I-E2_Elaborat o izvršenim geodetskim radovima	17.06.2024	Srbijavode
Elaborat zaštite od požara	Study of fire protection	22003-I-E3_Elaborat zaštite od požara	17.06.2024	Srbijavode
Elaborat energetske efikasnosti	Energy efficiency report	22003-I-E4_Elaborat energetske efikasnosti	17.06.2024	Srbijavode
Elaborat o geotehničkim uslovima izgradnje	Geotechnical conditions report	22003-I-E1_Elaborat o geotehničkim uslovima izgradnje	17.06.2024	Srbijavode
Aneksi	Anex	22003-I-E1-Aneksi	17.06.2024	Srbijavode
Graficka dokumentacija	Graphic documentation	22003-I-E1-Grafička dokumentacija	17.06.2024	Srbijavode
Tekstualna dokumentacija	Text documentation	22003-I-E1-Tekstualna dokumentacija	17.06.2024	Srbijavode
Accumulation phase 2	Accumulation phase 2		17.06.2024	Srbijavode
Geotehnika	Geotechnics	22003-I-B-02_Geotehnika	17.06.2024	Srbijavode
Hidrotehnicke instalacije	Hydrotechnical installations	22003-I-B-03_Hidrotehničke instalacije	17.06.2024	Srbijavode
TK I signalne instalacije	Signal installations	22003-I-B-05_TK i signalne instalacije	17.06.2024	Srbijavode

Pripremni radovi	Preparation works	22003-I-B-10_Pripremni radovi	17.06.2024	Srbijavode
Reservoir dam with feasibility study	Reservoir dam with feasibility study		17.06.2024	Srbijavode
Glavna sveska	Main volume	Sveska PV-00 - Glavna sveska	17.06.2024	Srbijavode
Hidrotehnicki deo	Hydrotechnical section	Sveska PV-01 - Hidrotehnicki deo	17.06.2024	Srbijavode
Konstrukcije	Structures	Sveska PV-02-1 - Konstrukcije	17.06.2024	Srbijavode
Nasuta brana	Embankment dam	Sveska PV-02-2 - Nasuta brana	17.06.2024	Srbijavode
Oskultacije	Oscillations	Sveska PV-02-3 - Oskultacije	17.06.2024	Srbijavode
Organizacija gradjenja	Construction organization	Sveska PV-02-4 - Organizacija gradjenja	17.06.2024	Srbijavode
Projekat elektroenergetskih instalacija	Electrical power installations project	Sveska PV-04 - Projekat elektroenergetskih instalacija	17.06.2024	Srbijavode
Projekat telekomunikacionih instalacija	Telecommunication installations project	Sveska PV-05 - Projekat telekomunikacionih instalacija	17.06.2024	Srbijavode
Projekat masinske i hidromehanicke opreme	Mechanical and hydromechanical equipment project	Sveska PV-06 - Projekat masinske i hidromehanicke opreme	17.06.2024	Srbijavode
Projekat antierozionih radova u slivu	Anti-erosion works project in the catchment area	Sveska PV-11 - Projekat antierozionih radova u slivu	17.06.2024	Srbijavode
Hidroloska studija	Hydrological study	Sveska PV-12 - Hidroloska studija	17.06.2024	Srbijavode
Sintezni geoloski elaborat	Synthesis geological report	Sveska PVI-00 - Sintezni geoloski elaborat	17.06.2024	Srbijavode
Studija opravdanosti	Feasibility study	Sveska PVII-00 - Studija opravdanosti	17.06.2024	Srbijavode
Conceptual design of section DP 21 along the Pambukovica reservoir	Conceptual design of section DP 21 along the Pambukovica reservoir		17.06.2024	Srbijavode
Glavna sveska	Main volume	Sveska 0_Glavna sveska	17.06.2024	Srbijavode
Projekat konstrukcija	Structural design project	Sveska 2.1_Projekat konstrukcija	17.06.2024	Srbijavode
Projekat saobraćajnica	Road design project	Sveska 2.2_Projekat saobraćajnica	17.06.2024	Srbijavode
Projekat odvodnjavanja	Drainage project	Sveska 3_Projekat odvodnjavanja	17.06.2024	Srbijavode

Projekat saobracajne signalizacije	Traffic signal project	Sveska 8.1_Projekat saobracajne signalizacije	17.06.2024	Srbijavode
Projekat privremene saobracajne signalizacije	Temporary traffic control project	Sveska 8.2_Projekat privremene saobracajne signalizacije	17.06.2024	Srbijavode
River profiles downstream of the Dam	River profiles downstream of the Dam	Pambukovica_rečni profili nizvodno od brane	04.07.2024	Energoprojekt
Brana Pambukovica - MPF	Brana Pambukovica - MPF	Brana Pambukovica - MPF	08.07.2024	Energoprojekt
RHMZ podaci	RHMZ podaci	RHMZ podaci	16.07.2024	Srbijavode
Geology - land slip risk	Geology - land slip risk	Geotechnical investigations and its analysis to determine land-slip risk and mitigation measures.	17.07.2024	Beoexpert
Geology Grouting for karst	Geology Grouting for karst	Geology Grouting for karst	19.07.2024	Beoexpert
Hydrological data received from RHMZ	Hydrological data received from RHMZ	Hydrological data received from RHMZ	06.09.2024	RHMZ
Water Quality Results August 2024 - Anahem	Water Quality Results August 2024 - Anahem	Water Quality Results August 2024 - Anahem	06.09.2024	Anahem
Area of influence - topography, hydrography and water facilities	Area of influence - topography, hydrography and water facilities	Area of influence - topography, hydrography and water facilities	11.09.2024	Srbijavode
Hydrography	Hydrography	Hydrography	11.09.2024	Srbijavode
All watercourses	All watercourses	All watercourses	11.09.2024	Srbijavode
Basins of water bodies	Basins of water bodies	Basins of water bodies	11.09.2024	Srbijavode
Water bodies	Water bodies	Water bodies	11.09.2024	Srbijavode
Water of the first order	Water of the first order	Water of the first order	11.09.2024	Srbijavode
Topographic data	Topographic data	Topographic data	11.09.2024	Srbijavode
Facilities	Facilities	Facilities	11.09.2024	Srbijavode
Hospitals and schools	Hospitals and schools	Hospitals and schools	11.09.2024	Srbijavode
Populated places	Populated places	Populated places	11.09.2024	Srbijavode
Traffic	Traffic	Traffic	11.09.2024	Srbijavode

Railway network	Railway network	Railway network	11.09.2024	Srbijavode
Road network	Road network	Road network	11.09.2024	Srbijavode
Water facilities	Water facilities	Water facilities	11.09.2024	Srbijavode
Channels	Channels	Channels	11.09.2024	Srbijavode
Embankments, regulations and coastal fortifications	Embankments, regulations and coastal fortifications	Embankments, regulations and coastal fortifications	11.09.2024	Srbijavode
Pumping stations	Pumping stations	Pumping stations	11.09.2024	Srbijavode

Appendix C

Summary of Regulatory Requirements

C.1 Summary of Regulatory Requirements

Laws
Law on Strategic Environmental Impact Assessment (Official Gazette of RS, no. 135/2004, 88/2010 and 94/2024)
Law on Environmental Impact Assessment (Official Gazette of RS, No. 135/2004, 36/2010 and 94/2024)
Law on Environmental Protection ("Official Gazette of the RS", no. 135/2004, 36/2009, 36/, 72/2009, 43/2011, 14/2016, 76/2018, 95 /2018, 95/2018 and 94/2024)
Law on Planning and Construction (Official Gazette of RS, no. 72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019, 9/2020, 52/2021 and 62/2023)
Law on Nature Protect ("Official Gazette of RS ", br. 36/2009, 88/2010, 91/2010, 14/2016, 95/2018 and 71/2021).
Law on Nature Conservation ("Official Gazette of RS", no. 36/2009, 88/2010, 91/2010 - amended, 14/2016, 95/2018 - other laws and 71/2021.)
Law on Forests ("Official Gazette of RS", No. 30/10, 93/12, 89/15 and 95/18)
Law on Air Protection ("Official Gazette of RS", No. 36/09, 10/13 and 26/2021)
Law on Environmental Noise Protection ("Official Gazette of RS", No. 36/09, 88/10 and 96/2021)
Law on Soil Protection ("Official Gazette of RS", 112/15)
Law on Waste Management ("Official Gazette of RS", No. 36/09, 88/10, 14/16, 95/18 and 35/2023)
Law on Packaging and Packaging Waste ("Official Gazette of RS", No. 36/09 and 95/18)
Law on Explosive Substances, Flammable Liquids and Gases ("Official Gazette of the SRS", No. 44/77, 45/85 and 18/89 and "Official Gazette of he RS", No. 53/93, 67/93, 48/94, 101/05 and 54/15)
Law on Waters (Official Gazette of the RS, No. 31/2019)
Law on the Spatial Plan of the RS from 2010 to 2020 ("Official Gazette of the RS", No. 88/10)
Law on Cultural Heritage ("Official Gazette of the RS", 71/94, 52/11 and 99/11)
Law on Occupational Safety and Health ("Official Gazette of RS", No. 101/05, 91/15, 113/17 and 35/2023)
Labour Law (Official Gazette of the RS No. 24/2005, 61/2005, 54/2009, 32/2013, 75/2014, 13/2017, 113/2017, 95/2018)
Law on Amicable Resolution of Labour Disputes (Official Gazette of the RS No. 125/2004, 104/2009, 50/2018)
Law on Socio-economic Council (Official Gazette of the RS No. 125/2004)
Law on the Prevention of Harassment at Work (Official Gazette of the RS No. 36/10)
Law on Strikes (Official Gazette of the FRY No. 29/96 and of RS No. 101/2005, 103/2012)
Law on Employment and Unemployment Insurance (Official Gazette of the RS No. 36/2009, 88/2010, 38/2015, 113/2017 and 49/2021)
Pension and Disability Insurance Law (Official Gazette of the RS No. 34/2003, 64/2004, 84/2004, 85/2005, 101/2005, 63/2006, 05/2009, 107/2009, 101/2010, 93/2012, 62/2013, 108/2013, 75/2014, 142/2014, 73/2018, 46/2019, 86/2019, 62/2021, 125/2022, 138/2022, 76/2023 and 94/2024)
Law on Preventing Discrimination Against Persons with Disabilities (Official Gazette of the RS No. 33/2006, 13/2016)
Anti-discrimination Law (Official Gazette of the RS, No. 22/2009 and 52/2021)
Law on Gender Equality (Official Gazette of the RS No. 104/2009 and 52/2021)
Expropriation Law (Official Gazette of the RS, No. 53/95, 16/2001, 20/2009, 55/2013, 106/2016)
Law on General Administrative Procedure (Official Gazette of the RS No. 18/2016, 95/2018 and 2/2023)
Law of Contracts and Torts (Official Gazette of the RS, No. 29/78, 38/85, 45/89, 57/89, 31/93, 1/2003, 18/2020)
Law on the approval of the agreement on the conservation of bat populations in Europe ("Official Gazette of RS - International Agreements", No. 13/2018)
Law on Agricultural Land (Official Gazette of the RS, No. 62/2006, 65/2008, 41/2009, 112/2015, 80/2017 and 95/2018)
Law on Public Information and the Media (Official Gazette of the RS, No. 83/2014, 58/2015, 12/2016 and 92/2023)

Law on Energy ("Official Gazette of RS", no. 145/2014, 95/2018, 40/2021, 35/2023, 62/2023 and 94/2024)
Law on the Fundamentals of Property Relations ("Official Journal of the SFRY" No 6/80, 36/90, FRY No. 29/96 and RS No. 115/05)
Law on Plant Health ("Official Gazette of RS", No. 41/09 and 17/19)
Law on Territorial Organization (Official Gazette of RS No. 129/2007, 18/2016, 47/2018 and 9/2020)
Law on Local Self Government (Official Gazette of RS, No. 129/2007 83/2014, 101/2016, 47/2018 and 111/2021)
Law on Free Access to Information of Public Importance (Official Gazette of the RS, No.120/2004, 54/2007, 36/2010 and 105/2021)
Law on Disaster Risk Reduction and Emergency Management ("Official Gazette of RS", No. 87/18)
Law on Fire Protection ("Official Gazette of RS", No. 111/09, 20/15, 87/18, and 87/18)
Law on Mining and Geological Exploration ("Official Gazette of the Republic of Serbia", no. 101/2015, 95/2018 - other law, and 40/2021)
Law on Chemicals ("Official Gazette of RS", No. 36/09, 88/10, 92/11, 93/12, and 25/15)
Law on Road Traffic Safety ("Official Gazette of the Republic of Serbia", No. 41/2009, 53/2010, 101/2011, 32/2013 - decision of the Constitutional Court, 55/2014, 96/2015 - other law, 9/2016 - decision of the Constitutional Court, 24/2018, 101/2018, 81/41/ 87/2018, 23/2019, 128/2020 - other law, 76/2023 and 19/2025)
Law on Obligatory Social Insurance Contributions (Official Gazette of the RS No. 84/2004, 61/2005, 62/2006, 5/2009, 52/2011, 101/2011, 7/2012, 8/2013, 47/2013, 108/2013, 6/2014, 57/2014, 68/2014, 5/2015, 5/2016, 7/2017, 113/2017, 7/2018, 95/2018, 4/2019, 86/2019, 5/2020 153/2020, 6/2021., 44/2021, 118/2021, 10/2022, 138/2022, 6/2023, 92/2023, 6/2024, 94/2024 and 8/2025)
Directives
SEA Directive – Strategic Environmental Assessment (Directive 2001/42/EC)
EIA Directive – Environmental Impact Assessment (Directive 2014/52/EU)
Water Framework Directive 2000/60/EC
Waste Framework Directive 2008/98/EC
Annex II and IV of EU Habitats Directive (for Bats, Amphibians, Fish, Aquatic Macroinvertebrates)
Annex IV of EU Habitats Directive (for Reptiles)
Directive 2008/50/EC on ambient air quality and cleaner air for Europe.
Directive 1989/654/EEC on minimum safety and health requirements for the workplace.
Directive 1992/57/EEC on the implementation of minimum safety and health requirements at temporary and mobile work sites
Directive relating to the assessment and management of environmental noise (Directive 2002/49/EC)
Conservation of natural habitats and of wild fauna and flora (Habitat Directive 92/43 EEC)
Framework Directive on Safety and Health at Work (Directive 89/391 EEC)
Directive 2006/54/EC on equal treatment of men and women in occupational social security schemes
Directive 2000/43/EC against discrimination on grounds of race and ethnic origin
Directive 2000/78/EC against discrimination at work on grounds of religion or belief, disability, age or sexual orientation
Directive 83/391/EEC Guidance on risk assessment at work.
Directive 2004/113/EC on equal treatment between men and women in the access to and supply of good and services
Proposal for a Directive of the European Parliament on Corporate
Sustainability Due Diligence and amending Directive (EU) 2019/1937
Directive for road safety management (EC 2019/1936, amendment of EC 2008/96)
Directive 2009/147/EC on the conservation of wild birds
Floods Directive (2007/60/EC)
The Environmental Liability Directive (2004/35/EC)

International Standards and Guidelines
European Bank for Reconstruction and Development Environmental and Social Policy 2019
International Commission on Large Dams (ICOLD) Guidelines
Environmental and Social Performance Standards (World Bank, 2018)
International Finance Corporation (IFC) Performance Standards (2012)
IFC Performance Standards on Environmental and Social Sustainability (2012)
EPs (EP4) (2020)
IFC General Environmental, Health and Safety Guidelines (2007)
The Espoo Convention
Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention, 1979)
IUCN Global List of Threatened Species at Global Level (2019)
IUCN Red List of Threatened Species in Europe (2019)
World Bank's Operational Manual, BP4.37 – Safety of Dams
International Commission on Large Dams (ICOLD), Dam Safety Management, 2017
United States Federal Dam Safety Commission (US FDSC): FEMA 64 guide for preparation of EPPs for dams, 2013
Global Analysis of Regulatory Frameworks for the Safety of Dams and Downstream Communities, the World Bank, 2020
Canadian Dam Association Guidelines for Public Safety Around Dams, 2011.
IFC Good Practice Handbook 'Environmental Flows for Hydropower Projects: Guidance for the Private Sector in Emerging Markets' (2018)
Canadian Dam Association Guidelines for Public Safety Around Dams (2011)
EBRD Green Economy Transition Technical Guide (2022)
EBRD Paris Agreement alignment methodology
Guidance on climate risk assessment from EUFIWACC, JASPERS and industry-led best practice guidance including the International Hydropower Association
Other relevant regulation
Regulation on Determining the List of Projects for Which an Environmental Impact Assessment is Mandatory and the List of Projects for Which an Environmental Impact Assessment May be Required ("Official Gazette of RS", No. 114/08);
Regulation on Emission Limit Values for Pollutants in Waters and Deadlines for Achieving Them ("Official Gazette of RS", No. 67/11, 48/12, and 1/16);
Regulation on Limit Values for Pollutants in Surface and Ground Waters and Sediments and Deadlines for Achieving Them ("Official Gazette of RS", No. 50/12)
Regulation on Limit Values for Priority and Priority Hazardous Substances Polluting Surface Waters and Deadlines for Achieving Them ("Official Gazette of RS", No. 24/14);
Regulation on Water Classification ("Official Gazette of SFRY", No. 5/68);
Regulation on Classification of Watercourses ("Official Gazette of SFRY", No. 5/68)
Regulation on Noise Indicators, Limit Values, Methods for Assessing Noise Indicators, Disturbance, and Harmful Effects of Noise in the Environment ("Official Gazette of RS", No. 75/10);
Regulation on Limit Values for Pollutants, Harmful, and Dangerous Substances in Soil ("Official Gazette of RS", No. 30/18 and 64/19);
Regulation on Systematic Monitoring of Soil Condition and Quality ("Official Gazette of RS", No. 73/19);
Regulation on Air Quality Monitoring Conditions and Requirements ("Official Gazette of RS", No. 11/10, 75/10, and 63/13);
Regulation on Products that Become Special Waste Streams After Use, the Form for Daily Records of Quantity and Type of Produced and Imported Products and Annual Report, Method and Deadlines for Submitting Annual Reports, Payment Obligations, Calculation Criteria, Amount, and Method of Calculation and Payment of Fees ("Official Gazette of RS", No. 54/10, 86/11, 15/12, 41/13, 3/14, 81/2014, 31/2015, 44/2016, 43/2017, 45/2018, 67/2018, and 95/2018);

Regulation on Classification of Facilities, Activities, and Land into Fire Risk Categories ("Official Gazette of RS", No. 76/10);
Regulation on Control of Use and Trade of Wild Flora and Fauna ("Official Gazette of RS", No. 31/05, 45/05, 22/07, 38/08, 9/10, 69/11, and 95/18 law);
Regulation on Ecological Network ("Official Gazette of RS", No. 102/10);
Regulation on Protection Regimes ("Official Gazette of RS", No. 31/12);
Regulation on Determining Locations for Meteorological and Hydrological Stations of State Networks and Protection Zones Around These Stations, as well as Types of Restrictions That Can Be Imposed in Protection Zones ("Official Gazette of RS", No. 34/13);
Regulation (EU) 2020/852 (Taxonomy) on the establishment of a framework to facilitate sustainable investment including date of entry into force and its implementing and delegated acts;
Rulebook on the Content of the Environmental Impact Assessment Study ("Official Gazette of RS", No. 69/05);
Rulebook on the Type and Quantity of Hazardous Substances Based on Which the Accident Prevention Plan is Prepared ("Official Gazette of RS", No. 34/19);
Rulebook on the Content of the Accident Prevention Policy and the Content and Methodology for Preparing the Safety Report and Accident Prevention Plan ("Official Gazette of RS", No. 41/10)
Rulebook on the Content of Information on Hazards, Measures, and Procedures in Case of Accidents (Official Gazette of RS", No. 18/12)
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Rulebook on Technical Norms for Fire Hydrant Network Installations (Official Gazette of RS", No. 3/18)
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Rulebook on Technical Norms for Low Voltage Electrical Installations ("Official Gazette of SFRJ", No. 53/88 and 54/88, and "Official Gazette of SRJ", No. 28/95)
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Rulebook on the Hygienic Safety of Drinking Water ("Official Gazette of SRJ", No. 42/98 and 44/99, and "Official Gazette of RS", No. 28/19)
Rulebook on Permissible Quantities of Hazardous and Harmful Substances in Soil and Irrigation Water and Methods for Their Testing ("Official Gazette of RS", No. 23/94)
Rulebook on Methods for Measuring Noise, Content, and Scope of Noise Measurement Reports ("Official Gazette of RS", No. 72/10)
Rulebook on Exposure Limits to Non-Ionizing Radiation ("Official Gazette of RS", No. 104/09)
Rulebook on the List of Electrical and Electronic Products, Measures for Prohibition and Restrictions on the Use of Electrical and Electronic Equipment Containing Hazardous Substances, and the Method and Procedure for Managing Waste from Electrical and Electronic Products ("Official Gazette of RS", No. 99/10)
Rulebook on Categories, Testing, and Classification of Waste ("Official Gazette of RS", No. 56/10 and 93/19)
Rulebook on Storage, Packaging, and Labeling of Hazardous Waste ("Official Gazette of RS", No. 92/10)

Rulebook on the Form of the Waste Movement Document and Instructions for Its Completion ("Official Gazette of RS", No. 114/13)
Rulebook on the Form of the Hazardous Waste Movement Document, the Form for Prior Notification, Its Submission Method, and Instructions for Filling Them Out ("Official Gazette of RS", No. 17/17)
Rulebook on the Form for Daily Records and Annual Reports on Waste with Instructions for Completing Them ("Official Gazette of RS", No. 7/20)
Rulebook on the Form for Requesting a Permit for Treatment, Storage, Reuse, and Disposal of Waste ("Official Gazette of RS", No. 38/18)
Rulebook on Conditions and Methods for Collection, Transport, Storage, and Treatment of Waste Used as Secondary Raw Material or for Energy Recovery ("Official Gazette of RS", No. 98/10)
Rulebook on Conditions, Methods, and Procedures for Managing Waste Oils ("Official Gazette of RS", No. 71/10)
Rulebook on Criteria for Identifying Habitat Types, Types of Habitats, Sensitive, Endangered, Rare, and Priority Habitats for Protection and Measures for Their Preservation ("Official Gazette of RS", No. 35/10)
Rulebook on the Declaration and Protection of Strictly Protected and Protected Wild Species of Plants, Animals, and Fungi ("Official Gazette of RS", No. 5/10, 47/11, 32/16, and 98/16)
Rulebook on Lists of Harmful Organisms and Lists of Plants, Plant Products, and Prescribed Facilities ("Official Gazette of RS", No. 7/10, 22/12, and 57/15)
Rulebook on Criteria for Assessment and Procedure for Categorizing Protected Areas ("Official Gazette of RS", No. 97/15)
Rulebook on the Application of Hydrological Measurement and Observation Methods ("Official Gazette of RS", No. 20/13)
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Detailed Regulation Plan for "Pambukovica Dam on the River Ub" ("Official Gazette of the Municipality of Ub", No. 30/16)
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Decree on Establishing the List of Projects Subject to Impact Assessment and the List of Projects that May Require Environmental Impact Assessment ("Official Gazette of RS" no 114/08)
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Rulebook on Waste Categories, Testing and Classification ("Official Gazette of RS", Nos. 56/10 and 93/10)
Regulation on Technical and Other Requirements for Cement ("Official Gazette of RS", No. 55/06)
Regulation on Safety and Health at Work on Temporary or Mobile Construction Sites
Danube River Basin Management Plan
Sava River Basin Management Plan
Outline on Sava Sediment Management Plan