Republic of Serbia
Ministry of Agriculture, Forestry
and Water Management
Nemanjina 22-26, 11000 Belgrade

SAVA AND DRINA RIVER CORRIDORS INTEGRATED DEVELOPMENT PROGRAM (SDIP)

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

for

REHABILITATION WORKS FOR GALOVICA CHANNEL

B E L G R A D E, September 2025

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Abbreviations

BE	Biology Expert
BMP	Biodiversity Management Plan
DWM	Directorate for Water Management
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
ESMP	Environmental and Social Management Plan
ESMF	Environmental and Social Management Framework Document
ESS	Environmental and Social Standards
ESSS	Environmental and Social Safeguard Specialist
SDIP	Sava and Drina River Corridors Integrated Development Program
GEHSGIFC	IFC General Environmental, Health and Safety Guidelines
IFC	International Financial Corporation
MAFWM	Ministry of Agriculture, Forestry and Water Management
MCTI	Ministry of Construction, Transport and Infrastructure
MEP	Ministry of Environmental Protection
MLMP	Material and Logistics Management Plan
MoD	Ministry of Defence
INP	Institute for Nature Protection
IPCM	Institute for Protection of Cultural Monuments
ISRBC	International Sava River Basin Commission
PIU	Project Implementation Unit
PPE	Personal Protective Equipment
PSC	Project Supervision Consultant
PWMC	Public Water Management Company
RDNEIA	Request for decision about the need for EIA
RoS	Republic of Serbia
SAP	Sampling and Analysis Plan
SSIP	Site Specific Implementation Plan
WB	The World Bank Group

INTRODUCTION

The Republic of Serbia has requested and received financial support through Investment Project Financing with the World Bank (Hereinafter referred to as: WB) to implement the Sava Drina Integrated Development Program (SDIP). SDIP aims to accelerate regional economic cooperation in the Western Balkans and help strengthen the institutions and procedures through which the Sava and Drina riparian countries collaborate. SDIP will be implemented through two sequential and partially overlapping phases with five participating countries, inter alia in Serbia. The Rehabilitation works for Galovica channel Sub-project to which this ESMP refers to is implemented under the umbrella of the SDIP. The term Rehabilitation works for Galovica channel within the scope of this Environmental and Social Management Plan (ESMP) refers to a set of interventions includes riverbed profiling, silt disposal/removal, bank protection and small construction works. This ESMP is based on technical documentation referenced in chapter 12 of Technical study (Elaborat), which serves as the basis for the preparation of the project's Technical Specifications, and is prepared in line with the requirements of the Law on Waters of the Republic of Serbia ("Official Gazette of RS", Nos. 30/2010, 93/2012, 101/2016, 95/2018, and 95/2018 – other law). This legislation establishes the framework for regulating watercourses and implementing measures aimed at protecting against the harmful effects of water. Article 62– Regulation of Watercourses and Protection from the Harmful Effects of Water, sets out both the preventive measures and the types of protective works that may be undertaken. In accordance with Paragraph 1, preventive actions are carried out to prevent and mitigate erosion and torrential flooding. This includes the construction and maintenance of water management facilities and the execution of protective works designed to ensure the stability and safety of watercourses. Further, Paragraph 5 of the same Article defines protective works as encompassing a wide range of biotechnical and biological interventions. These include inter alia afforestation, cultivation and maintenance of protective vegetation, clearing of excessive or invasive growth, grassing of slopes, terracing, and the establishment of orchards and artificial meadows. Additional measures cover cleaning of riverbeds, and other similar works aimed at reinforcing natural protection systems and maintaining the ecological balance of the affected areas. The technical documentation not only complies with the applicable legal provisions but also provides a framework for practical, field-based interventions that combine engineering solutions with ecological and biological methods, ensuring a sustainable approach to erosion control, flood protection, and watercourse management..

Operations and activities for which the World Bank`s Investment Project Financing (IPF) is sought after October 1, 2018, fall under the application of the Environmental and Social Framework (ESF). The ESF comprise, inter alia, the 10 Environmental and Social Standards (ESS) setting out mandatory requirements for the Borrower and the Project. In response to the commitment of the Borrower to comply with the ESF in 2019 an Environmental and Social Management Framework (ESMF) inter alia was developed at Appraisal. This instrument is part of the Project`s Environmental and Social Management system. The document also sets out a formal system by which the Project will manage and monitor commitments during the construction and operational phases of the proposed Sub-project. The document has distributed responsibilities among parties involved in the Sub-project implementation inter alia in relation to responsibilities assigned under this ESMP.

In application of the ESF the overall risk of the SDIP has been classified as High. Screening and subsequent classification of risks for this Sub-project that was conducted based on the site specific technical, environmental, and social setting in line with the approach and methodology set forth in the ESMF (2019) suggests the Sub-project risk is classified as Moderate.

The Environmental and Social Standards relevant for the Sub-project to which activities are bound to comply with are listed below:

Standard mark	E & S Standards	Relevance
ESS1	Assessment and Management of Environmental and Social Risks and Impacts	**Relevant**
ESS2	Labor and Working Conditions	**Relevant**
ESS3	Resource Efficiency and Pollution Prevention and Management	**Relevant**
ESS4	Community Health and Safety	**Relevant**
ESS5	Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	**Not Relevant**
ESS6	Biodiversity Conservation and Sustainable Management of Living Natural Resources	**Relevant**
ESS7	Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	**Not Relevant**
ESS8	Cultural Heritage	**Not Relevant**
ESS9	Financial Intermediaries	**Not Relevant**
ESS10	Stakeholder Engagement and Information Disclosure	**Relevant**
OP 7.50	Projects on International Waterways	**Not Relevant**

1. SAVA AND DRINA RIVER CORRIDORS INTEGRATED DEVELOPMENT PROGRAM - DESCRIPTION

1.1. Background

The Sava and Drina have a proclivity for both dry spells and devastating floods—most recently occurring in 2010 and 2014. The 2014 Sava flood—the largest flood in a century—caused 79 casualties and a damage of €1.5 billion in Serbia (4.7% of GDP), €2.0 billion in Bosnia and Herzegovina (15% of GDP) and €300 million in Croatia （0.5% of GDP). In 2010 the Drina was flooded extensively—partly due to spilling hydropower reservoirs—and saw its highest levels in 100 years. Flash floods destroyed houses, bridges and sections of roads, while rising water levels resulted in flooding of both urban and rural areas.

The Sava Drina River Corridors Integrated Development Project main focus is to improve flood protection, and transboundary water resources management in selected catchment areas of the Sava and Drina river corridors, with the higher level objective being to enhance regional economic integration and growth through improved flood protection, waterway navigability and freight transport connectivity, and transboundary water management along the Sava and Drina Corridor.

This Project will implement Sub-projects with high implementation readiness and relevance to the program objectives, with detail designs and tender documents likely ready by Effectiveness in Montenegro, BiH (Brcko District), and Serbia, while simultaneously preparing Sub-projects that will be implemented during the second phase of the Regional Program. The Project consists of four components as described below:

Component 1: Integrated Management and Development of the Sava River Corridor;

Component 2: Integrated Management and Development of the Drina River Corridor;

Component 3: Project preparation and management;

Component 4: Regional activities.

2. REHABILITATION WORKS FOR GALOVICA CHANNEL SUBPROJECT DESCRIPTION

The hydro melioration system (HMS) Galovica covers an area of 71,600 ha and extends over two melioration areas:

- 28,411 ha belongs to the melioration area "Belgrade Sava 1" (municipalities of Zemun, Novi Beograd and Surcin) – and is under the responsibility of JVP "Srbijavode",
- 43,189 ha belongs to the melioration area "Srem" (municipalities of Ruma, Stara Pazova and Pecinci) – under the responsibility of JVP "Vode Vojvodine".

The area of HMS Galovica is predominantly agricultural, which is why the previous hydro technical solutions and built systems and facilities were dedicated to the protection of agricultural land from excess water, and to a lesser extent irrigation, with the aim of establishing stable agriculture. The concept of water protection in the HMS Galovica basin rests on a dense channel network with a total length of 1,401 km and the main Galovica channel with a length of 46.88 km, which represents the backbone of the system.

The planned works will improve the functionality of the Galovica channel, which is the main channel in the Galovica drainage system, and will therefore affect the functionality of the entire system.

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Figure 1: Sub-project location in relation to rivers and river basins in Serbia

The Galovica channel is the main channel of the Galovica hydromelioration system. It has a catchment area of 71.600 ha. The channel route from the pumping station (PS) Galovica, on the left bank of the Sava River, to the settlement of Budjanovci has a length of 46,88 km.

The main Galovica channel is 46,88 km long, of which 23,58 km with a channel network of 419,854 m is located in the reclamation area "Belgrade Sava 1", water unit "Belgrade", and the upstream section of the channel is 23,30 km long with a channel network of 983.230 m is located in the reclamation area "Srem", water unit "Istocni Srem".

The Galovica channel drains the water of the entire channel network, within both hydromelioration systems, through the PS "Galovica", which is located in the city of Belgrade, Municipality of Surcin. The main function of the Galovica channel is the drainage of agricultural land.

Collected water from the Galovica channel is discharged via PS "Galovica" and PS "Petrac" to the Sava river.

On both sides of the channel, the design includes an embankment, which already exists in most of the channels length, and is an integral part of the Operational Flood Defense Plan. An embankment was

built from the Surcin bridge to the defensive embankment on the Sava, on the right side of Galovica, and an embankment was also built on the left side from the settlement of Bezanija.

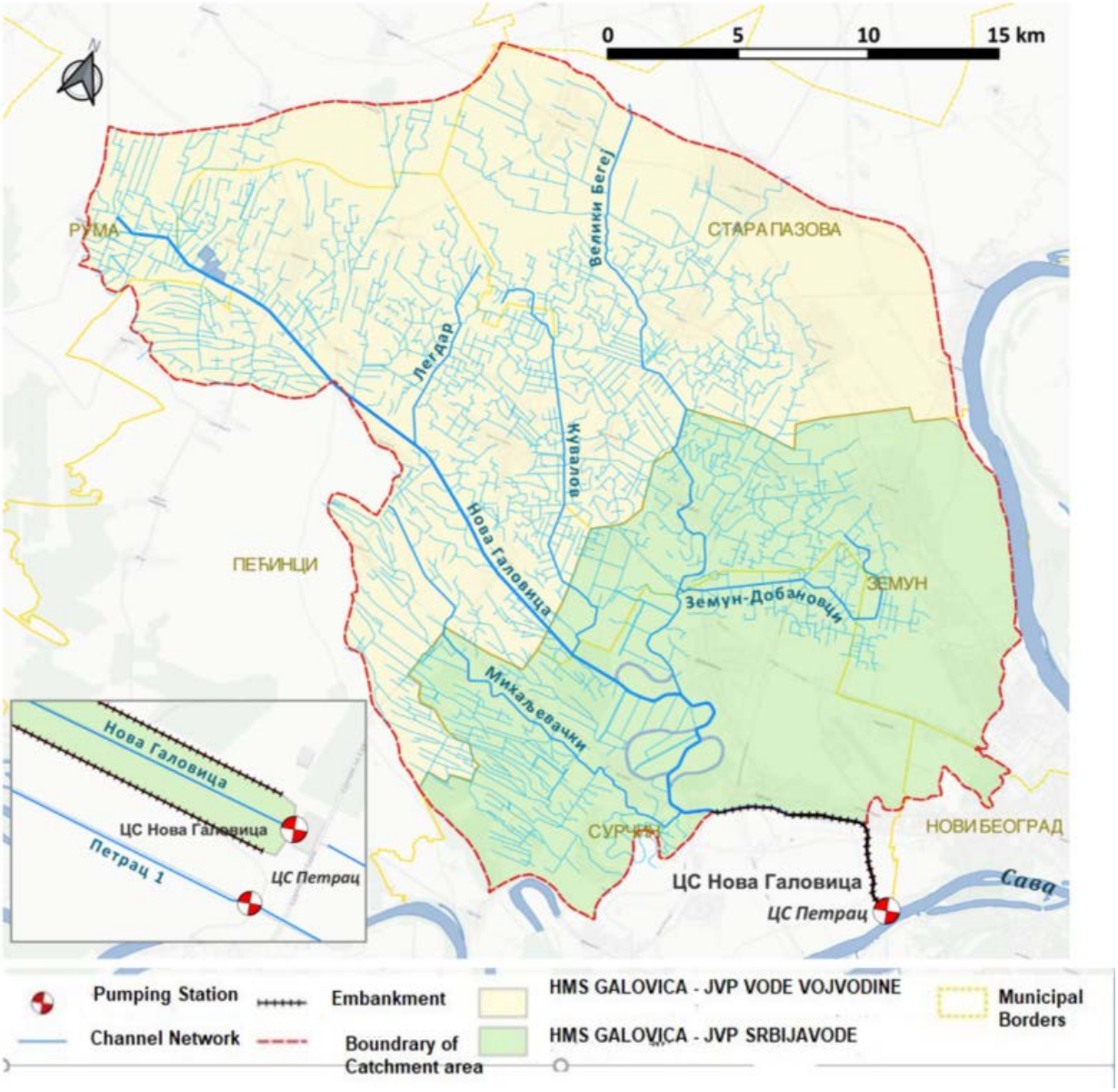

Figure 2: Hydro melioration system Galovica

The Galovica channel receives water of many other large channels with their own watersheds:

- On the right bank, the basin of the Mihaljevac channel with sub-basins: Rimski, Stranjski, Cigrinski, Asanjski and Draski and
- On the left bank, the Veliki Begej channel basin with its sub-basins: Zemun channel - Dobanovci, Usinjski, Novopazovacki, Ladovaca and Mali Begej.

There are a total of 64 tributaries flowing into the Galovica channel.

Along the channel a total of 27 structures (bridges and culverts) were identified. No works are envisaged on any of the structures.

No rehabilitation or reconstruction of existing bridges is planned. Works in the vicinity of the bridges will be limited to the construction of concrete lining for the channel. Regarding the structure at km 10+480, information obtained from the competent water management company indicates that, over time, a natural cascade (depression) has formed, causing the bridge to act as a nozzle. This depression will be backfilled as part of the Rehabilitation works for Galovica channel.

In its current state, the channel is extremely muddy, with a poor flow profile and extremely overgrown with woody and aquatic vegetation.

The existing culverts on the channel route are also silted up, and there is aquatic vegetation on the bottom of the channel. All this leads to a slowdown in the flow of water.

The channel bottom width is variable:

- from km 0+000 – km 20+207 b= 10.00m,
- from km 20+207 – km 22+069 b= 5.50m.
- from km 32+160 – km 46-888 b= 4.00m.

The slope of the channel is 1:2,00.

The Galovica channel, as the main channel of the hydromelioration system of Galovica, is extremely overgrown, especially in certain sections that are difficult to access. The slopes of the channel and the belt next to the channel are overgrown with woody plants and bushes, and the channel is very muddy along its entire course. In the channel profile, there are rubble and waste in several places that need to be removed.

During the preparatory phase of the project, a detailed video recording of the Galovica channel was carried out with a drone, which covered the entire project area of approximately 48 km in linear length. The aerial survey of the location was carried out in the period 15 Dec 2023 – 20 Dec 2023.

The video recording was carried out on the territory of the municipalities through which the Galovica channel passes - Surcin, Zemun, Pecinci and Ruma. A visual inspection of the area of the channel flow was carried out by filming with a drone and subsequent analysis of the footage. The realization of these activities provided new data for the improved database that will be part of the project's digital archive.

Figure 3: Beginning of the channel at “Galovica” pumping station, km 0+000

Figure 4:Bridge and radial gate at km 20+181

Figure 5:Surcin highway bridge at km 2+900

Figure 6:Bridge at km 35+958

On the section from km 20+060 – km 21+900, the channel cuts through an area of land owned by the Ministry of Defense (MoD). In that, area at km 20+181 there is malfunctioning radial gate that requires repair which is part of a separate Subproject #10 under the SDIP - Reconstruction and extension of the nova Galovica pumping station and the rehabilitation of the floodgate on the nova Galovica channel.[1]

The land is mainly forest and meadows and is a hunting area managed by the Military authorities. Nonetheless, hunting is allowed. A special permit will need to be obtained from Military Authorities is mandatory conditions for performing works in the subject area. The Stakeholder engagement and permitting will be led by the MAFWM PIU and Water Directorate. Special permission is only required for the Rehabilitation works for Galovica channel activities and earthworks on this specific section.

In order to enable works within this area, a specific procedure has been established in coordination with the MoD to ensure security clearance, safe access, and the continuation of essential land management functions during construction.

The process begins with the formal notification of the MoD on the intention to implement the project. This notification describes the type of works to be undertaken within the MoD land, such as channel rehabilitation and related interventions, together with the tentative period during which the works are expected to be carried out. The purpose of this step is to ensure that the MoD is informed well in advance about the planned scope of activities and the anticipated timeline.

Once the Contractor is engaged, a second notification is submitted to the MoD providing details on the awarded contract. This includes information on the identity of the Contractor, the precise workplan, and the names of all persons who will require access to the MoD land. In addition, the MoD receives a full listing of the machinery and equipment that will be mobilized in the area. This step allows the MoD to exercise oversight and to approve entry of personnel and equipment in line with their internal security protocols.

Prior to the commencement of works, a meeting is held with the MoD Hunting Area Administrator. During this meeting it has been confirmed that hunting activities in the affected area will be suspended for the entire period in which the Contractor is authorized to carry out works. This suspension ensures both the safety of the Contractor's workforce and the protection of wildlife during construction. At the same time, it was agreed that the existing watering place located along the channel, which serve as essential watering points, will be maintained in operational condition. The Contractor is responsible for ensuring that these structures remain intact and functional and that they are regularly filled with water throughout the duration of the works.

Access to the MoD land is strictly conditional upon the MoD's approval of the Contractor's workplan, personnel list, and equipment inventory. Any subsequent changes, such as the addition of new personnel or machinery, must be communicated without delay and re-approved before access is granted. During the works, the Contractor is required to adhere fully to all security instructions issued by the MoD, as well as to comply with applicable environmental, health, and safety requirements. The Project Implementation Unit, in coordination with the MoD, will monitor the Contractor's compliance with these obligations, including the maintenance of the watering points, the adherence to the approved schedule, and the suspension of hunting activities for the period of authorized works.

Rehabilitation works for Galovica channel. No other portion of works beyond the Rehabilitation works for Galovica channel in this specific area require additional permits or permits form the Ministry of Defence. The figures below depict the above described area.

[1] This subproject will be implemneted under a separate construction works contract following the devleopment of the PREPARATION OF TECHNICAL DOCUMENTATION FOR THE RECONSTRUCTION AND EXTENSION OF THE NOVA GALOVICA PUMPING STATION AND REHABILITATION OF THE GATE ON THE NOVA GALOVICA CANAL (Contract signed with the Water Institute Jaroslav Černi SER-SDIP-QCBS-CS-24-37)

Figure 7:Hunting area, property of the Ministry of Defence (MoD), km 20+060 – km 21+900

Figure 8:Galovica channel section that cross the land owned by the MoD

The planned works will improve the functionality of the Galovica channel, which is the main channel in the Galovica drainage system, and will therefore affect the functionality of the entire system.

In order to bring the channel to a functional state, the following works are planned:

a) Preparation works,

b) Removal of plant vegetation,

c) Earth works,

d) Works on enforcement of the section of the channel with stone embankment from 10+420-10+456,

e) Works on uncategorized access road leading to PS Galovica and PS Petrac Nova in the length of 2,450 m (ground leveling, procurement, transport and spreading and rolling of

crushed stone), and

f) Works on the production of concrete lining - concreting of the bottom and slope of the channel under the culvert.

g) Rehabilitation of existing access road in the length of 9,190 m.

The planned works will improve the functionality of the Galovica channel, which is the main channel in the Galovica drainage system, and will therefore affect the functionality of the entire system.

There will be no widening of the channel. Instead, the scope of works is limited to cleaning and restoring the channel to its original, designed condition. The channel will be maintained at its originally designed width, including the width of the channel bed. In certain sections where the embankment has become deformed or eroded over time, works will be carried out to “repair” and reinstate the embankment to its originally designed dimensions. These activities are intended to ensure that the hydraulic capacity and structural profile of the channel remain consistent with the approved design parameters, while avoiding any alterations that could lead to changes in flow patterns, land take, or other environmental and social impacts beyond those already assessed.

2.1. Baseline conditions assessed during route survey

2.1.1. Water and sediment Quality

On September 14, 2023, at the request of PWC “Vode Vojvodine” Novi Sad water and sediment sampling was conducted. The Testing was undertaken by a certified Laboratory Dr. Milena Dalmacija, with the Department of Biochemistry and Environmental protection of the Faculty of Natural Science and Mathematics at University of Novi Sad. The testing included sampling undertaken at five measuring points in Galovica Channel. The quality of water and sediment was compared to the values prescribed by the regulation on limit values of pollutants in surface and groundwater and deadlines for achieving them (Official Gazette of RS, 50/2012).

The findings of the testing concluded that the water quality at all tested locations corresponds to class V in terms of dissolved oxygen content, suspended matter, Chemical Oxygen Demand (COD), Biochemical Oxygen Demand (BOD), and nutrients.

The sediment quality at all locations correspond to class 2 and is considered slightly polluted.

The findings concluded that disposal of sediment is permitted without treatment and may be disposed close to watercourses at a minimum distance of 20m.

2.1.2. Zone of works and its location in respect to natural and cultural protected areas

The Sub-project location is neither located nor will impact nature protected area for which the protection procedure has been implemented or initiated, nor in the area of the ecological network of the Republic of Serbia.

The closest protected natural area is Nature park “Obedska bara”, marked as “S1” on the picture bellow, which is over 20 km away from the Sub-project area. The Special Nature Reserve Obedska has the total area of 19 667 ha of which 11 083 ha (55,3%) is located in foreland. This part serves as an important flood retention area that helps to prevent floods downstream in Belgrade.

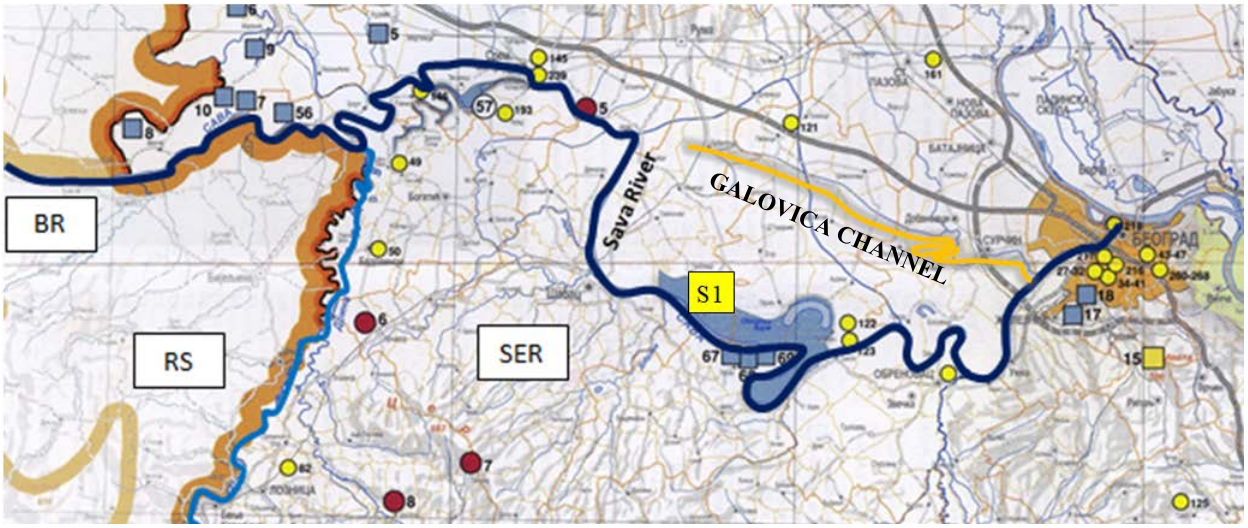

Figure 9: Galovica channel and nature / cultural protected areas in wide project zone

Ecological Network of the Republic of Serbia, as a functionally and spatially connected entity, is established for maintaining the habitat types of special importance for the protection, restoration and/or improvement of disturbed habitats. The Ecological Network of the Republic of Serbia consists of ecologically significant areas and ecological corridors. The closest protected ecologically significant area is “Obedska bara”, marked as “19” on the picture bellow, which is over 10 km away from the Sub-project area.

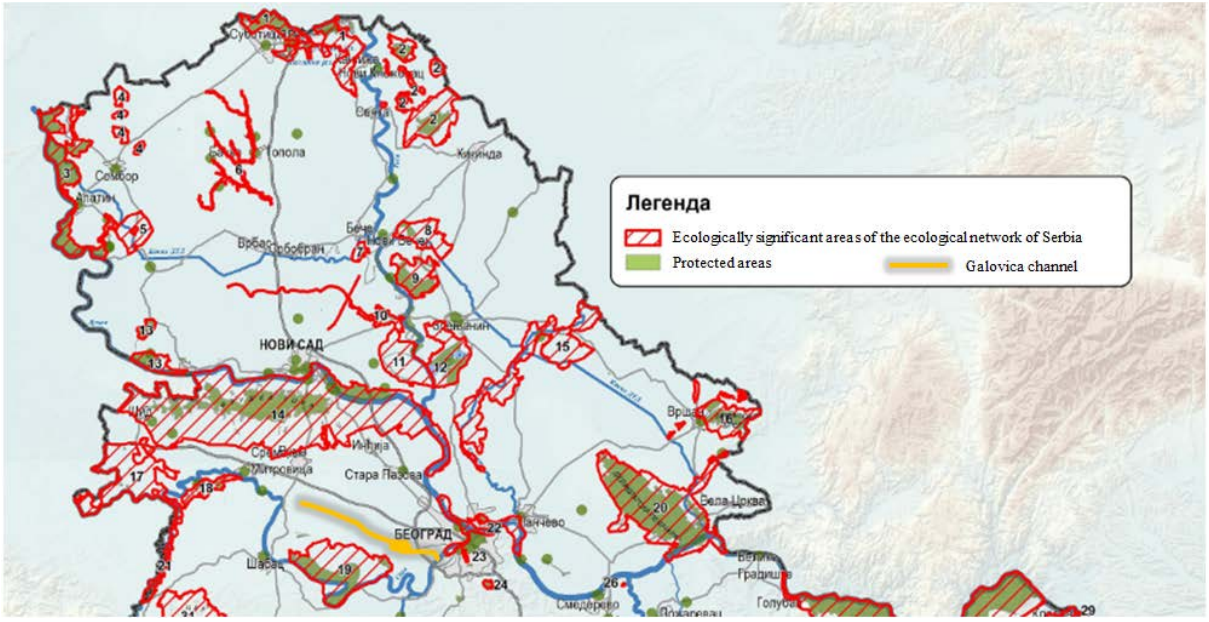

Figure 10: Galovica channel and ecologicaly significant areas in wide project zone

2.1.3. Biodiversity in the Project Area

The Galovica channel and its immediate surroundings form a highly modified agro-hydraulic environment. Within a channel corridor, biodiversity is closely tied to the aquatic system of the channel and the narrow vegetated embankments that support it. Aquatic habitats are dominated by reed communities (Phragmites australis) and scattered submerged macrophytes where dredging is less frequent. These vegetated patches create important microhabitats for amphibians such as the marsh frog (Pelophylax ridibundus), small fish adapted to slow-flowing waters, and aquatic invertebrates.

Terrestrial biodiversity in the corridor reflects the pressure of intensive agriculture. Embankments and field margins provide marginal refuges for small mammals, reptiles, and farmland birds. Species recorded in similar channel systems of Vojvodina include skylarks, herons, and starlings, which utilize open water surfaces and drainage banks for foraging. However, populations are fragmented and sensitive to seasonal agrochemical applications. Runoff of herbicides, fungicides, and insecticides from adjacent

fields has a direct effect on aquatic biodiversity, leading to reduced insect populations, amphibian stress, and the contamination of aquatic sediments. Pollinators are particularly vulnerable to pesticide drift, which reaches the embankments during spraying periods.

In the EU context, the Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC) do not designate this corridor as a Natura 2000 site and the project area is not under a formal protection regime.

Nevertheless, Environmental and Social Standard ESS6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources) is considered relevant to the activities, given the local habitats along approximately 50 km of the channel (reeds, grasslands, shrubby margins) and the presence of small fauna within the ±50 m corridor. In line with ESS6, a reasonable level of avoidance, minimization, and monitoring will be implemented.

2.1.4. Air Quality

The baseline air quality within the Galovica channel zone is generally good, owing to the lack of industrial emissions in the immediate vicinity. However, localized impacts are clearly linked to agricultural activities. Dust emissions occur during plowing and harvesting seasons, often settling on channel waters and embankments. Agricultural machinery contributes nitrogen oxides and particulate matter from diesel combustion, particularly during irrigation and drainage operations that require pumps. While these emissions disperse rapidly in the open lowland landscape, they generate seasonal spikes that are detectable at nearby monitoring stations.

A more significant concern arises from pesticide spray drift and volatilization. During spraying periods, fine droplets and volatile compounds are carried into the air, affecting not only farm workers but also residents of smaller rural settlements located near the channel. Fertilizer application, especially nitrogen-based products, leads to emissions of ammonia (NH_3), which can contribute to the formation of secondary particulate matter. These emissions represent cumulative agricultural pressures that, although within annual threshold levels reported by the Serbian Environmental Protection Agency, create repeated short-term episodes of reduced air quality.

In terms of compliance, these pressures fall under World Bank ESS3 (Resource Efficiency and Pollution Prevention and Management), which requires minimization of air emissions and promotion of good international industry practice. On the EU side, the Ambient Air Quality Directive (2008/50/EC) sets the framework for maintaining safe pollutant concentrations. More specifically, the National Emission Ceilings Directive (2016/2284/EU) targets agricultural ammonia emissions, while the Sustainable Use of Pesticides Directive (2009/128/EC) addresses spray drift and obliges member states, including Serbia as a candidate country, to reduce risks and impacts of pesticide use. These instruments collectively emphasize the importance of drift reduction technologies, buffer zones, and integrated pest management to safeguard air quality in the Galovica corridor.

2.1.5. Land Use and Land Quality

The Galovica channel zone lies within a landscape dominated by intensive arable farming. Land is typically divided between the watercourse, protective embankments, and fields of maize, sunflower, wheat, and soybeans. Embankments are maintained primarily for hydraulic stability and are therefore sparsely vegetated, offering limited ecological value. In some sections, informal access roads are visible, used by maintenance teams and farm machinery. The functional land use is thus tightly interwoven with agriculture, leaving little space for semi-natural vegetation.

The soils of this zone are predominantly chernozems, among the most fertile soils in Europe. Their high productivity supports intensive monocultures but also makes them sensitive to degradation. Repeated use of heavy machinery compacts the soil, reducing infiltration and increasing runoff into the channel. The absence of perennial vegetation on field margins and the narrowness of drainage strips increase the risk of wind erosion, a well-documented problem in Vojvodina's open agricultural landscapes. Nutrient leaching from nitrogen fertilizers is common, with nitrates entering both groundwater and the channel. Pesticide residues are widely present in Vojvodina soils, and in the Galovica corridor these residues are easily transported into surface waters during rainfall events, affecting sediment and aquatic quality.

This situation represents a direct challenge under World Bank ESS3, which emphasizes efficient use of land and soils. At the EU level, the Nitrates Directive (91/676/EEC) seeks to protect waters from nitrate pollution from agriculture, while the Sustainable Use of Pesticides Directive again reinforces the need for minimizing pesticide transfer into soil and water. Although Serbia is still in the process of aligning with these directives, the principles are applicable in the Galovica system, where narrow riparian buffers and unsustainable tillage practices create measurable risks to soil and water quality.

2.1.6. Climate

Galovica channel is located zone within the 6 municipalities in Srem district: Novi Belgrade, Surcin, Ruma, Stara Pazova and Pecinci. Project zone is located at an elevation of approximately 100 meters above sea level. It has a humid subtropical, no dry season climate The district's yearly temperature is 14.5ºC and it is 1.24% higher than Serbia's averages. Srem district typically receives about 82 millimeters of precipitation and has 132 rainy days (36% of the time) annually. The wetter season lasts 2.8 months, from April to July. The months with the most wet days are May and June.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Nov	Oct	Dec	Year
Record high °C (°F)	15.0 (59.0)	19.0 (66.2)	25.0 (77.0)	32.0 (89.6)	32.0 (89.6)	37.0 (98.6)	42.0 (107.6)	42.0 (107.6)	36.0 (96.8)	31.0 (87.8)	25.0 (77.0)	17.0 (62.6)	42.0 (107.6)
Average high °C (°F)	3.93 (39.07)	6.65 (43.97)	12.77 (54.99)	18.51 (65.32)	22.03 (71.65)	26.38 (79.48)	28.95 (84.11)	30.69 (87.24)	24.8 (76.64)	18.29 (64.92)	12.57 (54.63)	5.91 (42.64)	17.62 (63.72)
Daily mean °C (°F)	1.84 (35.31)	4.23 (39.61)	9.71 (49.48)	15.14 (59.25)	18.77 (65.79)	23.22 (73.8)	25.4 (77.72)	26.48 (79.66)	20.96 (69.73)	14.93 (58.87)	9.64 (49.35)	3.57 (38.43)	14.49 (58.08)
Average low °C (°F)	-1.1 (30.02)	0.64 (33.15)	4.74 (40.53)	8.42 (47.16)	11.74 (53.13)	15.36 (59.65)	16.57 (61.83)	17.12 (62.82)	13.83 (56.89)	9.83 (49.69)	5.99 (42.78)	0.83 (33.49)	8.66 (47.59)
Record low °C (°F)	-13.0 (8.6)	-24.0 (-11.2)	-12.0 (10.4)	0.0 (0)	2.0 (35.6)	6.0 (42.8)	9.0 (48.2)	9.0 (48.2)	5.0 (41.0)	0.0 (0)	-5.0 (23.0)	-15.0 (5.0)	-24.0 (-11.2)
Average precipitation mm (inches)	74.95 (2.95)	78.38 (3.09)	80.61 (3.17)	70.37 (2.77)	171.12 (6.74)	128.05 (5.04)	86.37 (3.4)	48.95 (1.93)	63.55 (2.5)	66.49 (2.62)	53.98 (2.13)	54.65 (2.15)	81.46 (3.21)
Average precipitation days (≥ 1.0 mm)	11.27	11.82	11.27	10.55	16.64	16.18	12.18	8.18	8.64	8.36	8.18	8.82	11.01
Average relative humidity (%)	81.79	76.92	67.86	65.07	71.35	71.58	64.72	56.52	59.95	66.12	72.37	78.03	69.36
Mean monthly sunshine hours	6.38	6.64	9.35	12.45	13.19	13.71	14.01	13.73	11.27	8.97	7.46	6.64	10.32

Table 1: Climate Srem – Monthly Averages

2.1.7. Cultural Heritage

No archaeological or cultural resources are recognized during Sub-project preparation phase. There are no statutory protected archaeological sites along the Sub-project zone. The ESMP also includes a chance finds procedure in case any cultural heritage may be discovered during the works. In case of any findings the Contractor shall cease with works momentarily and notify the IPCM. Community infrastructure

At the place where the railway crosses the Galovica channel (km 10+480), there is a railway bridge that does not satisfy with its opening and height, so there is an inappropriate cascade that causes the collapse of the downstream left bank, which is washed away when the water is high because the bridge itself is like a nozzle. The cascade will be backfilled and no other works will be performed as part of the Rehabilitation works for Galovica channel.

Figure 11:Railway bridge over Galovica channel at km 10+508

The following structures are registered on the Galovica channel route:

- at km 1+341- bridge,
- at km 2+571- bridge,
- at km 2+900 – highway bridge,
- at km 4+709- bridge,
- at km 6+441 - bridge,
- at km 7+500 - bridge,
- at km 8+543 – highway bridge,
- at km 8+571 - railway bridge,
- at km 9+561 - bridge,
- at km 10+508 – railway bridge,
- at km 12+428 - bridge,
- at km 14+708 - bridge,
- at km 18+246 - bridge,
- at km 20+181 – radial gate
- at km 20+728 – suspension bridge,
- at km 22+045 - bridge,
- at km 26+241 - bridge,
- at km 28+564 - bridge,
- at km 31+178 - bridge,
- at km 35+958 - bridge,
- at km 37+722 - bridge,
- at km 39+806 - concrete culvert,
- at km 40+547 – radial gate,
- at km 41+875 - bridge,
- at km 45+088 - concrete culvert,
- at km 45+985 - failure,
- at km 46+487 – concrete culvert,

Figure 12: highway bridge at km 2+900 and service roads along the channel

Population

Surcin

Jakovo

2.1.8. Land Ownership and Legal Status

Land ownership within the Rehabilitation works for Galovica channel Subproject direct area of impact is public. The majority of the direct area of impact along the Galovica Channel is situated on land owned by the Republic of Serbia and managed by the Public Water Management Company (PWMC) "Vode Vojvodine." Project works related to vegetation clearing, earthworks, and channel restoration are predominantly planned within existing rights-of-way and on these public lands. Detailed land ownership status is provided in section 2.3

Private Land Parcels and Voluntary Easements

Despite the predominantly public character of the project area, the Subproject also requires the use of specific privately owned parcels for Works on uncategorized access road leading to PS Galovica and PS Petrac Nova in the length of 2,450m, and transportation of excavated materials to designated sediment disposal sites. These private lands are currently utilized as field roads and are already in public use, though they legally belong to private entities. Voluntary agreements have been secured with private landowners to establish temporary easement rights for the duration of construction works. No other private land will be permanently or temporary occupied and with the concluded voluntary easement agreements, the project has obtained all required easements for the entire scope of works.

The specific private parcels involved include the following owners and land parcels:

1. **Owner: New International Investments 011 d.o.o.**
    - Location: Municipality of Surčin, Cadastral Municipality Surčin
    - Parcels:
        - No. 4689/3
        - No. 4689/12
        - No. 4816

    Voluntary easement has been granted for the use of these parcels for access routes for construction machinery and material transport. The sample agreement is provided in Annex X No compensation is required, and the easement remains in force until entire works under the Rehabilitation works for Galovica channel contract are completed and handed over to the PWC Galovica..

2. **Owner: BBSE Investment d.o.o.**
    - Location: Municipality of Surčin, Cadastral Municipality Jakovo
    - Parcels:
        - No. 2959/2
        - No. 2961/2

    Voluntary easement has been granted for these parcels to facilitate machinery and material passage along existing field roads until works are completed and handed over to the PWC Galovica. No compensation is required. Sample agreement provided in Annex 6.

3. **Owner: Agroindustrijska korporacija Beograd a.d.**
    - Location: Municipality of Surčin, Cadastral Municipality Jakovo
    - Parcel:
        - No. 2976

Agroindustrijska korporacija Beograd a.d. has voluntarily granted a servitude right to the Ministry of Agriculture, Forestry and Water Management – Directorate for Water, allowing the passage of construction machinery and material transport for works on the Galovica Channel. The servitude follows the route of an existing field road along the parcel's edge, ensuring minimal disturbance to the land. The owner does not seek compensation for this easement. The servitude remains in effect until all works under the Rehabilitation works for Galovica channel contract have been completed and the completed facility is handed over and rights will be transferred to the selected contractor upon conclusion of the works contract.

The land subject to these voluntary easements represents only a small fraction of the total private holdings and does not involve cultivated land or assets requiring compensation for crops, trees, or buildings. These arrangements comply fully with World Bank ESS5 provisions on land acquisition, ensuring that land access is secured through voluntary agreements rather than involuntary expropriation.

A sample consent form is provided in Annex 6. Easement rights are formalized and retained as official correspondence within the Water Directorate. All records pertaining to these agreements are maintained and archived by the Legal Department of the Directorate.

In addition, the Environmental and Social (ES) Specialists within the Project Implementation Unit (PIU) of the Ministry of Agriculture, Forestry and Water Management (MAFWM) are responsible for monitoring the environmental and social performance of the Contractors. This includes ensuring that all activities conducted under the easement rights are implemented in full compliance with the stipulated conditions and do not result in adverse environmental or social impacts.

Sediment Disposal Sites

The project also involves sediment disposal at designated locations, all of which are managed by public or local community entities. These include:

- Public Utility Company "Sava" in Pećinci
- Local Community Office in Buđanovci
- Public Utility Company "Surčin"

These designated sites are already in use for similar purposes and have been confirmed as suitable for the placement of extracted/dredged materials, in compliance with national regulations on sediment disposal.

2.1.9. Location and Extent of informal Dumpsites

Field investigations identified **four illegal dumpsites** located along the Galovica channel at the following chainages:

- km 2+980.39
- km 6+303.51
- km 8+087.90
- km 37+809.51

These sites have developed as a result of **uncontrolled disposal of household and construction waste**.

The waste at these locations consists of **mixed non-hazardous waste**, including:

- Municipal solid waste
- Construction and demolition debris
- Bulky household items

According to national waste classification codes, the following waste types were observed:

- 20 02 02 – Soil and stones
- 20 03 01 – Mixed municipal waste
- 20 03 07 – Bulky waste
- 20 03 99 – Other municipal waste not otherwise specified

In some instances, **bulky and electronic waste** was also noted, reflecting illegal dumping practices by local residents.

Although the waste observed at the identified sites is classified as **non-hazardous** under national regulations the possibility of encountering **hazardous waste** during removal operations cannot be excluded.

In the event of discovering hazardous waste, **all works must be suspended immediately**, and the Contractor must notify the Engineer and the Client, in line with relevant legislation and the Project's ESMP procedures.

2.2. Description of Sub-project's works

The Sub-project works comprise of following components:

2.2.1. Preparation works

- Geodetic works - include recording and geodetic marking of the route,
- Preparation of the construction site - clearing the ground and setting up temporary structures,
- Increased operation of the Galovica pumping station in order to lower the water level in the channel

2.2.2. Removal of plant vegetation

- Works on mechanical mowing of grass with a tractor rake, o Works on mechanical removal of reeds with a tractor rake, o Works on mechanical removal of aquatic vegetation,
- Works on the mechanical removal of plant vegetation with a backhoe,
- Cutting trees with a chainsaw, cutting branches and leaving them aside.
- Extraction of stumps by mechanization, with transport and unloading into a previously dug pit and backfilling with a layer of earth.

2.2.3. Earthworks

- Mechanical excavation of humus with a bulldozer, loading, transport and spreading,
- Construction - forming an embankment with a bulldozer,
- Humusification of the slope and crown of the embankment,
- Grassing the embankment surfaces with a standard mixture of grass,
- Formation of the platform - mechanical excavation of the upper working platform with deposition on a temporary landfill, loading, transport and spreading,
- Dredging the channel with a long-arm excavator,
- Loading, transport and spreading of ground material,
- Removal of the old landfill - mechanical excavation with an excavator with loading into a truck, transport and spreading,
- Creation of a working platform for mechanical cleaning of culverts with an excavator, o Mechanical cleaning of culverts, loading, transport and spreading, o Mechanical extraction of bulky waste from the channel profile,

-

2.2.4. Works on enforcement of the section of the channel with stone embankment from 10+420-10+456

- Procurement, transport and installation of stone,
- Excavation of the channel slope, loading, transport and spreading,
- Incorporation of earth material into the channel profiles where the rock embankment is made,
- Procurement, transport and installation of geotextiles on the given section, as a base for stone embankment,

2.2.5. Works on uncategorized access road leading to PS Galovica and PS Petrac Nova in the length of 2,450 m (ground leveling, procurement, transport and spreading and rolling of crushed stone)

- Ground leveling,
- Procurement, transport, spreading and rolling of the dough, with the roller crossing three times

2.2.6. Works on the production of concrete lining - concreting of the bottom and slope of the channel under the culvert

- Manual excavation under the culvert for concreting the bottom and slope of the channel, loading, transport and spreading,
- Knocking down piles in order to ensure the works during the production of concrete lining,
- Procurement, transport and installation of gravel in a buffer layer of 10 cm,
- Procurement and transport of concrete MB 30 with manual installation in structures,
- Making a concrete lining on a gravel base,
- Pumping water with a motor pump during the execution of works,

2.2.7. Rehabilitation of existing access road in the length of 9,190 m

- Geodetic marking of the route.
- Procurement, transportation and installation of material suitable for the repair of potholes and road edges as part of the correction of transverse leveling. For the material, use crushed stone aggregate DKA 31-63 mm.
- Mechanical excavation of soil material with a total width of one and a depth of d=0.5 m for the purpose of widening the roadway. The position includes excavation, loading and transportation of materials up to a maximum of 5 kilometers.
- Machine excavation of humus with a total width of 4.5 m and layer thickness d=0.15 m. The position includes excavation, loading and hauling of humus up to a maximum of 5 kilometers.
- Procurement, transportation and installation of sand material with a total width of one meter and a layer thickness of d=0.2 m for the purpose of widening the roadway.
- Procurement, transportation and installation of crushed stone aggregate DKA 063 mm with a total width of one meter and a layer thickness of d=0.2 m for roadway widening.
- Procurement, transportation and installation of crushed stone aggregate DKA 031 mm with a total width of one meter and a layer thickness of d=0.1 m for roadway widening.
- Procurement, transportation and installation of crushed stone aggregate DKA 031 mm with a total width of 4.5 meters and a layer thickness of d=0.1 m for the needs of correcting the level of the entire roadway.
- Construction of the bearing pavement structure by stabilizing the soil using a hydraulic binder with a total width of 4.5 meters and a layer thickness of d=0.25 m. The stabilized layer must be compacted

to a strength of at least 70 MPa.

- Procurement, transportation and installation of the bituminized bearing layer BNS22 with a total width of 4 meters and layer thickness d=8cm.
- Procurement, transport and installation of asphalt layer AB11 with a total width of 4 meters and layer thickness d=5cm.
- Construction of embankments next to the road from earthen material with a width of 0.5 meters on each side of the road.

2.2.8. Cross section of the channel bed – Corridor of works

Adopted dimensions of the Galovica channel bed:

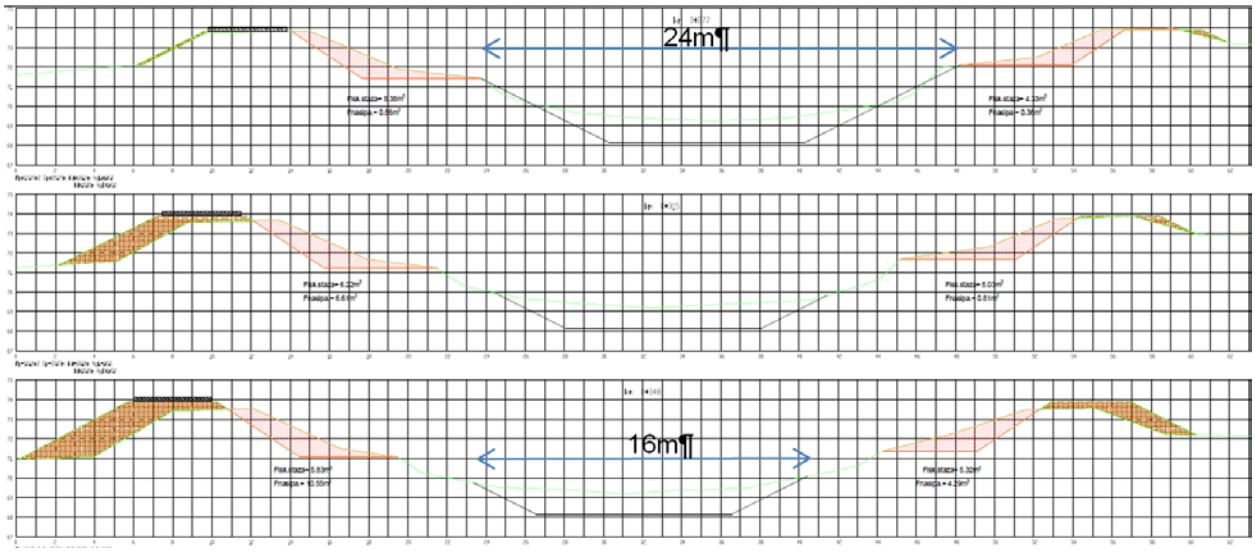

Figure 13: Cross section of the Galovica channel bed

2.3. Land Acquisition and Restrictions on Land

The Sub-project activities are distributed over 7 main components:

a) Preparation works,

b) Removal of plant vegetation,

c) Earth works,

d) Works on enforcement of the section of the channel with stone embankment from 10+420-10+456,

e) Works on uncategorized access road leading to PS Galovica and PS Petrac Nova in the length of 2,450 m (ground leveling, procurement, transport and spreading and rolling of crushed stone),

f) Works on the production of concrete lining - concreting of the bottom and slope of the channel under the culvert and

g) Rehabilitation of existing access road in the length of 9,190 m.

Activities from a) through f) do not require permanent acquisition of private land for its development, use land that is currently occupied or regularly used for productive purposes (e.g. a gardening, farming, pasture, fishing locations, forests nor physically displace individuals, families or businesses, result in the temporary or permanent loss of crops, fruit trees or household infrastructure. Works under these components, including works on the access road under e) in the length of 2,450 m and concrete works will be within the existing right of way on land owned by the Republic of Serbia. The works will be executed either from the channel itself or from the existing access roads at the crest of the channel. This access road will facilitate transport of goods and construction material and allow construction traffic and transport of excavated material from the channel to the deposit areas

Cadastral Parcel	Cadastral Municipality	Title holder of land and Asset	Asset attached
988	Dec	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets
1033	Surcin	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets
1447	Surcin	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets
2128	Surcin	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets
2133	Surcin	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets
2314	Surcin	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets
2384	Surcin	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets
2385	Surcin	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets
2577	Prhovo	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets
3250	Simanovci	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets Easement rights established on behalf of the Municipality of Pecinci for construction of municipal sewage in the length of 36 m
4823/11	Surcin	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets. Easement rights established on behalf of PE "Srbijagas Servitude rights established on behalf of PE" allowing the right for the gas line
4823/12	Surcin	Republic of Serbia- Public land/ PWMC " Vode Vojvodine"	No assets Easement rights established on behalf of PE "Srbijagas for the gas line

Table 2: Title over land for Sub-project activities identified under a) to f)

Easement rights already established on public land shown in table 2 above are of a historic character and granted in favor of the entities designated in the table. Such rights remain unaffected and shall not impede or otherwise interfere with the implementation of the works or vice versa.

Rehabilitation of existing access road in the length of 9,190 m (activity "g") consider rehabilitation of an existing access road along the foot of the flood protection embankment of the Sava River upstream from the PS Galovica. The crest of the flood protection embankment also hosts a service road which, as reported by representatives of PWC "Vode Vojvodine", is not adequate for movement of heavy machinery and construction vehicles, as this may impact the stability of the embankment. Due to this, the design

proposed that the access road at the foot of the embankment will be rehabilitated to allow movement of construction traffic and transport of material.

There are areas in which the existing service roads are not in a condition to allow safe movement of vehicles and equipment. These are mainly related to the service roads from the Pumping Station Galovica upstream to km 46+880:

- Deposit Area Jakovacka Kumsa

- Deposit Area Kumsa – for which the exact location within the area is to be determined through written contracts. The second area has the greatest absorption capacity and most of the sediments will be deposited there. locations:

The land hosting the existing access road planned for rehabilitation is prevalently public. However, the subject access road also partly runs through 6 privately owned land parcels owned by 3 legal entities.. This road is regularly used for movement of maintenance vehicles and by the public, including those parts of the road which are on private land. Voluntary written consent from land owners have been obtained securing temporary easement rights for the rehabilitation works and the uncategorized access road until completion of the Sub-project works and activities. The project has no need and will not resort to other types of acquisition such as expropriation or other compulsory procedures in accordance with national law or ESS5. Upon completion of all works, the land shall be restored and formally returned to the lawful title holders as mandated in the easement agreements.

Table 3: List of private land for which easement rights have been granted

Cadastral Parcel	Cadastral Municipality	Title holder of land and Asset	Asset attached
4689/3	Surcin	**New International Investments 011 d.o.o.**	No assets
4689/12	Surcin	**New International Investments 011 d.o.o.**	No assets
4816	Surcin	**New International Investments 011 d.o.o.**	No assets
2959/2	Jakovo	**BBSE Investment d.o.o**	No assets
2961/2	Jakovo	**BBSE Investment d.o.o**	No assets
2976	Jakovo	**Agroindustrijska korporacija Beograd a.d**	No assets

The table identifying private land parcels subject to acquired easement rights, when read together with the table of public land parcels, shall be deemed to represent the complete and exhaustive universe of land within which all project works are to be carried out.

The channel covers 10 Cadastral Municipalities.

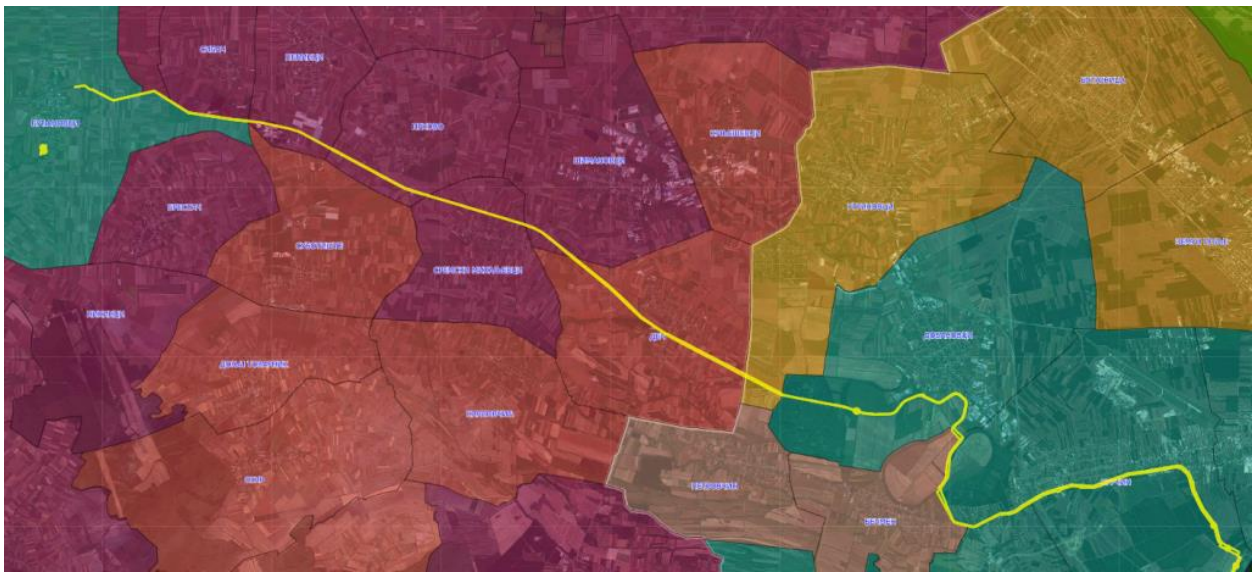

Figure14: Footprint of the channel Galovica relevant to Cadastral Municiaplities

On the section from km 20+060 – km 21+900, the channel cuts through an area of land owned by the Ministry of Defense. In that, area at km 20+181 there is malfunctioning radial gate that requires repair which is part of a separate Subproject #10 (please see footnote1) . The land is mainly forest and meadows and is a hunting area managed by the Military authorities. Nonetheless, commercial hunting is allowed. A special permit obtained from Military Authorities is mandatory conditions for performing works in the subject area. The figures below depict the above described area.

2.4. Deposit Areas

The land designated for depositing the removed sediments are existing designagted deposit areas managed by three different utility companies and Local governmnetes respectively : Public Utility Company " Sava" from Pecinci, Local Community office Budjanovci, Public Utility Company "Surcin.

The sediments and material excavated from the channel will be despoited on 3 diffetrent locations: Dec Budjanovci and Jakovacka Kumsa. The designation was established through consents in writing with the Public Management Companies and Loacl community offices entrusted with management of these areas.

The following section contains a detailed description of the location, siting relevant to the wider area, and evidence of title over land.

DEPOSIT AREA DEC

This deposit area consists of a single cadastral parcel 2264/1 in the Cadastral Municipality Budjanovci, Municiaplity Ruma. The land is publicly owend. No infromal use or occupation, nor livelihood generating activties have been identified Consent to deposit sediment material excavated from the chanel Galovica in the quantity of 500,000m3 has been obtained in writing from the Public Utility company "SAVA" in charge of managing this area subject. The Contractor will be reposnisble to excavate, ransport and level the sediments by using its own machinery which is indicated as a condition in the consent issued on March 15, 2024.

DEPOSIT AREA BUDJANOVCI

This deposit area consists of two cadastral parcels 1197/3 and 1192 in the Cadastral Municipality Budjanovci, Municiaplity Ruma. The land is publicly owend. No infromal use or occupation, nor livelihood generating activties have been identified Consent to deposit sediment material excavated from the chanel Galovica in the quantity of 300,000m3 has been obtained in writing from the Municipal Office in Budjanovci in charge of managing this area subject. The Contractor will be reposnisble to excavate, ransport and level the sediments by using its own machinery which is indicated as a condition in the consent issued on March 22, 2024.

Figure 15: Deposit area DEC

Figure 16: Deposit area Budjanovci

Figure 17: Jakovacka kumsa

DEPOSIT AREA "JAKOVACKA KUMSA"

Jakovacka kusma has a total area of 320,50 hectares and has the greatest in-take capacity. It is expected that most of the sediments will be stock-piled/ deposited there. The entire location consists of a number of cadastral parcels, all of them in public ownership. The general consent to deposit sediment material has been obtained in writing from the Public Utility Company "Surcin" (PUC "Surcin") who manages and operates this area. The specific location within this area has not yet been defined and will be agreed subsequently through a formal written legal agreement between the PUC "Surcin" and the PWMC "Galovica" , on of the the final beneficiary of the works on whose behalf the consent was issued. Whole of the area is an existing sand extraction site. One of the largest in the Belgrade area. It si sindicated that the extraction operation is undertaken with mandatory permits in line with the Law on mining. The Extraction activities currently ongoing are conducted by the Public Utility Company Surcin who is the manager and operator of the extraction site at the same time. There are extraction activities ongoing which will not be interfered with nether temporray nor permananetly through this additional stockpile of sediment material. The Contractor will be responsible for excavation, transport and spreading of the sediments by using its own machinery and will be allowed to stockpile only material which is chemicaly atested and clean . This has been indicated in the permission granting Decision dated March 8, 2024. Excavated sediments will be transported by the Contractor to the designated stockpile /deposit areas using the acces roads providing access to the stockpile areas. The Access roads will be almost in exclusive use as a roadway for the transporattion of the excavated material.

2.5. Stakeholder engagement, Information disclosure and public consultations

In compliance with the World Bank's ESS10 requirement, a Sub-project specific Stakeholder Engagement Plan (SEP) has been prepared inclusive of a Sub-project specific grievance mechanism that has been set-up for the Sub-project. Dedicated communication materials (GM pamphlets, posters) have been created to help local residents familiarize themselves with the grievance redress channels and procedures, and are in the process of being distributed. A GM guidebook/manual will also be developed by end of September 2025, and suggestion boxes installed at the construction site prior to commencement of works. In order to capture and track grievances received under the Sub-project, a dedicated GM Management Information System/database is kept.

In addition Information Desks in the municipalities affected by the Galovica channel Sub-project will be set-up by November 2025 to provide local residents with information on stakeholder engagement activities, construction updates, contact details of the PIU. The PIU will set up at affected municipalities information desks, in the premises of each affected Municipality where they can meet and share

information about the project with PAPs and other stakeholders. Brochures and fliers on various project related social and environmental issues will be made available at these information desks.

Representatives of the PIU visited the Sub-project location and held meetings with representatives of the Galovica channel managers, Srbijavode and community members on the site on various occasions during 2024. A joint site visit was conducted to the 50 km channel section to assess the planned works in the field and ensure alignment with environmental and social safeguards under the Environmental and Social Framework (ESF). The visit was attended by representatives of the Project Implementation Unit (PIU) under the Ministry of Agriculture, Forestry and Water Management (MAFWM), the Contractor, Supervision Consultant, local Water Directorate, and PIU Environmental and Social (ES) Specialists. The visit focused on three main aspects: (i) Review of the physical scope of works, (ii) Identification and evaluation of proposed deposit areas for the disposal of excavated materials; and (iii) Reinforcement of ESF requirements, particularly those related to ESS1 (Environmental and Social Risk Management), ESS2 (Labor and Working Conditions), and ESS4 (Community Health and Safety).

In addition, the Contractor will receive written instructions outlining their obligations related to easement rights and environmental and social compliance. The PIU ES Specialists will regularly monitor Contractor performance to ensure full adherence to ESMP provisions and easement conditions. All documentation, including easement agreements, will be retained by the Legal Department of the Water Directorate.

The PIU together with the affected municipalities will disclose Sub-project information to allow the affected communities and other stakeholders to understand the risks and impacts of the Sub-project, and potential opportunities for stakeholder engagement during the Sub-project implementation.

Following a two-week disclosure window once endorsed by MAFWM, the draft of this ESMP, shall be subject to Public consultations. The ESMP will be disclosed in Serbian and English at the website of the MAFWM together with invitation to the Public Consultations. This shall also be advertised in the local newspaper. The consultation meetings shall offer special support for stakeholders with disabilities, as appropriate. Additional formats like location sketches, physical models, and film presentations will be considered to communicate relevant information.

The Invitation shall indicate how the ESMP to be consulted on may be accessed, the Project details, date, time and venue of the consultations, and contact information details for feedback and /or questions.

The Public consultation shall solicit the following: (a) whether the list of identified stakeholders is accurate; (b) the proposed methods of notification and engagement (for example, where meetings and workshops may be held and how to communicate with disadvantaged or vulnerable groups); (c) the proposed extent and format of engagement (for example, the type of meetings and duration of the consultation period); and (d) the format and language of information to be provided. Stakeholder feedback on these aspects will be reviewed and incorporated in the ESMP as appropriate

Once the Consultations have been completed, minutes of meeting shall be prepared and annexed to the ESMP. The minutes shall reflect on the feedback received, questions raised and how these were incorporated into the final document. The attendance of Stakeholders shall be verified through a signed attendance log, preferably with contact details of the attendees and photographs with permission to disclose.

3. LEGAL AND INSTITUTIONAL FRAMEWORK

3.1. Relevant Institutions

The MAFWM and the Ministry of Environmental Protection (MEP) are the key relevant institutions responsible for management of environmental impacts under the SDIP Sub-projects.

Project Implementation Unit (PIU) established under DWM is responsible for procurement, contract management, financial management, disbursement, environmental and social safeguards, and monitoring and evaluation.

Other aspects of environmental and social management related to SDIP projects are dealt with several other institutions, among which are the Public Water Management Companies (PWMC) “Srbijavode”, “Beograd Vode” and “Vode Vojvodine”.

3.2. Analysis of alternatives

An alternative route for the Sub-project could not have been explored and the impact area itself could not have been completely avoided due to the nature and the objective of the Sub-project. The alignment is set to follow the flow of the channel its position and the eroded, flood prone and exposed channel banks.

3.3. EIA procedure in the Republic of Serbia

The EIA procedure in Serbia is governed by the Law on Environmental Impact Assessment, which aligns with European Union directives and international conventions such as the Aarhus Convention. This legal framework provides a structured approach to assessing the environmental impacts of projects, ensuring that significant environmental concerns are addressed before project approval.

In the juridical system of the Republic of Serbia, the Environmental Impact Assessment procedure is regulated by the Law on Environmental Impact Assessment, which is completely in line with European EIA Directive (85/337/EEC, 97/11/EC, 2003/35/EC and COM 2009/378).

The EIA procedure in Serbia consists of three main phases:

- screening,
- scoping, and
- the EIA study and decision.

Screening: This initial phase determines whether a proposed project requires an EIA Study. The competent authority reviews the project details and decides if an EIA Study is necessary based on predefined criteria. This step is crucial in identifying projects that could have significant environmental impacts.

For Rehabilitation works for Galovica channel no EIA Study is required unless the project is to be implemented within the protected areas. In such cases a Determination about the need for EIA Study is to be obtained from relevant authority as mandatory step in accordance with Law on EIA.

Scoping: If EIA Study is required as a result of ES Screening, during scoping phase the scope and content of the EIA study are defined. This includes identifying the key environmental issues to be addressed, the methodologies to be used, and the extent of the study. Public participation is encouraged during this phase to ensure that all relevant concerns are considered. This collaborative approach helps in creating a comprehensive and focused EIA study.

EIA Study and Decision: The project developer prepares the EIA study, which includes a detailed analysis of the potential environmental impacts and proposed mitigation measures. The study is then reviewed by the competent authority, which makes a decision on whether to approve the project based on the findings. This phase ensures that all environmental impacts are thoroughly evaluated and that appropriate measures are in place to mitigate any adverse effects.

4. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

Since the existing infrastructure, facilities and equipment will be rehabilitated, reconstructed, repaired and replaced during the realization of the Sub-project, impacts on environment both natural and human will be a consequence of human presence and construction machines, and the nature of Rehabilitation works for Galovica channel at a location, which are limited to the location of works or its surrounding vicinity.

Rehabilitation works for Galovica channel would not pose significant risks to the environment. In addition, the Sub-project will have a localized impact on the flow of the channel. Proposed works can be divided into surface and channel bed works. Channel bed works are expected from June to November, coinciding

with low water levels, and should not last as long as surface works, which will start first. Currently the time for completion of these works is not determined. As a consequence, the range of impacts is limited (impacts directly related to the Rehabilitation works for Galovica channel) and their magnitude remains localized. Considering the nature of the proposed Sub-project, it is anticipated that adverse environmental impacts can be expected in the construction phase mainly, while the prevalent social impacts related to land and asset acquisition will be experienced in the pre-construction Phase. The aspect of health and safety at work and community health and safety are seriously taken into consideration. It is to be noted that parts of the construction work are taking place in populated area, however in all parts in an environment already strongly influenced by human activities. Most of the activities will be implemented from within the water course so impacts to day-to-day life of the community is minimized.

Broadly, the impacts in the **pre- construction phase** are of the following type and nature:

- For temporary impacts related to private land required for movements, parking etc. of equipment and machinery, and/or storage of material the Contractor will be required to lease the land in line with the entitlement matrix set forth in the RPF and the land entry and land exit protocols he will be required to develop. Temporary impacts to land will be subject to voluntary lease, with no other options deployed should the private owner not be willing to lease the land. The Contractor will be required to seek alternative solutions guided by the same principles until land lease arrangements have been secured to the satisfaction of the Employer i.e. the PIU.
- For all **permanent works** associated with the project, including access road to be constructed on privately owned land, **easement rights have already been secured by the relevant authorities** prior to Contractor mobilization. These agreements grant the right of access and use for the specified purpose and duration and are retained as official records within the Water Directorate, with oversight from the Legal Department.
  The Contractor shall have no responsibility for negotiating or securing easement rights for permanent works. However, the Contractor is obliged to strictly adhere to the conditions set forth in the existing easement agreements and ensure that all construction activities remain within the boundaries defined therein. The PIU Environmental and Social Specialists will monitor compliance to ensure that all obligations under the easement arrangements are respected.
- Community health and safety: During the pre-construction phase machinery and equipment might be brought on sight. However it is expected that these will not pose threat risk to community health and safety as they will mainly be sophisticate measurement instruments for setting out of the site, survey and water and soil measurements.
- Include the requirements of ESMP in the Procurement Documents from selection of Contractor for this Sub-project.

Broadly, the impacts in the **construction phase** can be of the following types and nature:

- **Soil and Water Pollution**: during Rehabilitation works for Galovica channel, when using machinery, there is a possibility of soil contamination due to accidental spills of oils and fuel from construction machinery and their use can occur. In the area of Rehabilitation works for Galovica channel, construction waste is generated which, if not properly disposed of, may result in adverse impacts. The Rehabilitation works for Galovica channel carried out inside the channel bed results in a temporary increase of turbidity of the watercourse.
- **Flora and fauna**: Rehabilitation works for Galovica channel in the channel bed along with the temporary increase of turbidity in the watercourse can pose a very limited threat to water habitats. For cleaning of the existing channel, with the BMP measures in place, residual impacts are expected to be local and temporary, and the risk of permanent damage is considered low. The principal near-term risks are temporary and local: disturbance and partial removal of bank vegetation, temporary displacement of small mammals, amphibians and reptiles sheltering in reed and grass cover, and short-lived turbidity pulses from in-channel operations. Noise and human presence may cause brief avoidance by birds and other mobile fauna but are not expected to create lasting habitat loss when

good practice is applied. Residual effects are expected to be local and short-lived, with a low likelihood of permanent damage. Where pre-work surveys identify sensitive features—such as active nests or amphibian spawning sites—these areas are to be temporarily avoided and the sequence of works adjusted so that populations are not harmed. If active nests, amphibian spawning sites, or other sensitive features are identified during the survey, works will be phased or seasonally adjusted in accordance with the Biodiversity Management Plan (BMP) to avoid permanent effects.

- **Noise and vibrations:** Noise from Galovica channel cleaning can affect land-habitat fauna immediately adjacent to the works, but impacts are expected to be brief and spatially limited if operations move steadily, occur outside peak breeding periods, and are planned with basic quiet-work practices. With the BMP measures in place, noise impacts are expected to be local and temporary.
- **Sourcing of materials.** As typical for Rehabilitation works for Galovica channel the Sub-project will increase consumption of energy and raw materials, waste generation and emission of pollutants. Impact will be mitigated through utilizing material plants possessing valid environmental permits.
- **Disposal of excavated materials and construction wastes**. Demolition debris and excessive soil are usually generated during the works on drainage and channel embankment systems; these would need to be managed through licensed companies for construction and municipal waste from the site, while the excavated materials can be used for landscaping, other uses or to simply dispose these at a defined locations (Dec, Jakovacka kumsa and Budjanovci), with detailed logistics given the large volume (>1,000,000 m³) and haul distances. Before works start, the Contractor shall submit to the PIU and the Engineer, and then implement, a Material and Logistics Management Plan (MLMP) covering: phasing of quantities by sections, estimated daily outputs, transport fleet and scheduling, approved routes and time windows, and proof of reception capacity at the final disposal sites. Traceability will be ensured for every load (origin by chainage/section, quantity, destination) via delivery dockets and/or GPS logs, with receipt verification at the landfill. Also, adequate measures to ensure aesthetic requirements of the disposal site's area will apply. Contamination of the designated disposal sites at Dec, Jakovačka Kumsa, and Buđanovci is not expected under the proposed management regime. The sediments reflect the agricultural origin of the catchment and do not carry industrial pollutants or toxic heavy metals. Potential risks are limited to nutrients and trace agrochemical residues already common in the surrounding farmland soils. However, The Contractor is required to undertake regular sampling and analysis prior to transport and prior to final disposal of extracted/dredged material. Additionally, the Contractor is also obliged to perform baseline (zero) sampling and follow-up (control) sampling of the recipient soil at the disposal locations. The number of points, composites, LOQs, LC/GC-MS/MS methods; metals per EN/ISO, will be defined by the Contractor in the Sampling Plan approved by the Supervision Engineer. All sampling under chain-of-custody; accredited laboratory Certificates of Analysis shall be attached to the Contractor's monthly report. **Monitoring costs are borne by the Contractor**.
- **Disposal of extracted/dredged material at temporary disposal sites adjacent to the channel**. Unauthorized dumping is strictly prohibited. Compliance will be ensured through contractual obligations and penalty clauses, continuous site supervision (Engineer and PIU), daily control of delivery dockets/weigh tickets and random route inspections, and registration and investigation of any community complaints (grievance mechanism). Any deviation will result in immediate suspension of deliveries and corrective measures at the Contractor's cost.

  If, for efficiency and route shortening, the Contractor proposes temporary channel-side stockpiles or an additional new location, this is permissible only after obtaining all required permits and approvals from the competent authorities (including land/ownership rights, water management/utility conditions, environmental conditions where applicable) and with the following special protection measures:

  A. Transport and logistics (mandatory for all cases):

  – Approved routes and time windows (off-peak; no night deliveries unless specifically permitted); speed limits; a Traffic Management Plan.

  – Covered loads, no overfilling; wheel-wash and track-out controls to prevent soil on public roads.

  – Spill kits in every vehicle; incident reporting within 24 hours.

– Daily summary reports (number of trips, routes, volumes; destination records).

B. Temporary channel-side stockpiles (only if approved by the PIU and authorities):

– Location and setback: outside the flood cross-section, min. 20 m from the water's edge (or more if required by water authorities), and away from sensitive micro-habitats identified by the Contractor's Biology Expert (BE).

– Pad preparation: levelled and compacted ground, protective underlay (geotextile/compacted layer), perimeter berms and/or settlement sumps, silt fence along the downslope edge, and drainage with no direct discharge to the channel.

– Geometry and stability: maximum lift height ≤3 m, side slopes ≤1:2, routine profiling; no tipping on the embankment crest/slopes.

– Erosion and dust control: water spraying in dry weather; cover/mulch any surface retained >7 days; prompt grassing if retention exceeds 30 days.

– Time limit: temporary storage ≤60 days per batch, followed by haul to the final site or incorporation into approved landscaping.

– Monitoring: visual checks after each significant rainfall (≥25 mm/24 h); prompt repair of any seepage/erosion; gate logs of in/out volumes.

With these additions, logistics and any temporary storage are clearly regulated, preventing uncontrolled impacts on the channel and surroundings, while monitoring of quantities and destinations remains complete and verifiable. With proper placement, stabilization, and vegetation cover, these risks remain negligible. In fact, in some cases the organic fraction of the excavated sediments may even contribute positively to soil fertility if incorporated into landscaping or agricultural fields.

- **Degradation of landscapes and soil erosion**. The impacts on vegetative cover will be short-term, localized, and totally associated with Rehabilitation works for Galovica channel; in case of removal of any vegetation, adequate replanting measures will be conducted. **Disposal of municipal wastes**. All municipal and bulky waste found during the works will be collected, segregated (where applicable) and handed over to a licensed operator, and then disposed of exclusively at approved sanitary landfills of the competent units of local self-government (LSGs) or at regional sanitary landfills. This is in line with the Waste Management Act and the National Waste Management Program, as well as the practice of disposing municipal waste at licensed sanitary facilities (e.g., city/regional sanitary landfills serving the Belgrade and Srem areas). For the areas of the City of Belgrade, the city system and sanitary landfill within the city/regional facility will be used, which is in operation in accordance with the relevant plans and permits.

  The organization of collection, transport and disposal of municipal waste within an LSG is performed by public utility companies (PUCs) owned and managed by the LSG; they provide the service, while sanitary landfill operators act in accordance with the permits issued. Permits for inert and non-hazardous waste fall under local authorities, while the ministry issues permits for hazardous waste streams.

  The Contractor will not carry out any "on-site burying" of municipal waste nor mix it with sediment; all municipal waste will be temporarily stored in closed/covered containers at the work site and removed no later than 24–48 hours from generation. Transport will be performed by a licensed carrier to a sanitary landfill approved by the competent LSG (e.g., city/regional). Upon receipt, weighbridge tickets/delivery dockets must be recorded; copies will be attached to the monthly report.

  Unauthorized disposal of municipal waste at any location is strictly prohibited. Compliance will be ensured through contractual obligations, continuous supervision (Supervision/PIU), daily control of transport documentation and ad hoc route inspections, together with a community grievance mechanism. Any deviation will result in immediate suspension and corrective measures at the Contractor's expense.

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

- **Noise, dust and vibration disturbances during construction and temporary air pollution** related to the transportation of construction materials and truck traffic. These impacts will occur during the construction and Rehabilitation works for Galovica channel, but will be only short-term. Effects include dust from Rehabilitation works for Galovica channel, noise during trench excavation, possible effect of vibration caused by operation of heavy machinery, increased traffic in some sections of roads, etc.;
- **Safety hazards from Rehabilitation works for Galovica channel**. No major hazards are expected the construction of the proposed Sub-project elements, as long as proper construction practices and safety procedures are applied;
- **Labor And Working Conditions And OHS.**
- **Impacts on historic-cultural and archaeological monuments**. No archaeological or cultural resources are recognized during Sub-project preparation phase. There are no statutory protected archaeological sites along the Sub-project zone. The ESMP also includes a chance finds procedure in case any cultural heritage may be discovered during the works. In case of any findings the Contractor shall cease with works momentarily and notify the IPCM.
- **Key Labor Risks.** Key labor risks and how these will be managed have been identified broadly in the Labor Management Procedures. However, hunting season is expected to be a potential OHS risk for workers engaged for Rehabilitation works for Galovica channel close to the land owned by Ministry of defense (km 20+060 – km 21+900). Also, additional OHS risks are related to in channel works due to extremely low class of channel water (see chapter 2.1.1 Water and Sediment quality). Reduction of potential hazards will be accomplished by strict implementation of OHS mitigation measures prescribed in this ESMP document.

  Contractors are required to implement all reasonable precautions to protect the health and safety of workers in line with the LMP adopted for the Sub-project, national requirements and the EHS Guidelines of the World Bank. The requirements are already embedded in the Standard Bidding Documents of the World Bank required to be used for this Sub-project. However, the LMP has called for inclusion of a Statement on Compliance whereby bidders are requested to commit to implementation of the LMP, adherence to the National Labor and OHS law and to regularly report on social performance under the Sub-project (including matters to which ESS2 applies.).

  The Contractor will be required to implement preventive and protective measures according to the following order of priority:

  - Eliminating the hazard by removing the activity from the work process.
  - Controlling the hazard at its source through use of engineering controls.
  - Minimizing the hazard through design of safe work systems and administrative or institutional control measures. Examples include job rotation, training safe work procedures, lock-out and tag-out, workplace monitoring, limiting exposure or work duration, etc. ·
  - Providing appropriate personal protective equipment (PPE) in conjunction with training, use, and maintenance of the PPE.

Key labor risks under the Project can be divided between those associated with office work (office-based activities) and those associated with minor construction / Rehabilitation works for Galovica channel (construction site- based activities).

Key office –based risks may involve:

Project workers (external consultants and civil servants, and employees of service providers) are anticipated to be office staff with most of their work done indoors. These educated knowledge workers will have desktop jobs, although direct workers may carry out minor off-site travel may be needed to supervise project beneficiaries direct workers, and contracted workers may be required to travel to conduct training/TA. Thus, labor risks both in terms of working conditions and occupational health and safety are minor and negligible for all project. Off-site travel might expose them to travel and site related risks and requires some caution, but in terms of occupational health and safety these risks are minimal.

Due preparations will have to be made for each visit or event focusing on traffic safety and provision of adequate gear or equipment. Given the nature of the project work and the expected profile of project workers, the risk of child or forced labor tends to be nil. None of the identified project workers are considered vulnerable. No other labor risks are considered to be significant.

The office work related risks can be mitigated or reduced through improved organization of work processes and regular HR policies.

National legislation requires each employer to assess labor risks specific to each job/position. The recognized risks have to be addressed in compliance with the OHS legislation. OHS officers with each employer are responsible to ensure that adequate prevention and protection measures are in place and that safety regulations are obeyed. With the use of protection equipment, induction, proper training and organization of site, the risk of work-related injuries and occupational health can be significantly reduced.

The Project is assessed as Low on gender-based violence including sexual exploitation and abuse (SEA) and sexual harassment (SH). Mitigation measures to address SEA/SH risks are included in the section on Policies and Procedures. The risk factors assessment considered the institutional capacity of the implementing agency, low volume labor influx, no pre–existing social conflict and tensions, strong local law enforcement which resulted in the conclusion that this is a low labor risk project and risks can be managed through the requirements of this LMP.

Key labor risks associated with civil/ works at construction sites could include following occupational health and safety hazards, including but not limited to:

- Medium scale pavement works with asphalt or concrete;
- Soil stabilization;
- Cutting of trees and high vegetation
- Exposure to chemicals (paints, solvents.);
- Traffic accidents;
- Ergonomic hazards during construction;
- Welding hazards (aluminum thermite welding fume emissions, burns and radiation);
- Excavations, earth works hazards vibration;
- Vibration of heavy construction equipment;
- Dust, noise;
- Use of rotating and moving equipment;
- Lack of workers' awareness on occupational health and safety requirements such as the use of personal protective equipment (PPE) and safe workplace practices.

National legislation requires each employer to assess labor risks specific to each job/position. The recognized risks have to be addressed in compliance with the OHS legislation (in case of construction work, in addition to umbrella legislations, rulebooks for example, specifically addressing assessment of work-related risks, work on construction sites and protection at work during Rehabilitation works for Galovica channel are applicable). OHS officers with each employer and work execution coordinators at construction sites are responsible to ensure that adequate prevention and protection measures are in place and that safety regulations are obeyed. With the use of protection equipment, proper training and organization of site, the risk of work-related injuries and occupational health can be significantly reduced. The ISO standards set additional requirements in terms of quality management, environment and OHS or impose clear and string technical conditions for different activities.

If Rehabilitation works for Galovica channel involve potentially hazardous work, even after preventive and protective measures have been put in place (residual risk), persons under the age of 18 will not be employed by the Project, to avoid any unnecessary risks. Consequently, the risk of child labor tends to be nil.

Broadly, the impacts in the construction phase can be of the following types

The Operation phase is not expected to induce major social impacts. Maintenance of the Rehabilitation works for Galovica channel i.e. flood protection structure will be continued within the established Right of Way (ROW). What is seen as risk, although not significant in magnitude are risks related to exposure of the community to health and safety risk from maintenance activities (such as cleanse of natural debris, mowing of grass, cutting of shrubs and self-grown trees etc.) which activities will be implemented by the JVP Srbijavode (who will take over the operation of the facility). JVP Srbijavode will deploy and implement robust communication strategy in line with its internal communication practices and the provisions of the SEP designed for the operation phase.

Significant negative impacts on natural environment in the operational phase are not expected. On the contrary, impacts in the operational phase are considered to be highly positive, as Sub-project aims at prevention of risks for environment, humans and civil infrastructure.

4.1. Beneficial impacts of Rehabilitation works for Galovica channel Sub-project

The repair of Galovica channel infrastructure will bring economic, social, health and ecological benefits, to population and local community in this area.

4.2. Significance of adverse Sub-project Impacts and recommended Mitigation Measures

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

Impact	Significance	Comment /Mitigation Measures
Impacts on land use/ settlements,	Negligible	The Sub-project will not require land acquisition of private land, and will not require physical nor economic displacement.
Ground and surface water	Low	Due to low amount of drainage water that can be potentially drained from the Contractor's site and during works execution into the channel the consequential impact is expected to be minimal to negligible. Adequate Sub-project supervision consultant (PSC) will be established and no long term water disturbance or similar activities will be allowed. Considering the methodology of works on Rehabilitation works for Galovica channel, localized impacts to the channel flow (increased turbidity) are expected. Prevention of the erosion of the channel bank will result in increased channel flow in operational phase. Improper disposal of excavated materials and construction wastes could adversely impact ground and surface water. A properly organized waste disposal is mandatory requirement for the Sub-project. The Contractor is required to undertake regular sampling and analysis prior to transport and prior to final disposal of extracted/dredged material. Additionally, the Contractor is also obliged to perform baseline (zero) sampling and follow-up (control) sampling of the recipient soil at the disposal locations. Detailed design (number of points, composites, LOQs, LC/GC-MS/MS methods; metals per EN/ISO) will be defined in the Sampling Plan approved by the Supervision Engineer. All sampling under chain-of-custody; accredited laboratory Certificates of Analysis shall be attached to the monthly reports. **Monitoring costs are borne by the Contractor** and shall be included in the Bid price.
Air quality,	Low	Temporary impact. Local air quality may experience some moderate and temporary deterioration due to dust from transportation of construction materials and truck traffic and

Impact	Significance	Comment /Mitigation Measures
		elevated levels of nitrogen oxide (NOx) and sulphur oxide (SOx) from construction equipment exhausts. Impact can be mitigated by following WB EHS Guidelines (GEHSG)[2] procedures
Flora and fauna (protected areas and species),	Low	Loss or damage of vegetation and disruption of fauna can occur during works although compensation measures will be able to offset loss of vegetation. The Sub-project works will lead to increased consumption of energy and raw materials, waste generation and emission of pollutants. Impacts can be offset or mitigated by following GEHSG procedures and possession of valid environmental permits by the material suppliers. There will be no negative impacts on protected areas due to nature of works. Adverse impact to ichitofauna is not expected as the channel is highly polluted This is largely about BOD and COD (organic load) together with suspended solids and nutrients that depress dissolved oxygen and make the water ecologically poor for fish, rather than about acute toxicants that would threaten workers or require special hazardous-waste controls. The ESMP therefore keep its focus on good work practices: limit in-channel disturbance length at any one time, avoid works during peak heat/low-flow periods when oxygen is lowest and stabilize/vegetate placed sediments promptly to prevent wash-off. Those measures address the real mechanism of impact here—oxygen stress and siltation—while maintaining a very low risk profile for the workforce. Consistent implementation of the BMP will significantly reduce risks to flora and fauna. Pre-construction ecological surveys and continuous oversight by Contractor's Biology Expert (BE) will identify sensitive receptors early, while timing restrictions, phased "one-bank-per-pass" methods, and retention of vegetated refugia minimize disturbance and allow safe displacement and rapid recolonization. Sediment/turbidity controls, noise- and light-management. When active nests or amphibian breeding sites are found, temporary exclusion buffers and work rescheduling avoid harm and ensure alignment with ESS6 and national nature-protection requirements. Collectively, these measures keep residual effects local and short-lived, supporting no-net-loss outcomes and safeguarding ecological function along the channel corridor.
Noise and vibration,	Low	Only limited temporary impact during the Rehabilitation works for Galovica channel phase. Mitigation measures in form of noise deflecting shields will be placed where the work-scheduling activities cannot have desired effect. Impact can be mitigated by following GEHSG procedures. Structures near vibration sources (e.g. operating heavy earth-moving equipment) will be identified prior to construction. • Buildings and occupants with susceptibility detection will be evaluated for vibration, and if vibration estimates or measurements show potential for building damage, alternative construction methods will be developed to prevent damage. Vibration standards according to Serbian Law on Environmental Noise Protection 2021 will be implemented
Soil quality	Low	Soil contamination can occur from Drainage of extracted/dredged materials, spillage of hazardous and toxic

[2] https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines

Impact	Significance	Comment /Mitigation Measures
		chemicals. Impact can be mitigated by following procedures The Contractor is equired to undertake regular sampling and analysis prior to transport and prior to final disposal of extracted/dredged material. Additionally, the Contractor is also obliged to perform baseline (zero) sampling and follow-up (control) sampling of the recipient soil at the disposal locations. The Contractor shall: - prepare and implement a Sampling and Analysis Plan (accredited laboratory, sample traceability/chain-of-custody); - for each batch/lot of extracted/dredged material, conduct analyses before transport and before disposal - carry out baseline sampling of the recipient soil (0–30 cm) before the first placement, as well as control sampling after placement; - apply corrective measures (batch isolation, diversion to an alternative location/treatment) if results exceed applicable reference/limit values from national regulations or the pre-agreed screening levels.
Loss of top soil	Low/ negligible	Loss of top soil due to temporary access roads and work areas, Landscape degradation.
Waste	Low	Health hazards and environmental impacts can happen due to improper waste management practices. Impact can be mitigated by following GEHSG procedures
Community Health and Safety	Moderate	Risk to community health and safety (ESS4). The major risks tied to Community health and Safety relate to potential traffic and road safety risks to workers, affected communities and road users throughout the Sub-project life. These risks mainly stem from increased traffic on haulage routes from and to potential borrow and deposit areas to be used by the Contractors during Rehabilitation works for Galovica channel. Health and safety risks posed by the influx of workers or people providing support services into an area are almost considered negligent since no influx of workers is expected. Gender-Based Violence (GBV) or Sexual Exploitation and Abuse (SEA), Sexual Harassment (SH) is assessed as low. The Contractor will be required to adopt the Code of Conduct.
		Risk from hazardous materials including UXOs, mines and mine-exploding devices are highly unlikely to be found. Nonetheless these shall adequately be addressed by application of the “Unexploded ordnance and mines chance finds procedures provided by the Contract.
		Regular monitoring/patrolling of constructions in the ROW and awareness raising in communities with regards to construction site risks
		Prevent access of the general public, by use of signs and barriers near to prevent anyone from accessing the construction site.
		Risk to community health and safety during removal of channel sediment is low

Impact	Significance	Comment /Mitigation Measures
		Traffic impacts due to increased traffic flows, abnormal loads and Rehabilitation works for Galovica channel in vicinity of public roads
OHS risks	Moderate	The Contractor shall appoint one or more coordinators for safety and health matters
		Prior to setting u the construction site a health and safety plan shall be drawn up.
		Construction workers may be affected adversely due to presence of hunting area along the channel section from km 20+060 – km 21+900. This will be mitigated by aligning construction works with hunting season and by establishing a close and written coordination between the PIU, Ministry of defense and the Contractor engaged.
		Construction workers may be affected adversely due to hazardous working environment. Risk from infection from low quality channel water during removal of channel sediment are expected but will be mitigated by proper usage of PPE by engaged workers. Also, in channel works management plan will be prepared by the Contractor and reviewed and approved by PIU prior to commencement of Sub-project works. Water quality in all surveyed localities corresponds to **Class V**, indicating very poor water quality based on parameters such as **dissolved oxygen, suspended matter, COD, BOD, and nutrients**. Sediment quality corresponds to **Class 2**, which is considered **slightly polluted**. Despite these classifications, the **occupational health and safety (OHS) risk to workers involved in Rehabilitation works for Galovica channel is assessed as *low***, provided that standard precautions are applied. The low risk rating is justified by the following: Class 2 sediment is only **slightly polluted**, and its **disposal is permitted without special protection measures** within a **20-meter zone** along watercourses. No acute contamination, toxic substances, or hazardous pathogens have been identified that would trigger higher OHS controls. Works are limited to sediment dislocation and removal without processing, reducing exposure time and intensity.
Borrow pits	Low	Impacts related to the borrow pits for materials, shall be mitigated by using existing borrow pits or buy material at licensed separations; requirement for official approval or valid operating license. After exploitation ensure borrow pits are remediated.

Possible adverse effects as a consequence of temporary Rehabilitation works for Galovica channel shall, among other things, consist of: damages to access roads, noise, waste and dust; gaseous emissions; potential soil and water contamination; short-term disruptions to surrounding ecosystems; and momentary disruptions to neighboring settlements through various Sub-project and operational activities.

A Sub-project Grievance Mechanism in line with the SEP will be implemented to ensure that all complaints from local communities are dealt with appropriately, with corrective actions being implemented, and the complainant being informed of the outcome. It will be applied to all complaints from affected parties. A grievance form is attached in Annex 4 and hard copies will be made available at community centers and at the Construction Site.

The Contractor will be required to develop and implement specific Labor Grievance Mechanisms for its workforce (contracted workers) including sub-contractors, prior to the start of works. The Contractor will ensure that all engaged or employed workers are aware of the labor grievance mechanism by providing information on the methods for raising grievances (including anonymously) in the HR induction. The Contractor will ensure the grievance mechanism is accessible by putting grievance boxes, forms and posters about the labor grievances at locations at the main Construction Site and in suitable locations in the site offices or sites used during daily breaks. In addition the Contractor is required to conduct a communications campaign (e.g. through toolbox talk and posters) to make workers aware of the mechanism.

The workers grievance mechanism will include, at minimum:

- Procedures to receive grievances such as comment/complaint form, suggestion boxes, email address, a telephone hotline, focal point department;
- Stipulated timeframes to respond to grievances and to address cases.
- Register to record and track the timely resolution of grievances.
- Responsible department to receive, record, address and track resolution of grievances.

And will be based on the following principles:

- The process will be transparent and allow workers to express their concerns and file grievances.
- There will be no discrimination and retaliation against those who express grievances, and any grievances will be treated confidentially.
- Anonymous grievances will be treated equally as other grievances, whose origin is known.
- Management will treat grievances seriously and take timely and appropriate action in response.
- Any worker including subcontracting workers can express concerns, complaints, and grievances at any time, without fear of retribution and retaliation.
- All grievances will be treated in a fair and respectful manner.
- Anonymous grievances will be treated equally as other grievances whose origin is known.
- When a grievance is received, the Contractor will ensure to confirm its receipt within 3 business days. At this time, the complaint will also be provided information about response times, next steps and a contact within the team.
- All grievances will be documented to the grievance mechanism, including those received by supervisors, project managers, or any management staff.
- Grievance mechanism will have a dedicated procedure to address complaints related to workplace harassment and sexual harassment. The sexual harassment grievance mechanism shall be operated by the trained staff and complaints will be recorded and kept in a data protected data base,

The Project workers' grievance mechanism will not prevent workers from using any other administrative or judicial mechanisms provided by the national laws.

The Contractor will be selected using the World Bank's 2017 Standard Bidding Documents for solicitations and contracts, and these include labor and occupational, health and safety requirements. The Procurement Documents will be supplemented with a Third parties statement on commitment to comply with provisions of labor legislation and the Project`s LMP which the Contractor will be required to sign.

5. ES MITIGATION MEASURES

This document presents a site-specific ESMP, as action plan detailing which of the Environmental Assessment report recommendations and alternatives are adopted and implemented. It can be produced as part of Detailed Design, or like the subject ESMP, as a free-standing document. It ensures incorporation of the relevant environmental factors into the overall Sub-project design and links the Sub-project to other relevant Environmental and Social Standards.

5.1. General

This section details out the potential environmental and social impacts of the Sub-projects.

5.1.1. Environmental and Social Impacts and Mitigation Measures

Erosion of embankment slopes

Impact - The earthworks for the Sub-project activities might cause negative impacts in form of erosion on embankment slopes, dust, noise and vibration to disturb the local people.

Mitigation Measures - Excavation and/or filling will be done within right of way of Galovica channel. The Contractor should use erosion control measures such as re-vegetation of disturbed areas and placing of tarps. The Contractor shall stabilize the cleared areas not used for Rehabilitation works for Galovica channel with vegetation or with the appropriate surface treatments as soon as practicable following completion of activities.

Increased generation of pollution – Supply of material

Impact - The Sub-project works will lead to increased consumption of energy and raw materials, waste generation and emission of pollutants.

Mitigation Measures – During material supply ensure that material plants engaged by the Contractor possess valid environmental permits and conformance with the requirements of environment protection, health protection and human safety.

Potential air pollution - Dust

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

Mitigation Measures - Spraying of water is the main way of controlling dust. Water is, in any case, required to be added to fill material during the Rehabilitation works for Galovica channel.

Potential water impacts

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

During Rehabilitation works for Galovica channel there is a possibility of additional water contamination, as a consequence of water effluent from the construction site, spillage of fuels and oils from construction mechanization and uncontrolled flow of sanitary waters from the Construction site and the Contractor's camp.

Spillage of fuels and oils may, in most cases, occur inside the Contractor's camp and on manipulative surfaces where equipment and construction mechanization is maintained and cleaned.

Mitigation Measures - The site will establish appropriate erosion and sediment control measures (e.g. hay bales and / or silt fences) to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers. Fuel and lubricant spills can occur at the Contractor’s work camp while maintaining and washing equipment and work vehicles. During the normal operations, these areas should be equipped with the adequately sized, gravity oil separator. Should spills occur, to mitigate the problem the Contractor should use absorbing materials, such as absorbent mats/fabrics, or sand and scrape off the contaminated soils and dispose them in approved facility, in accordance with the Law on Waters.

During Rehabilitation works for Galovica channel there is a possibility of water contamination, as a consequence of water effluent from the construction site, spillage of fuels and oils from construction mechanization and uncontrolled flow of sanitary waters from the Construction site and the Contractor's camp.

Considering possible pollution after works completion, they are limited to accidents only. In which case as defined by the Ministry of Interior and the Law on Water, procedures for incidental situations will be applied.

Spillage of fuels and oils may, in most cases, occur inside the Contractor's camp and on manipulative surfaces where equipment and construction mechanization is maintained and cleaned. Effluent dirty water should be treated in separators of adequate size before being discharged towards the recipient.

If any spillage occurs inside the Sub-project area, the Contractor is obligated to mitigate the problem by applying absorbing materials, such as absorbing carpets / linens, or sand, as well as remove the layer of contaminated soil and move it to an approved location, in accordance with the Law.

Flora and fauna

Impact - The works are limited to mechanical cleaning and maintenance within the footprint of the existing Galovica chanel and its banks. Within the ±50 m corridor, habitats are predominantly anthropogenic and agricultural, interspersed with reedbeds, grassy banks and shrubby margins that host small fauna typical of lowland channels. There are no designated Natura 2000 or other protected areas within the project corridor; Obedska bara lies well outside the influence area. In ecological terms, the principal near-term risks are temporary and local: disturbance and partial removal of bank vegetation, temporary displacement of small mammals, amphibians and reptiles sheltering in reed and grass cover, and short-lived turbidity pulses from in-channel operations. Noise and human presence may cause brief avoidance by birds and other mobile fauna but are not expected to create lasting habitat loss when good practice is applied. Because the intervention stays within an already modified watercourse, and because the BMP requires phasing and refugia retention[3], residual effects are expected to be local and short-lived, with a low likelihood of permanent damage. Where pre-work surveys identify sensitive features—such as active nests or amphibian spawning sites—these areas are to be temporarily avoided and the sequence of works adjusted so that populations are not harmed.

Mitigation Measures – This ESMP includes a Biodiversity Management Plan –BMP (Annex 7) tailored to the Rehabilitation works for Galovica channel. The Contractor must appoint a qualified Biology Expert (BE), integrate the BMP into the Method Statement for each section. The BE will conduct a pre-construction ecological walkthrough 3–7 days ahead of works on each 300–500 m section, mapping any active nests in reed or bank vegetation, likely amphibian micro-refugia and other sensitivities. BE shall prepare a brief BMP Addendum by sections (sensitivity map, sequencing, phasing, equipment) to be delivered to PIU in timely manner. Works are scheduled, where feasible, outside peak bird breeding (approximately April–July) and amphibian spawning (March–June). If seasonal windows cannot be avoided, the BMP requires stricter phasing.

During works execution, the method is designed to let wildlife move away and to keep functioning habitat within each reach. Crews work one bank per pass and avoid clearing both banks of the same section at once. Vegetation removal follows a two-stage approach: an initial cut to roughly 20–30 cm followed by a pause of at least 48 hours to allow fauna to disperse, then a finishing pass. If the BE identifies an active nest, a temporary buffer of roughly 20–50 m is established, and that sub-section is skipped until fledging/abandonment is confirmed.

Throughout the project implementation, the BMP remains the operative reference. The BE pre-works notes, daily oversight, photographic record, and weekly summaries all cite BMP clauses and section maps so that any decision—such as phasing a bank, enlarging a buffer, or retaining an extra patch of reeds—is traceable to the plan. This disciplined implementation ensures that biodiversity risks are

[3] intentionally left "oases" of habitat

systematically avoided or minimized and that any residual effects remain local, temporary and reversible within the Galovica channel corridor.

Waste

Contractor is required to produce a Waste Management Plan for the Sub-project. Mitigation measures should, among other requirement, contain obligations to:

- Locate the garbage pit/waste disposal site min 500 m away from residential, or other areas used by people, including recreational, education and health care facilities so that people are not disturbed with the odor likely to be produced from anaerobic decomposition of wastes at the waste disposal places. Encompass the waste disposal place by fencing and tree plantation to prevent children to enter the area. All solid waste will be collected and removed from the work camps and disposed in approval waste disposal sites.
- In case oil and grease are trapped for reuse in a minimum 60cm thick lined pit, care shall be taken to ensure that the pit should be located at the lowest end of the site and away from the residential areas.
- In case of filling of low-lying areas with wastes, it needs to be ensured that the level matches with the surrounding areas. In this case care should be taken that these low lying areas are not used for rainwater storage

  In the event of discovering hazardous waste, **all works must be suspended immediately**, and the Contractor must notify the Engineer and the Client, in line with relevant legislation. The Contractor shall organize and deliver targeted training sessions for all personnel involved in Rehabilitation works for Galovica channel, sediment removal, transport, and disposal activities, with a focus on the identification and handling of potentially hazardous waste. Training shall include, at a minimum: (i) Awareness of hazardous waste categories relevant to water and sediment works (e.g., hydrocarbon-contaminated sludge, oily residues, chemical containers, heavy metal deposits); (ii) Recognition of visual, olfactory, and physical indicators of potential contamination (e.g., oily sheen, unusual color or odor, presence of solid waste or debris); (iii) Health and safety risks associated with exposure to hazardous waste and appropriate Personal Protective Equipment (PPE) requirements; (iv) Immediate response procedures, including cessation of work in the affected area, reporting to the site supervisor or environmental specialist, and secure containment of suspicious material; (v) Segregation, labeling, and temporary storage of hazardous waste in designated, bunded areas until properly characterized and disposed of by licensed operators; (vi) Compliance with national legislation and procedures for hazardous waste tracking and reporting (e.g., waste manifests).

Equipment maintenance and fueling

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

Mitigation Measures - To avoid damage to natural environment there is a need to ensure proper handling of lubricants, fuels and solvents while maintaining the equipment. Works on machinery and refueling to be done away from the channel bed. Have a plateau for such events. Use containment trays. Have an emergency spill management procedure in place. All vehicles and machinery to be equipped with spill kits...

Noise

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

Mitigation Measures - In case of noise disturbance with noise emissions which are above permitted level, temporary noise barriers should be considered as appropriate mitigation measure. Awareness building and administrative measures should be taken to ensure proper maintenance of vehicles. In case of exceeded noise limits for sensitive areas the Contractor should erect temporary shields to prevent a free noise spreading to the sensitive receptors.

Based on the preliminary assessment, key mitigation measures recommended under this Environmental and Social Management Plan (ESMP) are listed as follows:

- Identify and locate on Sub-project plans any sensitive natural resources in the Sub-project area including but not limited to patches of natural habitat, bird colonies, and wetlands, unique plant communities etc. (consult with local nature protection authorities).
- Identify local access routes through and around cultivated land and pasture.
- Minimize requirements for temporary or permanent alteration of lands outside the right of way.
- Dredging for embankment materials should occur only within marked navigation channels to minimize destruction of fish habitat.
- Provide for zones of preliminary accumulation of wastes that will cause no damage to the vegetation cover and other components of the environment.
- Transport and disposal of construction concrete rubbles, debris and spoils in approved paths and landfills/disposal sites.
- Delineate access roads/ work areas carefully and prevent their expansion.
- Rehabilitate access roads and work areas after work completion (scratch soil with special engine, put fertile topsoil in place, etc.).
- Use closed/covered trucks for transportation of construction materials.
- Clean the surrounding area from dust by water sprinkling, removal of excess materials and cleaning of sites upon completion of activities.
- Restoration to quasi-original conditions of landscape after completion of Rehabilitation works for Galovica channel.
- Arrange necessary preservation measures (establish protection zones, by-pass these areas during transportation and other).
- Cease the works as soon as historical and cultural monuments are encountered during earthworks and provide relevant information to the State Agency for Historical and Cultural Monuments Protection.
- Conduct mid-term and end-of-project inspections to the sites during Rehabilitation works for Galovica channel.

Labor risk

Impacts - Workers may be affected by inadequate working conditions, inadequate rest period and cases of violation of workers' rights.

Mitigation Measures – Establishment of a worker specific grievance mechanism for Sub-project workers. The Sub-project worker is entitled to give suggestions, remarks and information regarding health and safety at work. He/She may refuse to work if his/her life or safety is endangered or if appropriate measures for provision of health and safety at work are not in place. The Sub-project workers shall be informed on available grievance mechanisms upon their employment or engagement. Contracted parties shall demonstrate their willingness to implement these mechanisms, even if such requirement is not prescribed by any law of the domicile country.

Occupational Health and Safety

Impacts - Construction workers may be affected adversely due to hazardous working environments where high noise, dust, wastewater, working in and near water bodies unsafe movement of machinery etc. may be present. Safety hazards that lead to worker accidents and injuries.

Additionally, workers may be affected adversely due to presence of hunting area along the channel section from km 20+060 – km 21+900.

Also, the Rehabilitation works for Galovica channel workers may be affected adversely due to hazardous working environment. Risk from infection from low quality channel water during removal of channel sediment are expected.

Labor risks are associated with Rehabilitation works for Galovica channel such as exposure to physical hazards during Rehabilitation works for Galovica channel such as: use of heavy equipment, works on

channel banks with high-speed currants, trip and fall hazards, exposure to noise and dust, falling objects, exposure to hazardous materials and exposure to electrical hazards from the use of tools and machinery. As the Rehabilitation works for Galovica channel will involve hazardous work, persons under the age of 18 will not be employed by the Sub-project

Mitigation Measures - The Contractor must provide induction trainings in health and safety matters, and require from the workers to use the provided personal safety equipment. Contractor has to ensure that all operators of heavy or dangerous machinery are properly trained/certified, and also insured. The Contractor shall have first aid facilities on site, and prepare for rapid availability of trained paramedic personnel, and emergency transport to nearest hospital in a case of accidents and injuries.

Risks related to the presence of hunting area along the channel section from km 20+060 – km 21+900 can be mitigated by aligning construction works with hunting season and by establishing a close and written coordination between the PIU, Ministry of defense and the Contractor engaged.

Risk from infection from low quality channel water will be mitigated by proper usage of PPE by engaged workers. I addition, in channel works management plan will be prepared by the Contractor and reviewed and approved by PIU prior to commencement of Sub-project works

Non-compliance with conditions of easement rights leading to environmental or social impacts (e.g., restriction of access, damage to property, or inadequate reinstatement)- All easement rights shall be formalized and retained as official correspondence within the Water Directorate. The Legal Department of the Water Directorate shall maintain complete records of all signed easement agreements. The PIU Environmental and Social (ES) Specialists within the Ministry of Agriculture, Forestry and Water Management (MAFWM) will monitor the implementation of works conducted under easement rights to ensure compliance with the agreed conditions and relevant E&S safeguards. Contractor will be issued written instructions outlining their obligations under the easement rights, including environmental and social compliance requirements.

Working in the area managed by the Ministry of Defence - Before commencing works within areas under the jurisdiction of the Ministry of Defence (MoD), the MAFWM and/or PWC Srbijavode will prepare and submit an initial written request to the MoD at least 30 days before the planned start of works. The request shall include: (i) information on **scope of works**: site plan, description of works, precise geodetic coordinates, cadastral parcel references; (ii) **Plan of protective and supervision measures**, including access restrictions and entry requirements measures to avoid interference with hunting schedules and wildlife; (iii) Proposed schedule for the start and completion of works, and expected duration.

Commencement of works – works may begin only upon receipt of the written approval, and must be carried out within the approved timeframe under supervision.

5.1.2. Site-Specific Implementation Plans (SSIP)

Prior to initiating works, the Contractors will be required to prepare and submit for approval Site-Specific Implementation Plans (SSIP) consisting of:

- Waste and wastewater management plan
- Oil and fuel storage management plan
- In-channel works management plan
- Camp management plan
- Re-foresting plan
- Emergency response plan
- Stakeholder engagement and information disclosure plan
- Grievance Mechanism inclusive of a protocol to manage receipt, resolution/escalation of quaries and complaints

The following table presents the Mitigation Plan for the Sub-project and it is intended as a checklist to ensure that relevant mitigation measures are implemented at appropriate Sub-project stages.

Contractors are required to familiarize and adequately train their workers in the area of Environmental and Social protection measures put forth hereunder.

5.2. Mitigation Plan for SDIP Sub-project Rehabilitation works for Galovica channel

This chapter provides a framework for defining, organizing and implementing mitigation measures aimed at preventing, minimizing or compensating for potential negative impacts to the natural and human environmnet during project implementation. The purpose of the mitigation plan is to ensure that measures are integrated into the project implementation process in a systematic and transparent manner.

In addition to the direct project risks addressed by the mitigation plan, although the issue of pest control cannot be addressed within the current project and does not fall under the direct responsibility of the construction works, this Mitigation Plan also includes relevant provisions extending to the post-construction phase. In particular, the Project Implementation Unit (PIU) recognizes the obligation to draw the attention of the relevant institutions to the problem of pesticide use in the vicinity of the Galovica Channel and to highlight the importance of systemic solutions for managing this environmental risk. In this way, the Plan goes beyond its immediate scope by acknowledging broader environmental challenges and ensuring that institutional dialogue on pesticide management continues after the physical works are completed.

Mitigation Plan for SDIP Sub-project Galovica - Rehabilitation works for Galovica channel

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
PRE-CONSTRUCTION	**EIA Procedure and Tender documents preparation**				
Inclusion of adequate provisions to manage Environmental and Social Impacts	Tender documents prepared with access to or use of the this ESMP	Tender documents prepared with access to or use of the this ESMP No Tender documents will be prepared without incorporating this ESMP, which shall be included in the safeguard clauses of the Technical Specifications in the contracts and commitment to comply with will be request to be signed by each prospective bidder and will contractually be imposed to the successful bidder	PIU Central Fiduciary Unit (CFU) Water Directorate of MAFWM	During preparation of Procurement Document for selection of Contractor for Construction Works	
Planning/ Designing	Potential damages to the existing infrastructure and facilities, especially underground installations (water supply and sewerage pipeline etc.) which cause obstacles in the provision of services to consumers.	Precisely situate the position of infrastructural facilities and underground installations at the location of works in cooperation with relevant institutions at all levels of authority.	Contractor and representatives of relevant institutions of local authority.	During Design preparation	
Communication and Stakeholder Engagement	Timely engagement with relevant Stakeholders including local Communities on all aspects of Rehabilitation works for Galovica channel and mitigation measures	Prepare the Sub-project specific implementation plan featuring the key activities from SEP (SEP implementation Action Plan) and prepare the communication tools and material	PIU Social Specialist	SEP implementation Action Plan prepared and in place	Stakeholder's engagement including engagement with PAPs will commence during the ESMP disclosure phase.
Public consultations	Disclosure and public consultation on the ESMP	Disclose the ESMP and notify local communities. Discuss all aspects and impacts.	PIU ES Specialists	Prior to tendering	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
Securing consent on temporary land use during construction	Acquiring consent for temporary use of 6 land parcels	Written consents from private landowners shall be obtained prior to accessing or using private land for project-related works, including access roads and material transport routes, to ensure compliance with ESS5 and national regulations. Voluntary transactions must be properly documented to demonstrate that land users were fully informed and freely consenting.	Water Directorate of MAFWM guided by the PIU Social Specialist	Written consents already obtained prior to tendering for 6 private land parcels. Easement agreement to be signed and documented prior to start of works on any additional land parcels identified during construction phase.	Written consents from landowners of 6land parcels obtained and properly documented.
Securing timely access to the project area in the scope owned in managed by the Ministry of Defense	Acquiring timely consent for accessing and undertaking of works in the	On the section from km 20+060 – km 21+900, the channel cuts through an area of land owned by the Ministry of Defense (MoD). A special permit needs to obtained from Military Authorities for performing works in the subject area.	Contractor/ PWC Srbijavode supported by the MAFWM	Prior to commencement of works	
Prior to commencement of works	Damage to local roads and related infrastructure from heavy construction traffic and material transport, leading to community dissatisfaction and unexpected repair costs.	Conduct a Local Road Zero State Survey prior to commencement of construction works, covering all roads expected to be used by project traffic. Survey shall include: • Visual inspection of pavement, shoulders, drainage, and structures; • Detailed photographic and video documentation (geo-referenced); • Logging of defects with precise chainage and severity ratings; • GPS/GIS mapping of road conditions and sensitive receptors; • Assessment of existing traffic volumes and types; • Documentation of road furniture, safety features, and environmental sensitivities. - Prepare a Survey Report signed by the Contractor, PIU, and local authorities.	Contractor	Prior to commencement of works	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
		- Use survey as a benchmark for comparison post-construction. - Implement remedial measures for any new damages attributable to project activities, restoring roads to pre-project condition or better. - Maintain records to resolve potential disputes over road conditions and ensure transparency with stakeholders.			
Prior to commencement of works	Potential damage to flora and fauna	The Contractor must appoint a qualified Biology Expert (BE) and integrate the BMP into the Method Statement for each section. The BE will conduct a pre-construction ecological walkthrough, mapping any active nests in reed or bank vegetation, likely amphibian micro-refugia and other sensitivities. The BE shall prepare a brief BMP Addendum by sections (sensitivity map, sequencing, phasing, equipment) to be delivered to PIU in timely manner	Contractor	3–7 days ahead of works on each 300–500 m section	Activity shall be coordinated with PIU
CONSTRUCTION	**Material supply, borrow areas and stockpile (deposit areas)**				
	Sand and gravel borrow pit. disturbance of Galovica channel bed, water quality, ecosystem disturbance	Use existing borrow pits or buy material at licensed separations; requirement for official approval or valid operating license. Supervision Consultant shall approve each particular borrow pits proposed by the Contractor in accordance with the law. After exploitation ensure borrow pits are remediated.	The Contractor will be required to request approval of sourcing of materials for each borrow pit.	Prior to sourcing or use of material	to be specified in Tender documents - Conditions for selection of subcontractors for material supply
	Sanitation, remediation and re-cultivation of borrow areas	Rehabilitate, polluted and degraded land to a level that is safe for use in accordance with its purpose, appropriate measures and activities are implemented, that is, land remediation and/or re-cultivation. Land remediation shall be carried out in cases where soil pollution at a certain location exceeds the concentrations of polluting, dangerous and harmful substances prescribed by the remediation values. Land re-cultivation shall be carried out on polluted and degraded areas for the purpose of re-forming the soil layer	Contractor to adopt Remediation and re-cultivation designs and submit to MAFWM for approval Supervision Consultant shall oversee the activity is	Within 30 days from the day any and each borrow area is no longer used for material supply	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
		and establishing plant communities on areas where mineral raw materials were exploited, failed afforestation, as well as in the case of natural disasters, fires and other anthropogenic impacts. Develop Land remediation and/or re-cultivation designs approved by the Ministry of Agriculture, Forestry and Water Management	implemented in time		
	Stockpiling of excavated sediments	Perform necessary analysis of sediments excavated. Sediment categorized as non-hazardous waste shall be disposed on already approved deposit areas (Dec, Jakovacka kumsa and Budjanovci) The Contractor shall he ESMP will be updated so that the Contractor also shall: - prepare and implement a Sampling and Analysis Plan (accredited laboratory, sample traceability/chain-of-custody); - for each batch/lot of extracted/dredged material, conduct analyses before transport and before disposal - carry out baseline sampling of the recipient soil (0–30 cm) before the first placement, as well as control sampling after placement; - apply corrective measures (batch isolation, diversion to an alternative location/treatment) if results exceed applicable reference/limit values from national regulations or the pre-agreed screening levels.	Contractor	During the whole course of the Sub-project	
	Remediation plan for disposal sites	Remediation plan shall be prepared by the Contractor at its own cost. All disposal sites must meet aesthetic and technical requirements. Contouring the soil heaps, preventing erosion, and covering deposits with vegetation are mandatory in order to stabilize the material, reduce washout, and prevent diffuse pollution.	Contractor for Plan development. PIU for Plan approval.	Prior to works commencement	to be specified in Tender documents and cost included into bidding price
CONSTRUCTION	**Material transport**				

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
	Generation of dust	During transportation on public roads, the excavated materials will be covered with nylon canvas or suitable materials with a grain size greater than 10 mm in public roads as good practice. Localized watering/dampening and activity-specific watering/dampening will be used to reduce localized dust emissions. Stockpiling of stripped surface material, e.g. rock, sand and soil, stockpiling of unwashed materials, will be limited. Stockpiles should be kept as enclosed as possible or covered. Stockpiles will be placed as far away from receptors as possible. Compact deposited earth material. Design of stockpiles will be optimized to maintain a low profile without a sharp change in shapes. Wind breaks or dust protection systems (including sprinklers) should be built around the main Rehabilitation works for Galovica channel where necessary and, if possible, near potentially dusty works to minimize the impact of nearby residential receptors	Contractor	Throughout Construction works	
	Generation of noise	Speed limits will be implemented on the routes to minimize the risk from dust and working hours shall be in line with the law. When not in use, vehicles should be shut down unless it is due to health and safety reasons (e.g. maintenance of the air conditioner).In addition to above implement a restricted working time in consultation with the Local Community. Noise levels will not exceed Environmental Noise Limits, or result in a maximum increase in background levels of 3 dB at the nearest receptor location off-site. Night-time operation and transport should be minimized as much as possible, Avoid night time construction when noise is loudest. Avoid night-time construction using heavy machinery, from 22:00	Contractor	Throughout Construction works	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
		to 6:00 near residential areas. No discretionary use of noisy machinery within 50m of residential areas and near institutions, manual labor can be used at this point. Good maintenance and proper operation of construction machinery to minimize noise generation.			
CONSTRUCTION	Change Management				
	Design changes instructing a change to the Works as defined in the Contract for Construction works. These changes can include alterations to quantities, quality, levels, positions, dimensions, or the sequence of work either through Variation orders or Value Engineering). Such changes may result in new risks and impacts that were not identified during the initial screening (e.g. require the use of additional private or public land and may introduce unforeseen environmental or social risks. These could include impacts on surrounding habitats, community access, or land-based livelihoods..	Any intention to modify the design shall be formally communicated between the parties no later than 7 days following the identification of the need for changes. The notification must include sufficient details of the proposed design modifications to enable an appropriate screening of potential additional environmental and social risks and impacts. Undertake supplemental screening, which will either re-confirm or re-classify risk, and determine whether amendments to this ESMP are required. Where necessary, the ESMP will be updated to ensure adequacy and comprehensiveness of mitigation and monitoring measures. If the screening confirms that existing measures remain sufficient, this shall be documented accordingly. In the event that the screening process identifies a need for additional private land as a result of design modifications, a dedicated Resettlement Action Plan (RAP) will be prepared. The RAP will be developed in accordance with the requirements of ESS5 and national legislation, and will be based on: (i) a detailed census of affected assets and persons, (ii) a socioeconomic survey of affected households, and (iii) extensive consultations with all stakeholders to ensure that entitlements, mitigation measures, and livelihood restoration strategies are designed in a transparent, inclusive, and equitable manner. No civil works shall commence based on modified design until the ESMP changes have been put into effect and budgeted for, and until and unless the RAP (if required) is	Party initiating modifications to the design Party initiating modifications to the design PIU ES Specialists PIU Social Specialist	7 days from when either the Contractor, Supervision Consultant or PIU have become or should have become aware of the required modifications. 14 days following receipt of comprehensive details technical and other, allowing an ESF materially compliant supplemental screening.	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
		fully implemented.		Throughout the construction works	
CONSTRUCTION	**Damages**				
	Intrusion to private land outside the expropriation zone (Right of way)	The amount of land occupied during the construction will be contained to the area of works . Construction workers will be trained to stay within the border of the construction areas and avoid trespass on private land. If complaints related with unauthorized use of privately owned lands, damages on adjacent lands, etc. are received through Sub-project's Grievance Mechanism, evaluation/inquiry will be conducted on a case-by-case basis and where necessary, corrective actions will be planned and implemented. In case of any direct damage on private property as a result of the activities of the Sub-project contractors or subcontractors, the Contractor will ensure that relevant corrective measures (e.g. repair, maintenance, restoration etc. are implemented Grievance Mechanism will be publicized and awareness campaigns shall include clear information on how to access the mechanism, submit complaints, and receive timely resolution, including in cases of damage to private property. The information campaigns shall include corridor of impact/private land boundary.	Supervision Consultant Contractor PIU Social Specialist oversight Grievance Mechanism	Training will be part of the workers induction training.	
	Non-compliance with	All easement rights shall be formalized and retained as	Supervision	Throughout Construction	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
	conditions of easement rights leading to environmental or social impacts (e.g., restriction of access, damage to property, or inadequate reinstatement)	official correspondence within the Water Directorate. The Legal Department of the Water Directorate shall maintain complete records of all signed easement agreements. The PIU Environmental and Social (ES) Specialists within the Ministry of Agriculture, Forestry and Water Management (MAFWM) will monitor the implementation of works conducted under easement rights to ensure compliance with the agreed conditions and relevant E&S safeguards. Contractors will be issued written instructions outlining their obligations under the easement rights, including environmental and social compliance requirements.	Consultant Contractor PIU Social Specialist oversight	works	
CONSTRUCTION	**Water and Soil Pollution and waste management**				
	Water and soil pollution from improper material storage, management and usage	Organize and cover material storage areas; isolate concrete, works from watercourse by using sealed formwork or covers; isolate wash down areas of concrete trucks and other equipment from watercourse by selecting areas for washing that are not free draining directly into watercourse	Contractor	Throughout Construction works	
	Water and soil pollution from improper disposal of waste materials	dispose waste material at location protected from washing out, should be marked in the site plan; if not on site, then at authorized landfill / depot Storage of wastes according to international best practice (IFC EHS General Guideline). Apply additional measures for storage of hazardous wastes (such as use of secondary containment, access restriction, provision of PPE etc.) as necessary to prevent harm to construction staff, environment and public. Use and labeling of designated waste collection containers and storage areas for different kinds of wastes. Transport of waste in marked vehicles designed to the type of waste to minimize the risk of release of materials (hazardous and non-hazardous materials) and windblown	Contractor	Throughout Construction works	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
		debris. Training of drivers in handling and disposal of their cargo and the documentation of the transport describing the nature of the waste and its degree of hazard. Typical containers for solid Communal waste are placed at the construction site locations; Acceptance of collected Communal waste and its disposal by authorized institutions; Hazardous waste fractions (used waste oils, oiled packaging. bitumen agents waste, waste transformer oils, waste asbestos-cement pipes etc.) are separately collected into typical containers or metal barrels; they are to be consigned to entities authorized for hazardous waste management; Re-usage and recycle of waste whenever possible. It is prohibited to incinerate waste in the open and at the location. Acceptance of collected Communal waste and its disposal by authorized institutions;			
	Soil groundwater and surface water pollution. with oils and lubricants due to equipment poor maintenance and repairs and refueling at the Construction site.	Apply (IFC EHS General Guideline in safe storage and handling of lubricants, fuel and solvents by secured storage; ensure proper loading of fuel and maintenance of equipment; collect all waste and dispose to permitted waste recovery facility. Implement Law on Waste Management of Republic of Serbia. Avoid servicing and refueling at the site. Fueling will take place at least 30 meters of the Galovica channel Establish a plateau for such events. Use containment trays. Have an emergency spill management procedure in place. Use protective foils during possible vehicle refueling and maintenance at the construction site. Provide absorbing material in case of fuel spills. Used oiled materials and agents should be managed in line with the Waste management report. Procedure for actions in case of incidental oil and lubrication spills.	Contractor	Throughout Construction works	Requirements to be included in Procurement Documents and Contract agreements

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
		Prepare and implement the Construction Site Organization Plan that incorporates good construction practice measures. Cleanup action will follow the Spill Contingency Plan. Post waste management procedure on site.			
Transport & logistic (mandatory for all cases):					
Transport & logistics (MLMP)	Material spillage, traffic risks, spills, uncontrolled routing	Prepare & implement MLMP: approved routes/time windows; Traffic Management Plan; covered loads (tarpaulin), no overfilling; wheel-wash & track-out control; spill kits in vehicles; incident reporting ≤24 h; daily summaries (trips, routes, volumes); full traceability (dockets/GPS) and receipt verification	Contractor; Supervision /PIU	Pre-works (plan) & during transport	Demands: 0 uncontrolled spillage/spills; 100% loads documented; TMP adopted
Ban on unauthorised dumping	Site degradation, pollution, penalties	Contract clauses & penalties; continuous supervision; daily ticket checks; random inspections; grievance mechanism; immediate suspension & corrective action upon deviation	Contractor; Supervision /PIU	During works	0 confirmed cases; complaints closed on time
Temporary channel-side stockpiles (if approved) :					
Temporary channel-side stockpiles (if approved)	Erosion, wash-off to channel, slope instability	Permits/approvals; select site outside flood section and ≥20 m setback; avoid sensitive micro-habitats (BE verification)	Contractor; PIU; authorities; BE	Before establishment	Setback & siting verified; permits in place
Geometry & stability of lifts	Slips, collapse, safety of Temporary stockpile	Max lift height ≤3 m; side slopes ≤1:2; routine profiling; no tipping on crest/slopes of embankment	Contractor; Supervision	During works	Dimensions per BMP/ESMP
Erosion & dust control	Dust, erosion, nuisance on Temporary stockpile	Water spray in dry weather; cover/mulch if retained >7 days; prompt grassing if >30 days	Contractor	During works	No excessive dust; vegetative cover established
Time limit & removal	Prolonged exposure and increased risk related to Temporary stockpiles	Retention ≤60 days per batch; then haul to final disposal or incorporate into approved landscaping	Contractor; PIU	During works	Time limit & removal
	Population at increased risks of traffic accidents	Assure adequate warning signs, lighting, protective fencing etc.	Contractor	Throughout Construction works	Requirements to be included in

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
	and Rehabilitation works for Galovica channel to population.	Observe traffic rules. Clean construction waste from the construction site both in the construction phase and after works completion, when closing the construction site. Assure medical supplies and aid through institutional and administrative arrangements with municipal hospitals at the construction site. Implement the Construction Site Organization Plan.			Procurement Documents and Contract agreements
	Chance Finds	If during earthworks as archaeological site or artefact is discovered the Contractor will immediately suspend the Works, implement measures to safeguard the finding from damages and inform IPCM	The Contractor	During earthworks	
s	OHS and Worker`s Safety	Implement the LMP The Contractor will establish Occupational Health and Safety (OH&S) Management Plan with special focus on (but not limited to): movement of vehicles and traffic management, working at heights, working in confined spaces, working with hazardous materials, management, Enforcement, self-verification & consequence management will be implemented Appropriate number of EH&S officers per workforce group (e.g. risk based) will be employed to implement the EH&S program, including risks assessment, training, supervision of high risks tasks, subcontractor induction. Personal Protective Equipment will be selected based on the specific hazards and risks of the task to be performed and properly maintained to keep them effective and operational throughout. Emergency contact numbers will be made available at the Construction Site . This will include the fire and rescue service and the environmental inspection. Risk from infection from wastewater is low	The Contractor	Prior to commencement of works	Contractual conditions will ensure that all sub-contractors to follow the OH&S Management Plan

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
	Community health and safety	Timely, continuous and transparent communication with the community ensuring community health and safety. Preparation of all pertaining parts of Construction H&S Management Plans e.g. - Traffic Management Plan - Fire Response Plan (fire and explosion hazards, identify evacuation routes; - Traffic Accident Response Plan - Structure Collapse Preparedness and Response Plans - Infrastructure and Utilities Management Plan (IUMP) - Accident/drowning prevention Plan Waste Management Plan including further waste dumping within project area.- Flooding preparedness and response plan - Unexploded ordnance preparedness and Response Plan (which will include Unexploded Ordnance Chance Finds Procedure; When required by the National Legislation, Contractor is obliged to consult relevant Institutions/Ministries and obtain approval for these plans.	the Contractor Oversight by PIU E&S Specialists and the Supervision Consultant	Throughout Construction works	
Collection and temporary storage of municipal/bulky waste	Uncontrolled leakage/odour, visual degradation	Collect and segregate where applicable; store in covered/closed containers on site; remove within 24–48 h	Contractor	During works	Containers present and closed; no scattered waste; removal deadline met
Transport and final disposal of municipal waste	Environmental pollution, non-compliance	Hand over to a licensed operator; Use approved routes for transport; dispose ONLY at approved sanitary landfills of the competent LSGs/regional; maintain delivery dockets/weigh tickets	Contractor; PUC/landfill operator	During works	100% of loads documented and received at sanitary landfill
Ban on unauthorised dumping of	Local pollution; legal liability	Strict prohibition of on-site burying/burning and mixing with sediment; contractual penalties; continuous supervision and ad hoc inspections	Contractor; Supervision /PIU	During works	0 confirmed cases; all complaints closed on time

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
municipal waste and mixing with sediment					
	Community health and safety	On the section from **km 20+060 to km 21+900**, where the channel traverses Ministry of Defense (MoD) land allowing commercial hunting, the Contractor shall ensure worker and community safety through the following actions: • Notify the MoD and Hunters Association of planned works **at least 30 days in advance**. • Do not commence with works until formal approval has been received with specified conditions and agreement with MoD Hunting Area Administrator to suspend hunting during construction period. • Hold a coordination meeting with MoD, PIU, and local authorities **at least 15 days before works commence** to agree on safety measures and communication protocols. • Agree in writing on safety measures such as temporary hunting suspensions (if required), clear signage, adjusted work schedules, high-visibility PPE, and emergency communication procedures. • Distribute an information notice summarizing agreed measures **at least 7 days prior** to starting works, in languages understandable to all stakeholders. • Integrate agreed measures into the Contractor's site-specific Health and Safety Plan (HSP). • Maintain continuous coordination with MoD and Hunters Association and **report progress and any incidents** in Monthly Health and Safety and Environmental and Social Progress Reports to the PIU.	Contractor MAWFM PIU	**At least 30 days in advance**. Prior to commencement of works Information notice summarizing agreed measures **at least 7 days prior** to starting works, in languages understandable to all stakeholders.	
	Damage to private assets during construction	Any loss of or damage caused by Sub-project activities will be compensated. The Sub-project will minimize damage by	PIU	Throughout Construction works	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
		minimizing the area of disturbance caused by vehicle movement and other Rehabilitation works for Galovica channel. • If complaints related with unauthorized use of privately-owned lands, damages on adjacent lands, etc. are received through Sub-project's Grievance Mechanism, evaluation/inquiry will be conducted on a case-by-case and where necessary, corrective actions will be planned and implemented	Contractor		
	Labor and working condition- employment of foreign workers	The Contractor shall notify the Employer and Engineer at least **40 days in advance** of any planned recruitment of foreign workers, providing details of roles, numbers, and countries of origin. No recruitment or employment fees shall be charged to foreign workers, directly or indirectly, in line with the Labor Management Procedures (LMP) and international labor standards. Prior to workers' arrival, the Contractor shall submit **notification of accommodation arrangements**, including location, capacity, living conditions, and compliance with applicable health, safety, and welfare standards. The Contractor shall ensure that the **Labor Management Procedures (LMP)** are comprehensively applied to all foreign workers, including equal terms and conditions of employment, grievance redress, and occupational health and safety measures. The Contractor shall maintain evidence of compliance, available for review by the Employer and supervising authorities. The Contractor shall **adapt and deliver all Occupational Health and Safety (OHS) training, materials, and communication** in languages understandable to foreign workers, using qualified interpreters where necessary, and ensure that foreign workers fully comprehend safety rules, emergency procedures, and grievance mechanisms.	Contractor	Throughout Construction works with timelines in mitigation measure column	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
	Accommodation and living conditions and welfare	Where accommodation is provided for Project workers, the Contractor shall ensure that **accommodation and labor audits** are conducted **prior to approving the use of any facility**, and subsequently **at least every three (3) months** during occupancy. This requirement applies **each time new premises are proposed for use as worker accommodation**, regardless of prior approvals for other facilities. The Contractor shall **15 days in advance notify the Employer in writing** of any intention to use new accommodation facilities, providing details of location, capacity, living conditions, and compliance with national regulations and relevant international standards on worker welfare. All audits shall assess compliance with the Project's Labor Management Procedures (LMP), national legislation, and relevant international standards, including health, safety, security, privacy, and adequacy of living conditions. The Contractor shall maintain records of all audits and any corrective actions taken, and shall make these available for review by the Employer and supervising authorities. **Findings from accommodation and labor audits, along with evidence of corrective actions implemented, shall be included in the Contractor's Monthly Labor Management Reports.**	Contractor Verification by Engineer and PIU Social Specialist	Throughout Construction works with timelines in mitigation measure column	
	Labor Risks and Impacts Related to Women Employment and Nondiscrimination and Equal Opportunity	The Contractor will apply equal opportunities to women in all of their branches. Further measures will be put in place to encourage female participation in indirect workforce, such as providing specific training where required, enabling flexibility and job-sharing opportunities for women with children to participate.	Contractor	Prior to hiring of workforce	
	Labor Risks and Impacts Related to Subcontractor and Supply Chain	The Contractor and Operator will not employ nor permit any subcontractor to use child labor, and in accordance with Serbian legislation, any person under the age of 18 may	Contractor	Throughout Construction works	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
	Management (Including Child and Forced)	not be assigned to any hazardous work within the Sub-project. The Contractor and Operator will prohibit the use of forced labor by ensuring full compliance with national legislation and the provisions of relevant conventions and other international standards - Implement LMP - Worker`s GM			
	Worker Conditions and term of employment	Implement LMP Workers will have contracts inclusive of Code of Conduct which include SEA/SH provisions, These will clearly state the terms and conditions of their employment and their legal rights. Information will include, but not be limited to: • entitlement to wages, hours of work, overtime arrangements and overtime compensation, and/ paternity or holiday) • able to join trade unions of their choice and have the right to collective bargaining • contracts will be verbally explained in their native languages to all workers where this is necessary to ensure that workers understand their rights prior to any employment contract to be signed. • Cultural Awareness Training will be provided an on-boarding requirement to all non-local workers, and in particularly foreign workers. • Worker Grievance Mechanism will be developed and will: • be open to all the staff and their contractors, • be publicly advertised by the Sub-project in the workforce, • and be easily accessible by workers • be free of retribution • allow anonymous complaints to be raised and addressed. • All Sub-project parties will require all contractors to sign an anti-corruption and responsible procurement policy. • For all contractor contracts, the Sub-project will make explicit reference to the need to abide by WB ESS2 standards and ILO conventions in relation to labor and welfare standards, freedom of association and reference must be made to child and	Contractor	At employment/engagement	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
		forced labor. All worker`s will sign a Code of Conduct			
	Employment/Engagement Terms and Conditions	The Contractor's HSE plans and procedures include requirements for induction and training on expected behaviors and on disciplinary procedures (including dismissal procedures for unacceptable conduct).	Contractor	At the time of new hiring	
	Impacts on local infrastructure	(EPRP) will be developed that considers the capacity of communities and current situation of the community infrastructure to respond to emergency events efficiently. • Infrastructure and Utilities Management Plan (IUMP) will be developed. During the preparation of all plans, engagement with local authorities and utilities companies will be undertaken to ensure continuity of supply to communities. Implementation of Grievance Mechanism	Contractor	During mobilization of Contractor	
	Impacts on the local road network	In case of using local roads for transportation, repair works will be made in collaboration with the local authorities. Construction Engagement will be made with local authorities on the issue of traffic movement during construction phase.	Contractor	Throughout Construction works	
	Workers' Grievances	Contractor shall establish and maintain a **confidential Worker Grievance Mechanism (WGM)** with multiple accessible channels, protection from retaliation, clear procedures, and timely resolution. Grievances to be recorded, **resolved within 30 days**, and summarized in Monthly Reports. Workers to be trained on WGM use. Sensitive grievances (e.g. GBV, harassment) handled with special protocols. Ensure the Labor GRM is in place and operational. Include the Compliance statements in the Procurement package.	Contractor Supervision Consultant Oversight from PIU Social Specialist	Throughout Construction works	Ensure tender documents are adapted and language refined to include relevant E&S Sections including Labor compliance with National legislation and the Sub-project LMP

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
	Community grievances	Operationalize the Sub-project and Sub-project level GRM	PIU Social Specialist	Effective since December 2019	
	Community grievances	The Contractor shall **appoint a dedicated Community Liaison Officer (CLO) (function can be extended by the ES Specialist)** responsible for managing the Community Grievance Mechanism (GRM), ensuring accessibility, timely response, and proper documentation of grievances. The Contractor shall **publicize the GRM** widely, including clear instructions on how to submit grievances, through notices on construction site boards, local community noticeboards, and other appropriate communication channels in languages understandable to affected communities. The Contractor shall **establish accessible grievance submission and information points** at strategic locations, including near construction site entrances and community gathering places, to facilitate the easy lodging of grievances by community members. The Contractor shall maintain a **Grievance Log** to record all grievances received, including the date, nature of the grievance, actions taken, and resolution status. The Contractor shall **inform the Project Implementation Unit (PIU) on a weekly basis** of all grievances received, including updates on the status of resolution and any outstanding issues. The Contractor shall ensure that all grievances are addressed promptly, fairly, and without retaliation, in line with the Project's Stakeholder Engagement Plan (SEP) and national laws. **Records and details of the grievance process, including the nature of grievances, resolutions provided, and actions taken, shall be included in the Contractor's Monthly Reports** submitted to the Employer and PIU.	C		

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
	Emission of gases and particles from vehicles, mechanization and generators.	Regular equipment maintenance. The Contractor is obliged to submit evidence of vehicle roadworthiness in line with the Rehabilitation works for Galovica channel on hazardous gases emission. Prepare and implement the Construction Site Organization Plan that incorporates good construction practice measures.	Contractor	Throughout Construction works	Requirements to be included in Procurement Documents and Contract agreements
	Increased water turbidity as a consequence of the works.	Construction works should be executed in a way that surfaces and natural contents outside the Sub-project are not damaged and that works are performed so that watercourses are not unnecessarily made tumid and watercourses discontinued. Works should be executed in dry weather.	Contractor	Throughout Construction works	Contractor
	Reduced possibility through the area where the works are executed.	Keep roads unjammed and avoid blockages. Provide alternative passages for pedestrians and vehicles in cooperation with local authorities. Where detours are not feasible, ensure safe passage through construction sites with barriers, signage, and lighting. Avoid routing traffic through inhabited areas, particularly near schools and hospitals. Coordinate all traffic management plans with local authorities and communicate changes to the public. Monitor traffic conditions and adjust plans as needed.	Contractor	Throughout Construction works	
	Potential pollution of soil and water due to the discharge of waste sanitary waters from the construction site	The Contractor shall install sufficient **ecological (environmentally friendly) toilets** for all workers, compliant with health, safety, and environmental standards. Toilets must be placed at **adequate intervals along the 47 km site**, ensuring that no worker needs to walk more than **500 meters or 10 minutes** to access a toilet. Toilets shall be accessible, lockable, well-ventilated, and regularly maintained in a hygienic condition. Waste from ecological toilets shall be collected and disposed of by a licensed operator in compliance with national environmental regulations. Locations of toilets shall be marked on site maps and	Contractor	Throughout Construction works	

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
		communicated clearly to all workers. Records of maintenance, cleaning schedules, and waste disposal shall be kept and available for inspection.			
	Construction surplus material after the closure of construction sites	All material that remain after the closure of temporary construction sites are to be removed from the location and reused/recycled where possible. All remains are to be disposed of in a manner that will not be harmful to environment; this is to be done by companies that have permits to perform such works	Contractor	Throughout Construction works	Requirements to be included in Procurement Documents and Contract agreements
	Maintaining watering points for wildlife in the MOD Hunting are	Maintain all watering points structures along the MoD area of the channel; ensure they are regularly filled with water during the time the work area is accessed by the Contractor	Contractor đ Supervision consultant	Throughout Construction works	
OPERATION AND MAINTENANCE PHASE					
	Improper management of waste from maintenance activities (grass and woody vegetation as well as other types of waste generated)	Waste collection and disposal pathways and sites will be identified for all major waste types expected from maintenance activities. All waste will be collected and disposed properly by licensed collectors at approved sites (Dec, Jakovacka kumsa and Budjanovci) No open burning of wastes/removed vegetation on or off site	Contractor for maintenance Operator of structure PWC Srbijavode	Throughout maintenance phase	
	Repair of structural damage to regain functionality of the embankments	Implement the same measures as described under heading “Construction “	the Contractor Supervision Consultant to control on behalf of channel manager	Throughout maintenance phase	
Pesticide use in the Galovica channel corridor — institutional	Diffuse pesticide pollution from agricultural practices; cumulative pressure on the watercourse; lack of	The PIU will, in the post-construction phase and through the Stakeholder Engagement process, undertake to convene and lead consultations with the competent institutions — the Ministry of Environmental Protection (MEP), the Serbian Environmental Protection Agency	PIU (lead). Partners: MEP/SEPA; MAFWM (Plant	Post-construction, 24 months after completion, with annual review)	Stakeholder Engagement plan established and implemented with

Phase	Problem/activity impact	Mitigating measure	Institutional responsibility	Timeline	Comment
coordination after completion of works	systemic measures and coordinated action after works.	(SEPA), the Ministry of Agriculture, Forestry and Water Management (MAFWM), and the public water management companies 'Vode Vojvodine' / 'Srbijavode' — with the objectives of flagging the observed issue, developing potential systemic solutions, and defining appropriate actions. List of actions to be explored: Development/adoption of guidelines or a bylaw prescribing minimum 'no-spray' buffer widths along watercourses; preparation of IPM (Integrated Pest Management) guidelines for lowland crops along the channel network; establishment of a 'code of good agricultural practice along watercourses' (mechanical control, selective products, treatment scheduling, etc.); a farmer notification system for wind/rain forecasts with recommended spray windows; explicit prohibition of spraying at wind speeds >3–4 m/s in the communication materials; a program for packaging take-back and incident management.	Protection Directorate; Water Management Sector); Provincial Secretariat (where applicable); 'Vode Vojvodine'/'Srbijavode'; LSGs/PUCs; agricultural advisory services.		timelines; min. 2 formal letters to competent institutions in year one; ≥1 inter-institutional meeting/roundtable per year with minutes; a concept note prepared with a prioritized list of measures. Proposal of a minimum parameter set for targeted pesticide monitoring. Verification: copies of letters, meeting minutes, concept note/plan; progress status included in the annual post-implementation report.

6. ES MONITORING ACTIVITIES

Effective monitoring is essential to ensure that environmental and social risks and impacts identified for the Rehabilitation works for Galovica channel Sub-project are properly managed in compliance with national regulations and the World Bank's Environmental and Social Framework (ESF). Monitoring serves as a feedback mechanism, verifying that mitigation measures are implemented effectively and that project activities do not result in unintended adverse consequences.

The primary objectives of the environmental and social monitoring program are to:

- **Confirm compliance** with national legislation, World Bank Environmental and Social Standards (ESS), and other applicable requirements.
- **Assess the effectiveness** of proposed mitigation measures in managing environmental and social risks and impacts.
- **Identify any unforeseen impacts** requiring additional mitigation or corrective actions.
- **Provide information** for decision-making and adaptive management during Project implementation.
- **Demonstrate transparency and accountability** to stakeholders, including local communities and regulatory authorities.

Monitoring activities will encompass environmental, health, safety, and socio-economic parameters associated with Sub-project implementation. Monitoring shall be carried out at:

- **Critical locations** identified during the construction stage;
- The **construction camp site** and ancillary facilities;
- Any other plant or operational sites identified as relevant during the Rehabilitation works for Galovica channel.

The Sub-project's monitoring program includes, but is not limited to, the following elements:

- Surface **Water and Groundwater Quality:** Monitoring of key physico-chemical and biological parameters to detect potential contamination resulting from construction activities.
- **Ecological Habitats:** Surveillance of nearby ecosystems to detect disturbances or potential impacts on flora and fauna, especially in ecologically sensitive areas. . Before and during works, the Contractor shall implement the provisions of the BMP and elaborate it in the Contractor's **Method Statement** by sections. Prior to site mobilization and field works, the Contractor shall engage a **qualified Biology Expert (BE)** to carry out a pre-construction ecological walkthrough and prepare a site visit record, fully in line with the BMP requirements.
- **Environmental Compliance Inspections:** Unscheduled site inspections during construction to verify compliance with mitigation measures and regulatory requirements.
- **Site Condition Assessment:** Inspection of sites upon completion of works to ensure restoration and that no residual impacts compromise environmental or social values.
- **Pre- and Post-Construction Assessments:** Comparative assessments of environmental and social conditions before and after construction to verify that no loss of natural or socio-economic values has occurred.

A robust monitoring plan has been prepared, detailing:

- **Objectives:** Clear purpose of each monitoring activity.
- **Indicators:** Specific indicators linked to identified Sub-project impacts and proposed mitigation measures.

- **Parameters to be Measured:** Quantitative and qualitative parameters relevant to environmental, health, safety, and social aspects.
- **Monitoring Locations:** Defined monitoring sites, both critical points and additional areas as identified during implementation.
- **Frequency and Duration:** Timing and frequency of monitoring activities to capture accurate and representative data.
- **Institutional Responsibilities:** Defined roles of parties responsible for implementing and supervising monitoring activities.
- **Reporting Requirements:** Clear procedures for compiling, reviewing, and submitting monitoring data and reports.
- **Stakeholder engagement and information disclosure activities:**
- **Budget and Resources:** Cost estimates and financing arrangements to ensure sufficient resources are available for effective monitoring.

The following institutions shall oversee and implement the monitoring program:

- **Directorate for Water Management (DWM) / PIU:** Responsible for overall coordination and supervision of environmental and social monitoring activities.
- **Project Supervision Consultant (PSC):** Tasked with day-to-day monitoring supervision, verification of compliance, and reporting on the implementation of mitigation measures.
- **Contractor:** Responsible for carrying out monitoring activities as specified in the ESMP and Contractor's Environmental and Social Management Plans (C-ESMP), maintaining records, and reporting results to the PSC and PIU.

Monitoring results shall be documented in periodic reports, prepared by the Contractor and reviewed by the PSC.

- Reports will include:
    - Monitoring data and analysis;
    - Observations on compliance and effectiveness of mitigation measures;
    - Recommendations for corrective actions, if needed.
- Summary reports shall be submitted to the PIU and shared with the World Bank as part of regular environmental and social reporting obligations.
- Key findings relevant to local stakeholders will be disclosed publicly in line with the Stakeholder Engagement Plan (SEP).

Should monitoring results indicate that mitigation measures are not effectively managing identified risks, or if unforeseen impacts arise, corrective actions shall be promptly designed and implemented. The monitoring plan shall remain a **living document**, subject to revision as required during Sub-project execution.

6.1. Budget and Financing

Adequate resources shall be allocated in the Sub-project budget to ensure full implementation of monitoring activities, including:

- Sampling and laboratory analysis costs;
- Equipment and logistics;
- Personnel costs for monitoring and reporting;
- Engagement of specialists, if required.

6.2. Monitoring Plan for SDIP Sub-project": Rehabilitation works for Galovica channel

This chapter sets out the framework for systematic monitoring of environmental and social impacts associated with the sub-project "Rehabilitation works for Galovica channel" The purpose of this chapter is to define the scope, principles, and responsibilities for monitoring activities that will ensure compliance with national legislation, international good practice, and the mitigation measures prescribed in the ESMP.

The Monitoring Plan provides a structured approach to observing, measuring, and reporting on key environmental parameters during both construction and post-construction phases. While the detailed parameters, methods, and frequency of monitoring are already presented in the monitoring table within the plan, this introductory section highlights the general objectives:

- To verify the effectiveness of mitigation measures;
- To ensure that project implementation does not cause unanticipated adverse effects;
- To provide a basis for timely corrective actions;
- To maintain transparency and accountability toward stakeholders.

It is important to note that although pest management as such cannot be addressed or resolved within the scope of this project, and does not fall under the works financed by the sub-project, the Monitoring Plan nonetheless includes provisions for pesticide monitoring in the project environment during the post-construction phase. This obligation reflects the recognition that pesticides may have indirect impacts on the ecological condition of the Galovica Channel and surrounding habitats, and thus need to be observed in order to safeguard long-term environmental sustainability.

General post-project monitoring note

Based on the laboratory results of 14 Sept 2023 (water: Class V due to low dissolved oxygen, elevated suspended solids, COD/BOD and nutrients; sediment: Class 2 – slightly polluted, with permission to place within 20 m of the watercourse without special measures), the Project Implementation Unit (PIU) will, in cooperation with the Ministry of Environmental Protection (MEP) and the Ministry of Agriculture, Forestry and Water Management (Water Management Sector), and, for AP Vojvodina, the Provincial Secretariat for Agriculture, Water Management and Forestry, as well as the public water management companies 'Vode Vojvodine'/'Srbijavode', continue light-touch post-implementation monitoring to confirm that project activities have not worsened conditions and to document cumulative agricultural pressures.

Monitoring will include: (i) visual inspections and photo-documentation of characteristic profiles (at least twice yearly – spring/autumn); (ii) basic water-quality parameters (SS, BOD5, COD, ammonium, nitrate, orthophosphate, and transparency) twice yearly at the same locations as in 2023; (iii) targeted multi-residue pesticide testing in water and/or sediment once yearly at a minimum of three representative profiles (upstream, mid-reach, downstream), with expansion of analyses if incident indications arise; and (iv) unscheduled sampling after major rain events/overflows or community reports.

Thresholds and response: legal limit values and the 2023 campaign results are the reference. If three consecutive campaigns show a >30% rise in COD/BOD or nutrients vs. the reference average, or if active pesticide substances are detected above typical background, a corrective actions are triggered - additional targeted sampling, verification of no-spray buffers and vegetative cover, supplemental IPM training with advisory services, and notification of competent inspectorates as needed.

Results and recommendations will be presented in an annual post-implementation monitoring note, which the PIU will submit to the Ministry, water management companies, and the financier. The minimum monitoring duration is two growing seasons after completion of works, with the option to continue within regular institutional programs.

Monitoring Plan Table for SDIP Sub-project": Rehabilitation works for Galovica channel

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
PRE - CONSTRUCTION			**Material supply**			
Zero monitoring for Water and soil pollution	Water quality (suspended solids, oils, ph. values, conductivity). Water contains ammonium nitrates, feces, gastrointestinal enterococci, etc.	In the Galovica channel	Sampling, analysis in a certified laboratory possessing the required equipment.	Prior to the commencement of works the Contractor will provide the results of zero monitoring	Identify any potential impact to the surrounding environment	PIU Activity completed during 2024.
Pre-construction ecological surveys	Sensitive receptors: Locate/status active bird nests, amphibian spawning sites, reptile basking/refugia, otter holts and potential bat roost features;	Active works footprint plus a strip 20m from the top of bank on both sides	Mapping: GPS/chainage. Issue a Pre-Works Ecological Note (map + photos + constraints table) cross-referenced to BMP clauses.	3–7 days ahead of works on each 300–500 m section	safeguarding ecological function along the channel corridor.	Contractor and its Biology Expert (BE)
Dust monitoring	Air pollution (solid particles)	At and near construction site	Inspection and visual observation	Prior to Rehabilitation works for Galovica channel and prior to material delivery	Identify any potential impact to the surrounding environment	Contractor
pre-construction road condition survey)	Execution of Local Road Zero State Survey,	At all locations of the transport routes and local road	Visual inspection and defect logging. - Photographic and video documentation (geo-referenced) - GPS/GIS mapping of roads and sensitive areas - Assessment of road structures, drainage, and traffic volumes - Signed survey report with documentation	Once, before works start	Benchmark road condition for future comparison and repairs	Contractor
	Easement rights	On the ground and through	Verified registry of all easement rights maintained and updated	Monthly during construction works	Ensuring the land is used by the Contractor	PIU

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
		official records With the title holders	Number of field inspections conducted by PIU ES staff Contractors who received and acknowledged written instructions Compliance reports confirming adherence to easement conditions Number of grievances related to easement rights resolved		within the limits provided in the easement agreements Ensure the easement rights are valid throughout the contract period	
Construction			**Material supply**			
Material supply	Possession of an official approval or valid (operating) license	At construction site	Insight into the documentation	Prior to sourcing of material and use	Ensure compliance of the plant with environmental and social protection and health and safety at work	Supervision Consultant
Construction			**Material transport**			
Stone	Truck load covered or wetted	Construction Site and Transport routes	Supervision Consultant	Unannounced inspections during work, at least once per week	And safety requirements and enable as	Supervision Consultant Contractor
Sand and gravel	Truck load covered or wetted	Construction Site and Transport routes	Supervision Consultant	Unannounced inspections during work, at least once per week	Little disruption to traffic as it is possible	Supervision Consultant Contractor
Traffic management	Hours and routes selected	Construction Site and Transport routes	Supervision Consultant	Unannounced inspections during work, at least once per week		Supervision Consultant Contractor

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
Traffic management and community health and safety	Speed limit	Transport routes and Construction Site and Transport routes	Supervision Consultant	Unannounced inspections during work, daily	Community health and safety	Supervision Consultant
Construction			**Construction site**			
	Water quality (suspended solids, oils, ph. values, conductivity)	In the Galovica channel upstream and downstream of construction site (both measurement required)	Sampling, analysis in a certified laboratory possessing the required equipment. Sampling should be carried out in accordance with valid standards, methods: SRPS EN ISO 5667 - 1, SRPS EN ISO 5667-3, SRPS EN ISO 5667 - 6, SRPS ISO 5667-10 and SRPS EN ISO 19458. Presentation of the results given in accordance with the relate Serbian legislation / Rehabilitation works for Galovica channel (see Annex 1)	During the Rehabilitation works for Galovica channel, in case of complaint of local residents, NGOs or other affected or interested parties.	Identify any potential impact to the surrounding environment	Contractor. Costs of subject activity shall be calculated by bidders during bidding procedure and integrated into its bid. The bidders shall confirm that the costs of monitoring activities defined within this ESMP are included in the bid price for the Sub-project:
	Presence of archaeological findings in the soil	At and near the Construction site	Supervision Consultant of earthworks	During earth works	For the sake of preservation of cultural heritage	Contractor Supervision Consultant (Monitoring)
	Degradation and soil pollution	At the construction site and directly around the construction site	Visual supervision	Weekly	For prevention of soil degradation and pollution	Supervision Consultant
	Disturbance to flora and fauna	At the construction site and directly around the construction site	fauna observations, checks that refugia patches are being retained, confirms that any nest buffers are in place. The Contractor maintains a simple log of sections completed,	routine walkovers of active and upcoming sections, 3–7 days ahead of works on each 300–500 m section	Preservation of local flora and fauna	Biology Expert (BE) engaged by the Contractor

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
			measures implemented and any ecological incidents, which is summarized monthly to the PIU.			
	Does the construction site meet the criteria from the guidelines for good construction practice	At the construction site	Visual supervision. Insight into the documentation	During Construction works	For the purpose of establishing a safe working environment	Supervision Consultant
	Occurrence of noise and air pollution	At the construction site	Standard air quality and noise level measurement equipment.	Upon received citizens' complaints	For minimizing noise and air pollution	Contractor - Company that has license to perform environment monitoring works
	Working hours control for noise emission control	At the Construction Site	Visually and comparison with the construction site organization plan.	Upon received citizens' complaints	Reducing nuisance from noise	Supervision Consultant
	Working hours	At the Construction Site	By workers interviews and insight to work hour records	Monthly and upon receiving workers grievance related to working hours	Ensuring LMP is complied with	Supervision Consultant and PIU Social Consultant
	Worker's rights	Proof of lawful employment	Job site/Contractor's office	Inspection	Unannounced inspections during works execution	Ensure worker's enjoy rights guaranteed by Law
	Waste disposal	At the construction site and in the approved locations (Dec, Jakovacka kumsa and Budjanovci)	Visually and by comparison with the waste management report. Permanently	During Construction works	For ensuring proper waste management	Supervision Consultant
Handling of municipal/bulky	Closed/lidded containers; removal ≤48	Work sites and channel margins	Visual checks; site log. In case of delay/open	Daily	Pollution prevention.	Contractor; Supervision /PIU

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
waste	h		containers immediate removal and corrective actions are required			
Documentation & landfill reception for municipal waste	Delivery dockets/weigh tickets; landfill receipt	Sanitary landfill of competent LSG	Record review; verification with operator. In case of incomplete records → suspend deliveries until resolved; report to PIU ≤24 h	Weekly + monthly summary	Ensuring legal compliance and preventing illegal disposal.	Contractor; PUC/landfill operator; Supervision /PIU
Unauthorised dumping of municipal waste	Community complaints; inspection findings	Wider project area	Ad hoc patrols; grievance mechanism records. If case is confirmed → removal at Contractor's cost; contractual sanctions	Weekly + ad hoc	Legal compliance and community health and safety. Confirmed case → removal at Contractor's cost; contractual sanctions	Supervision /PIU
Handling of extracted/dredged material	Screening of extracted/dredged material before transport	Temporary storage / loading point	Laboratory tests / screening: Moisture, grain size, LOI/TOC, TN/TP, metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	Per batch/lot (e.g., each ≤10,000 m³) or min. once weekly during dredging	Pollution prevention. If results are above reference/limit levels → isolate batch, stop delivery, notify PIU, define alternative handling/disposal	Contractor Accredited laboratory engaged by the Contractor. Monitoring costs are borne by the Contractor.
Handling of extracted/dredged material	Extracted/dredged material reception verification at disposal site	Disposal site	Visual check, odour, pH (rapid test), EC (optional)	Each disposal day (visual check for every load)	In case of atypical appearance/odour, then reject/return load and perform additional sampling	Contractor, Supervision Consultant
Handling of extracted/dredged material	Recipient-soil zero monitoring	Each site (Deč, Jakovačka Kumsa, Buđanovci) or other approved disposal site	Laboratory tests / screening of soil quality, sample depth from 0–30 cm: texture, organic matter, TN/TP, metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	Before first placement (composite of 3–5 points per site)	Serves as reference; if levels already above permitted levels - consult PIU, adjust plan	Contractor Accredited laboratory engaged by the Contractor. Monitoring costs are borne by the Contractor.

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
Handling of extracted/dredged material	Recipient-soil Control monitoring		Laboratory tests / screening of soil quality, sample depth from 0–30 cm: texture, organic matter, TN/TP, metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	30–60 days after placement and end of season (or after ≥25 mm/24 h rainfall)	If increase is greater than 30% vs. baseline or exceeding limits, than stop further placement, perform micro-site remediation, additional sampling	Contractor Accredited laboratory engaged by the Contractor. Monitoring costs are borne by the Contractor.
	Existence of zones/sites for preliminary accumulation of wastes	At and near work site	Inspection	During Rehabilitation works for Galovica channel	Preventing pollution of water and soil because of improper disposal of excavated materials and construction wastes	Contractor, Supervision Consultant
Transport compliance	Covered load; no overfilling; wheel-wash in service; TMP compliance; documentation	Routes & landfills	Visual checks; review of dockets/GPS; speed control	Daily; random spot checks	Violation → suspend deliveries; corrective actions	Contractor; Supervision /PIU
Incidents / spills	No. of incidents; presence of spill kits	Routes / vehicles	Incident log; equipment check	Daily	Incident → immediate clean-up; report ≤24 h	Contractor
Unauthorised dumping	Route patrols; community complaints	Project area	Inspections; grievance records	Weekly + ad hoc	Confirmed case → stop, removal at Contractor's cost	Supervision /PIU
Temporary stockpiles – protective measures	Setback ≥20 m; underlay/berms/silt fence; drainage without direct discharge	Temporary stockpile	Visual checks; checklist	Upon establishment & 2× weekly	Deficiency → fix within 48 h	Contractor; BE; Supervision
Stability & geometry	Height ≤3 m; slopes ≤1:2; profiling	Temporary stockpile	Measurement; visual check	Weekly	Exceedance - re-profile immediately	Contractor
Erosion/dust	Dust emissions; erosion signs; vegetative cover	Temporary stockpile	Visual; log; photos	Weekly + after ≥25 mm/24 h rainfall	Dust/erosion → spray, repair; grassing	Contractor
Time limit	Days retained per batch	Temporary stockpile	Records; batch labels	Continuous	≥60 days → mandatory removal within 7 days	Contractor; PIU

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
	Waste remnants and soil degradation	At the construction site	Visually	After the works completion	Ensuring that the site has been returned to pre-disturbance conditions, upon Constriction site closure	Contractor, Supervision Consultant
	Number of registered accidents, near misses	At the construction site	Visually and insight into the Contractors LMP register	Permanently during the works execution	Ensuring adequate health and safety and working conditions, ensuring works execution in accordance with relevant labor legislation	Contractor, Supervision Consultant
	Clear delineation of access roads and Construction Site to prevent their expansion	At access roads and Construction Site	Inspection, observation	During Rehabilitation works for Galovica channel	Prevent loss of top soil due to temporary access roads and work areas, Landscape degradation	Contractor, Supervision Consultant
	Cleaning of access roads and work sites after Rehabilitation works for Galovica channel completion	At access roads and Construction Site	Inspection, Observation	After Rehabilitation works for Galovica channel		Contractor, Supervision Consultant
	Sprinkling of water to suppress the dust	At access roads and Construction Site	Inspection, observation	During Rehabilitation works for Galovica channel	Preventing temporary air pollution (dust) related to the transportation of construction materials and truck traffic	Contractor, Supervision Consultant
	Use of protective equipment, organization of by-passing traffic	At work site	Inspection	During Rehabilitation works for Galovica channel	Increasing staff safety	Contractor, Supervision Consultant
	Dust Air pollution (solid	At and near job site	Inspection and visual observation	Unannounced inspections during	Health and safety requirements and	Contractor, Supervision

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
	particles)			material delivery and construction	enable as little disruption to traffic as it is possible	Consultant
Operation			**Safety during flow Rehabilitation works for Galovica channel**			
	Structural functionality of the embankments	At the	Visual inspection	Yearly and after high waters	Flood protection	PWMC Srbijavode

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
	Water level Temperature Flow Water level tendency	In the course of Galovica channel	Automatic meteorological stations	Daily	Flood control	Republican Hydro meteorological Institute
	Waste management for maintenance works	At maintenance site	Visual inspection	Daily	To ensure waste is not dumped into the channel	PWC Srbijavode
During pre-construction and Construction	Stakeholder Engagement and Grievance management					
	Number and type of engagement events (public meetings, FGDs, consultations)		Attendance sheets, meeting minutes, photos	Monthly	To confirm compliance with the SEP and verify that stakeholder engagement is continuous and inclusive	
	Stakeholder Participation		Disaggregated data on participants (e.g. gender, age, group affiliation)		o ensure that all affected groups, especially the vulnerable, are represented and not excluded	
Engagement Activities	Number and type of engagement events (public meetings, FGDs, consultations)	Attendance sheets, meeting minutes, photos	Monthly/Quarterly	PMU / Consultant / PIU	To confirm compliance with the SEP and verify that stakeholder engagement is continuous and inclusive	
Stakeholder Participation	Disaggregated data on participants (e.g. gender, age, group affiliation)	Participant lists, survey data	Each event	PMU / RAP & SEP consultants	To ensure that all affected groups, especially the vulnerable, are represented and not excluded	Ensure outreach reaches remote and at-risk groups

Phase	**What is the *parameter to be monitored?***	**Where *the parameter should be monitored?***	**How *the parameter should be monitored? / type of monitoring equipment***	**When *the parameter should be monitored? (Frequency of measurement or continuous)***	***Why the parameter should be monitored? (optional)***	**Institutional responsibility / Operate**
Post Construction			**Construction site**			
Visual inspections of channel profiles	Bank stability, vegetation cover, evidence of erosion/runoff, obvious spills; photo-log	Same 5 stations as 2023 + disposal sites	Field checklist; geo-tagged photos	2×/year (spring, autumn)	To catch bank failures, erosion, dumping, and verify reinstatement.	PIU / Water Management Co.
Basic water quality	SS, BOD5, COD, NH_4-N, NO_3^--N/NO_2^--N, PO_4-P, transparency (Secchi/tube)	Same 5 stations as 2023	Grab sampling; accredited lab; APHA/EN/ISO equivalents	2×/year (spring, autumn), similar hydrol. conditions	To detect turbidity, oxygen stress, and nutrient-driven eutrophication trends.	PIU (sampling) / Accredited lab
Targeted pesticide screening (water)	Multi-residue suite aligned with regional use	3 profiles: upstream / mid / downstream	LC-MS/MS or GC-MS/MS (accredited)	1×/year (late spring or early summer)	To capture pesticide pulses after spraying/rain and assess aquatic risk.	PIU / Accredited lab
Targeted pesticide screening (sediment)	Multi-residue suite (priority herbicides/insecticides)	Same 3 profiles	Extraction + LC/GC-MS/MS (accredited)	1×/year (late summer/early autumn)	To locate particle-bound residues and long-term hotspots.	PIU / Accredited lab
Event-based sampling	Same as Basic water quality + targeted pesticides if relevant	Affected reach(es)	As in Rows 2–4	After ≥25 mm/24h rain, overflow, or community report	To measure worst-case loads after heavy rain or incidents.	PIU / Water Management Co. / Lab

7. ES MANAGEMENT RESPONSIBILITIES

For each potential impact the ESMP identifies: (a) The proposed mitigation measure(s); and (b) The parties or charged with implementing those measures, separated into:

- The Employer PWMC Srbijavode and Directorate for Waters of the MAFWM shall ensure that all necessary agreements and permits (e.g. EIA conclusion, permits for water use and discharge and for the disposal of excavated materials, wastes, and demolition debris) are obtained from relevant state and local authorities before the Rehabilitation works for Galovica channel are tendered out.
- Contractor is responsible for implementation of measures where specified and shall take the responsibility for physical implementation of mitigation measures provided under the ESMP during the construction phases according to the World Bank's Environmental and Social Standards and Serbia environmental and other pertinent legislation.
- Supervision Consultant is responsible for supervising the works to ensure that they execute the mitigation measures as planned and will be responsible for supervising the timely, proper and reliable implementation of works and measures as provided by the ESMP. The Supervision Consultant will ensure compliance with the ESMP listed measures and provide reports on compliance The PIU will also ensure that all necessary agreements and permits are obtained by appropriate contractors from relevant state and local authorities before the Rehabilitation works for Galovica channel are tendered out. The World Bank during supervision missions may request randomly to check if such permits are issued and are valid (e.g., not expired) as well as if the ESMP mitigation and monitoring aspects are implemented on the ground during the construction phases according to the Bank's Environmental and Social Standards and Serbia environmental legislation.
- Approvals at Ministerial levels. MAFWM with Directorate of Water, The Public Water Resources Management Companies "Srbijavode", "Beogradvode" and "Vode Vojvodine" providing preparation of water resources management technical documentation, different kind of license requested for works and supervise construction, organization and implementation of water pollution protection measures. Hydro meteorological Institute takes water samples and monitors the quality of water.

7.1. Environmentally and socially sound clauses for civil works contracts

Standard clauses for Environmental and Social (ES) Management in World Bank civil works bidding documents come from the **World Bank Standard Procurement Documents (SPDs)** for "Procurement of Works will be used. Specifically, **Conditions of Contract** and the **Employer's Requirements / Technical Specifications will be reinforced** but not limited to the following issues:

Environmental and Social (ES) Specifications / Requirements

- Bidding documents require inclusion of **ES Specifications**, which become part of the Contract and set out obligations related to:
    - Health and safety (workers and community)
    - Environmental protection
    - Waste management
    - Labor management and working conditions
    - Management of hazardous materials
    - Pollution prevention
    - Cultural heritage protection (where relevant)
    - Traffic and road safety

- Protection of biodiversity and natural habitats
- Stakeholder engagement
- Grievance redress mechanisms (GRMs)

Codes of Conduct

Contracts **must require Codes of Conduct** for:

- Contractor's personnel (including subcontractors)
- Supervisory staff
- Key management staff

The Code covers:

- Prohibition of gender-based violence (GBV)
- Child labor prohibition
- Respectful behavior towards local communities
- Confidentiality
- Health and safety compliance

The standard WB template provides sample Codes of Conduct for insertion in bidding documents.

Environmental and Social Management Plan (ESMP)

- Contractors are **required to prepare and implement a Contractor's ESMP (C-ESMP)** based on the Project's ESMP included in the bidding documents.
- The C-ESMP must:
  - Detail how ES mitigation measures will be implemented
  - Define monitoring and reporting procedures
  - Be updated as necessary during the works
- The C-ESMP is subject to review and approval by the Employer or the Engineer.

Key Performance Indicators (KPIs)

- The contract will include **ES KPIs** for:
  - OHS incidents
  - Worker grievances received and resolved
  - Community grievances
  - Environmental incidents (e.g. spills, exceedance of pollution limits)
  - Training provided

Performance against these KPIs may affect contract payments, retention, or penalties.

ES Reporting Requirements

The Contractor must:

- Maintain records of all ES incidents, monitoring, and mitigation measures
- Submit regular reports (typically monthly) covering:

  - ES compliance status
  - Accidents/incidents
  - Grievances and their resolution
  - Updates to the C-ESMP
- Immediate within 24 reporting of serious ES incidents (as provided in Annex 5 of this ESMP).

Labor Management Requirements

Contracts include obligations to comply with:

- National labor laws
- WB ESS2 standards:
  - Non-discrimination
  - Freedom of association
  - Payment of fair wages
  - Occupational health and safety
- No child labor or forced labor
- Maintenance of labor grievance mechanism
- Statements of Compliance and Reporting

7. Provisions for GBV and SEA/SH

- Contracts may include **special provisions on Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH)**:
  - Worker training
  - Dedicated GBV grievance mechanisms
  - Reporting protocols
- These are mandatory for projects assessed as high-risk for SEA/SH.

Suspension and Termination for ES Non-Compliance

Contracts typically grant the Employer:

- The right to **suspend or terminate** the contract for severe ES non-compliance
- The right to impose remedies or require corrective actions at the Contractor's cost

9. Supervision Engineer's ES Duties

- The supervision consultant/Engineer is tasked with:
  - Reviewing and approving C-ESMP
  - Monitoring ES compliance
  - Reporting ES performance to the Employer

10. Compliance with Laws

Contractors are obligated to comply with:

- National environmental and labor laws
- World Bank Environmental and Social Standards (ESSs)
- Conditions of Environmental Permits

The Tender documents will include this ESMP inclusive of its Environmental and Social Mitigation Plan and Environmental and Social Monitoring Plan presented within the chapter 4 and chapter 5 of this ESMP document. This ESMP document will be a part of the bidding and contractual documents for which the Contractor hired will be responsible to implement and to ensure that all works are undertaken with a minimum of compliance as stated in the ESMP. The works Supervisor will ensure compliance with the ESMP listed measures and provide reports on compliance.

8. MONITORING AND REPORTING ARRANGEMENTS

8.1. SDIP Project Monitoring

The SDIP Project and this Sub-project will be monitored by the PIU under the DWM. Information and data collected at each of the implementation agencies will be fed into overall M&E. The ISRBC and PIUs will collect and present data and reports for semi-annual reviews by the Regional Committee and respective National institutions responsible for Sub-project implementation, in conjunction with Bank missions.

The Contractor is obliged to perform all monitoring activities (sampling, measurement, etc.) prescribed within the Monitoring Plan of ESMP document produced for Sub-project on which the Contractor is engaged.

Supervision Consultant is responsible to monitor all Rehabilitation works for Galovica channel, including environmental protection during Rehabilitation works for Galovica channel. PSC will be authorized to perform additional sampling in case he finds this needed.

8.2. Environmental and Social Monitoring

The Monitoring plan will be incorporated to the Procurement Documents and include:

- Environmental and social issues to be monitored and the means of verification
- Specific areas, locations and parameters to be monitored;
- Applicable standards and criteria;
- Monitoring of the procurement of materials (checks that valid permits are in place),
- Duration,
- Institutional responsibilities for monitoring and supervision.

8.3. Reporting Arrangements

8.3.1. Contractor to PIU

The Contractor will be required to prepare ESMP and SSIP compliance reports in the form of Monthly Progress Reports to form part of the overall Monthly progress reports and submit them to PIU and the Supervision Consultant, in both Serbian and English language, in hard copy and electronic versions.

The Contractor will provide quarterly progress reports to the Project Implementing Unit on the ESHS performance. These reports will which document the environmental and social mitigation and protection measures, together with prescribed monitoring activities carried out during that reporting period.

The Contractor will promptly notify the Supervision Consultant and the PIU of any incident or accident related

to the Sub-project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers including any incidental spillage that can cause pollution of land/water, expropriation issues, accidents involving workers or members of affected communities, labor issues, etc.

In accordance with the WB Environmental and Social Incident Response Process the Contractor and Project Supervision Consultant are obliged to deliver its Incident Report to PIU within the 24 hours in case of following incident types:

- **Fatality**: Death of a person(s) that occurs within one year of an accident/incident, including from occupational disease/illness (e.g., from exposure to chemicals/toxins).
- **Lost Time Injury**: Injury or occupational disease/illness (e.g., from exposure to chemicals/toxins) that results in a worker requiring 3 or more days off work, or an injury or release of substance (e.g., chemicals/toxins) that results in a member of the community needing medical treatment.
- **Acts of Violence/Protest**: Any intentional use of physical force, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, deprivation to workers or project beneficiaries, or negatively affects the safe operation of a project worksite.
- **Disease Outbreaks**: The occurrence of a disease in excess of normal expectancy of number of cases. Disease may be communicable or may be the result of unknown etiology.
- **Displacement Without Due Process**: The permanent or temporary displacement against the will of individuals, families, and/or communities from the homes and/or land which they occupy without the provision of, and access to, appropriate forms of legal and other protection and/or in a manner that does not comply with an approved resettlement action plan.
- **Child Labor**: An incident of child labor occurs: (i) when a child under the age of 14 (or a higher age for employment specified by national law) is employed or engaged in connection with a project, and/or (ii) when a child over the minimum age specified in (i) and under the age of 18 is employed or engaged in connection with a project in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral or social development.
- **Forced Labor**: An incident of forced labor occurs when any work or service not voluntarily performed is exacted from an individual under threat of force or penalty in connection with a project, including any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements. This also includes incidents when trafficked persons are employed in connection with a project.
- **Unexpected Impacts on heritage re**sources: An impact that occurs to a legally protected and/or internationally recognized area of cultural heritage or archaeological value, including world heritage sites or nationally protected areas not foreseen or predicted as part of project design or the environmental or social assessment.
- **Unexpected impacts on biodiversity resources**: An impact that occurs to a legally protected and/or internationally recognized area of high biodiversity value, to a Critical Habitat, or to a Critically Endangered or Endangered species (as listed in IUCN Red List of threatened species or equivalent national approaches) that was not foreseen or predicted as part of the project design or the environmental and social assessment. This includes poaching or trafficking of Critically Endangered or Endangered species.
- **Environmental pollution incident**: Exceedances of emission standards to land, water, or air (e.g., from chemicals/toxins) that have persisted for more than 24 hrs or have resulted in harm to the environment.
- **Dam failure**: A sudden, rapid, and uncontrolled release of impounded water or material through overtopping or breakthrough of dam structures.
- **Other**: Any other incident or accident that may have a significant adverse effect on the environment, the affected communities, the public, or the workers, irrespective of whether harm had occurred on that

occasion. Any repeated non-compliance or recurrent minor incidents which suggest systematic failures that the task team deems needing the attention of Bank management.

The Contractor will provide sufficient detail regarding the incident or accident, indicating immediate measures taken or that are planned to be taken to address it, and any information provided by any contractor and supervising entity, as appropriate. Incident Report Form is enclosed as Annex 5.

8.3.2. Sub-project Supervision Consultant to PIU

The Supervision Consultant plays a central role in ensuring that the Contractor's works are carried out in full compliance with the Environmental and Social (E&S) requirements set forth in the ESMP, relevant permits and licenses, and any applicable lender or national standards. Reporting to the Project Implementation Unit (PIU), the Consultant is responsible for the ongoing oversight, verification, and documentation of environmental and social performance during project implementation.

Approval and Oversight of Contractor's C-ESMP

Prior to the commencement of any physical works, the Supervision Consultant shall undertake a detailed review and provide formal approval of the Contractor's Construction Environmental and Social Management Plan (C-ESMP). The Consultant is responsible for ensuring that the C-ESMP is fully aligned with the overarching ESMP and incorporates all project-specific environmental, health and safety, and social mitigation measures. Throughout implementation, the Consultant shall monitor the C-ESMP's effectiveness and provide continuous oversight to ensure that the mitigation and monitoring measures are being correctly and consistently applied on site. The Consultant shall notify the PIU of any deviations or necessary updates, and ensure timely corrective actions are implemented by the Contractor.

B. Monitoring and Reporting

The Supervision Consultant shall submit structured environmental and social supervision reports to the PIU on a monthly and quarterly basis. These reports shall present an objective and evidence-based overview of the Contractor's E&S performance. The reports shall include an assessment of C-ESMP implementation, compliance with the terms and conditions of all relevant environmental and social permits and licenses (e.g. construction permits, waste management, water use), and site-specific monitoring results where required (such as noise, dust, and water quality). In addition, the Consultant will track and report on land access, including the number of land parcels for which legal consents, easements, or access agreements have been obtained. The Consultant will also monitor the functionality and responsiveness of the Contractor's grievance mechanism, including the number of grievances received, resolved, or pending, with an indication of their nature, source, and resolution timeframe. Special attention will be given to the Local Grievance Desk's visibility, accessibility, and documentation practices. Reports will also provide an overview of stakeholder engagement efforts, including the number and nature of consultation and information disclosure events organized within the reporting period, as well as the number and locations of public information boards installed on site. Any cases of non-compliance will be documented, including the type of issue, instructions provided to the Contractor, and status of remedial actions. Recurrent or serious non-compliance will be flagged to the PIU for further action.

Advisory and Capacity Building Role

The Consultant shall provide regular guidance to support proactive risk management and good practice implementation, particularly in areas such as hazardous waste handling, community health and safety, traffic safety, and grievance management. Where gaps in site-level understanding are identified, the Consultant shall support the delivery of targeted training or orientation for contractor personnel and site supervisors. Furthermore, the Consultant shall contribute to strengthening the PIU's oversight capacity by offering technical inputs, lessons learned, and strategic advice based on field observations.

Reporting Schedule

The Consultant shall adhere to the agreed reporting schedule, which includes the submission of concise monthly E&S supervision reports summarizing key observations, implementation progress, and emerging risks. On a quarterly basis, the Consultant shall prepare more comprehensive analytical reports consolidating findings over time, highlighting trends, and providing strategic recommendations. In addition to these scheduled reports, the Consultant is required to immediately inform the PIU in writing of any serious accident, environmental incident, or breach of compliance that may result in significant harm to the environment, workforce, or surrounding communities. All reports shall be submitted in formats agreed with the PIU and in line with the project's monitoring and reporting framework.

In case of incident described in 9.3.1 the Project Supervision Consultant is obliged to assist the Contractor in preparation of Incident Report to be delivered to PIU within the 24h since incident is happened.

8.3.3. PIU to MAFWM, WB, Semi-Annual Environmental & Social Report

The Contractor is required to prepare and deliver to PIU an Semi-Annual Environmental and Social Report covering all Sub-project activities during 6 month period PIU shall provide Semi-Annual reports to MAFWM and WB regarding the status of implementation of mitigation measures by the Contractors, additional mitigation measures that may need to be implemented, incidents of non-compliance with applicable environmental permits, complaints received from local residents, NGOs, etc. and how these were addressed. In case of fatalities or major incidents on site the PIU will immediately report to WB.

Monitoring and compliance in accordance with ESMF and site specific ESMPs, including monitoring of implementation of site-specific measures on each Sub-project/section during Sub-project implementation will be undertaken by PIU and its implementation unit, and reported in writing to the Bank on semi-annual basis. Environmental and social specialists are appointed to the Sub-project by PIU to ensure quality in the implementation of ESMPs.

9. GRIEVANCE MECHANISM

A transparent, accessible, and effective Grievance Mechanism (GM) has been established to address concerns and grievances arising from Sub-project activities. The GM will operate on two interconnected levels:

- A **Central Feedback Desk (CFD)**, administered by the Project Implementation Unit (PIU) at the Ministry of Agriculture, Forestry, and Water Management (MAFWM); and
- **Local Grievance Desks (LGDs)**, the functions of which will be assumed and operated by the **Contractor's Community Grievance Mechanism** established for the Sub-projects.

Together, these components constitute the Sub-project-level GM, providing stakeholders—including potential beneficiaries, local communities, and other interested parties—with avenues to submit grievances and receive timely responses and resolutions.

9.1 Access and Channels for Submitting Grievances

To ensure broad accessibility and inclusiveness, grievances can be submitted through multiple channels, including:

- In person, by visiting the Contractor's site office or the PIU;
- By mail;
- By fax;
- By telephone;

- By email;
- Via an online grievance form; or
- In any other format chosen by the complainant.

Information on how to submit grievances, as well as details of the GM process, will be publicly disclosed on the MAFWM's website to ensure full transparency.

9.2 Grievance Handling Process

The GM will adhere to a standardized grievance management process, consisting of the following steps:

1. **Receive:** Grievance is submitted through any of the designated channels.
2. **Assess and Assign:** The grievance is reviewed to determine its nature, severity, and the responsible party for resolution.
3. **Acknowledge:** Within **three (3) days** of receiving a grievance, the GM will acknowledge receipt and inform the complainant of the next steps.
4. **Investigate:** The GM will investigate the grievance by engaging with the complainant to understand the issue and desired resolution.
5. **Respond:** A formal response, including the proposed resolution or explanation, will be provided to the complainant within **thirty (30) days** of logging the grievance.
6. **Follow-up and Close Out:** Resolution measures will be implemented and verified. The grievance will be formally closed once the complainant confirms satisfaction, or the GM documents the outcome, even if mutual agreement is not reached.

If the grievance cannot be resolved amicably through the GM process, the complainant retains the right to pursue remedies through judicial or other formal mechanisms available under Serbian law at any stage, including during the grievance process.

Although the SEA/SH risk is low, the grievance handling process includes some basic requirements for handling SEA/SH complaints

The GM operators are to be trained on how to receive and document SEA/SH cases confidentially and empathetically (with no judgement). No identifiable information on the survivor should be stored in the GM.

Before the survivor reports a complaint about SEA/SH to the project GM, the survivor should be made aware if there is any mandatory reporting requirement that would apply – i.e. any obligation under national law for the GM operator, or the project, to report certain incidents. Whenever possible, reporting to the police should be done exclusively with the survivor's consent.

The GM should not ask for, or record, information on more than the following related to the SEA/SH allegation:

(i) The nature of the complaint (what the complainant says in her/his own words without direct questioning);

(ii) If, to the best of the survivor's knowledge, the perpetrator was associated with the project; o If possible, the age and sex of the survivor; and o If possible, information on whether the survivor was referred to services.

The GM should assist SEA/SH survivors by referring them to GBV service provider(s) for support immediately after receiving a complaint directly from a survivor.

The information in the GM must be confidential—especially when related to the identity of the complainant. For SEA/SH, the GM should primarily serve to: (i) refer complainants to the GBV service provider; and (ii) record resolution of the complaint

9.3 Role of Contractor's Community Grievance Mechanism

The Contractor's Community Grievance Mechanism will serve as the **Local Grievance Desk (LGD)** and will:

- Receive, log, and manage grievances related to construction activities and site-specific impacts;
- Maintain direct communication with affected communities;
- Investigate grievances at the local level and seek timely resolution;
- Provide regular updates to the CFD on grievances received and actions taken;
- Ensure that all grievances are recorded and reported in line with Project requirements.

The LGD shall prepare and submit a weekly summary log of all grievances received, their status, and actions taken, to the CFD. This weekly exchange of information ensures centralized oversight and prevents duplication of records.

9.4 Anonymous Grievances

Anonymous grievances will be accepted and processed. Following acknowledgment within **three (3) days**, the GM will investigate and issue a final decision within **thirty (30) days** of receipt. The resolution of anonymous grievances will be disclosed publicly on the PIU's website while ensuring confidentiality.

9.4 Grievance Log and Data Protection

Both the CFD and the Contractor's LGD shall maintain **Grievance Registers**, recording all grievances received through any channel. Each register will, at a minimum, include:

- A description of the grievance;
- The date of receipt and acknowledgment provided to the complainant;
- Actions taken to investigate and address the grievance;
- The date of resolution or feedback provided to the complainant;
- Verification of the implementation of any resolution; and
- Closure details.

All grievance records will be disaggregated by gender of the complainant and by type of grievance. Personal data will be protected in accordance with Serbia's Data Protection Law.

9.5 Coordination and Information Exchange

To avoid duplicate registration and ensure comprehensive management of grievances received through different channels, the Contractor's LGD and the CFD will **exchange grievance records weekly** and cross-check their logs. The CFD will maintain a centralized log, including notes on potentially duplicated submissions. If multiple submissions on the same issue from the same complainant are identified, they will be consolidated into a single grievance case, and the complainant will be informed accordingly.

9.6 Contact Details for Submitting Grievances

Stakeholders may submit grievances or inquiries using the following contact details:

Ministry of Agriculture, Forestry and Water Management
Project Implementation Unit (PIU)
Attention: Central Feedback Desk (CFD)

Grievance Contact Person: Ognjen Popovic
Address: Bulevar Umetnosti 2, 11000 Beograd

E-mail: rdvpiu@minpolj.gov.rs

rdvpiu@yahoo.com

Information on the Contractor's Community Grievance Mechanism, including site-specific contact details, will be made publicly available at construction sites and through local municipal channels.

9.7 Workers grievance mechanism

The Contractor shall establish a **Worker Grievance Mechanism (WGM)** to enable all project workers—permanent, temporary, contracted, or migrant—to raise concerns related to their employment and working conditions. The WGM is separate from the Community Grievance Mechanism to ensure workers' confidentiality and protect their rights, in line with World Bank ESS2 and Serbian labor laws.

The following are the key elements of the WGM:

- **Accessibility:** Workers must have easy access to multiple channels for submitting grievances (in person, phone, email, online, or anonymous submission).
- **Confidentiality & Non-Retaliation:** Grievances must be handled confidentially, without retaliation or discrimination.
- **Clear Process:** The mechanism shall follow steps:
    - Receive and log the grievance
    - Acknowledge receipt within 3 days
    - Investigate and propose a resolution
    - Provide a formal response within 30 days
    - Verify implementation and close out the grievance
- **Record Keeping:** A grievance register shall be maintained, capturing:
    - Nature of grievance
    - Date received and acknowledged
    - Actions taken
    - Date of resolution
    - Outcome and closure
- **Awareness and Training:** Workers must be informed of the WGM during induction and through regular communication (posters, toolbox talks).
- **Sensitive Grievances:** Special procedures and trained staff shall handle grievances related to harassment, GBV, discrimination, or safety hazards.

If a grievance is mistakenly submitted to the Community GM but relates to labor issues, it shall be redirected to the WGM. Both systems shall coordinate to prevent duplication and ensure clarity for all stakeholders. Summaries of grievances and resolutions, without personal identifiers, shall be included in the Contractor's Monthly Progress Reports to the PIU and Supervision Consultant.

10. ESMP IMPLEMENTATION COSTS

This ESMP refers to the Rehabilitation works for Galovica channel. The main impacts are identified in the construction phase. Since the nature of the Sub-project is as such that it entails standard Rehabilitation works for Galovica channel, all mitigation measures refer to good construction practices and will be implemented into the Sub-project design. Therefore, the associated costs will be included in the cost of overall Sub-project implementation. Potential bidders are to prepare their bill of quantities referring to the measures in this ESMP specifying that the bidd price deems to include implementation of all measure asigned to by this ESMP and the Conditions of Contract.

Scope of prescribed mitigation measures for the subject Sub-project works is such that it correlates with good environmental practices during construction and their implementation will have a negligible impact on the total cost of the works.

It is the Contractor's obligation to cost implementation of environmental mitigation measures in his overall cost. The Contractor will be required to provide a statement that confirms that:

- The implementation of the ESMP in its entirety has have been costed into the bid price (excluding cost related to permanent land and assets acquisition – there are no cost associated with the written consent/easement rights for use of private land parcels for the access roads) ,
- the Contractor has a qualified and experienced person on the Contractor‘s team who will be responsible for the environmental and social compliance requirements of the ESMP, and
- The Contractor and its sub-contractors will comply with Republic of Serbia national laws and World Bank requirements.

11. PUBLIC CONSULTATIONS AND PUBLIC DISCLOSURE OF THE ESMP

In accordance with WB ESS 10 a draft version of ESMP will be publicly disclosed on the Ministry of Agriculture, Forestry and Water Management, the Directorate of Water web site and in the municipalities affected by the Sub-project for a disclosure period of two weeks. The public consultation meeting will be held in the city of Belgrade, in organization of DfW, after the disclosure period.[4]

12. REFERENCES

01 ARRANGEMENT OF THE MAIN CHANNEL "GALOVICA" from km 0+000 to km 46+880 in the Galovica drainage system, Belgrade, December 2023.

02 ARRANGEMENT OF THE MAIN CHANNEL "GALOVICA" from km 0+000 to km 25+330 in the Galovica drainage system, Belgrade, August 2023.

03 The main drainage design of the Galovica basin, Energoprojekt - Hidroinzenjering, June 1990

04 Environmental and Social Screening Report for Subproject Nr. 011 „Arrangement of main Galovica channel“ km 0+000 to km 46+880, PIU under the Directorate for Water, Serbia, July 2024

05 Report on Galovica water and sediment sampling and laboratory analysis, Dr. Milena Dalmacija Laboratory, Department of Biochemistry and Environmental protection of the Faculty of Natural Science and Mathematics at University of Novi Sad.

06 Technical Report, Video recording of the 47 km long Galovica channel with a drone, VLADIMIR SUSIC PR PROJEKTOVANjE, INZENjERING I KONSALTING GEOINDUSTRY CACAK, Vojvode Stepe 165 B, 32000, Cacak Serbia, December 2023

07 Preconditions of the Institute for the Nature Conservation of Serbia, July 2021

08 The World Bank Environmental and Social Framework, 2018

09 Project Appraisal Document, PAD3402, Sava Drina River Corridors Integrated Development Program

10 Project Information Document, PIDC25739, Project Information Document (Concept Stage) - Sava Drina River Corridors Integrated Development Program – P168862, February 2019

11 Environmental and Social Management Framework, ESMF, Sava Drina River Corridors Integrated Development Program – P168862, October 2019

12 Resettlement Policy Framework, RPF, Sava Drina River Corridors Integrated Development Program – P168862, October 2019

13 Environmental Assessment Sourcebook No 25, Environmental and Social Management Plans, The World Bank Environment Department, January 1999

[4] Note: This chapter will be finalized after the public consultations’ procedure is over

ANNEX 1: PERTAINING NATIONAL LEGISLATION AS OF AUGUST 2025

The main laws and regulation currently in force in Republic of Serbia which are relevant to the environmental protection during planning, design, construction and operating of this Sub-project are listed below:

01 Constitution of the Republic of Serbia (“Official Gazette of RS” No. 98/06,115/2021).

02 National Sustainable Development Strategy (“Official Gazette of RS” No. 72/09, 81/09)

03 Law on planning and construction (“Official Gazette of RS” No. 72/09, 81/09, 64/10, 24/11, 121/12, 42/13, 50/13, 98/13, 132/14, 145/14, 83/18, 31/19, 37/19, 9/20, 52/21 and 62/23)

04 Law on nature protection (“Official Gazette of RS”, 36/09, 88/10, 91/10, 14/16, 95/18, 71/21)

05 Law on environmental protection (“Official Gazette of RS” No. 135/04, 36/09, 72/09, 43/11, 14/16, 76/18, 95/18)

06 Law on EIA (“Official Gazette of RS” No. 135/04, 36/09)

07 Law on Strategic EIA (“Official Gazette of RS” No. 135/04, 88/10)

08 Law on waste management (“Official Gazette of RS”, 36/09, 88/10, 14/16, 95/18 and 35/23)

09 Law on environmental noise protection (“Official Gazette of RS”, 96/21)

10 Law on water (“Official Gazette of RS”, 30/10, 93/12, 101/16, 95/18)

11 Law on Soil Protection (“Official Gazette of RS”, No. 112/2015)

12 Law on forest (“Official Gazette of RS”, 30/10, 93/12, 89/15, 95/18)

13 Law on air protection (“Official Gazette of RS”, 36/09, 10/13, 26/21)

14 Law on Safety and Health at Work (“Official Gazette of RS”, 101/05, 91/15, 113/17)

15 Agricultural Land Law, (“Official Gazette of RS” No. 62/06, 65/08, 41/09, 112/15, 80/17, 95/18)

<u>Regulation established on the basis of the Law on EIA include the following:</u>

16 Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested (“Official Gazette of RS” No. 114/08)

17 Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study (“Official Gazette of RS” No. 69/05)

18 Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study (“Official Gazette of RS” No. 69/05)

19 Rulebook on the work of the Technical Committee for the EIA Study (“Official Gazette of RS” No. 69/05)

20 Rulebook on methodology for determination of acoustic zone (“Official Gazette of RS” No. 72/10)

21 Decree on establishing class of water bodies (“Official Gazette of SRS” No. 5/68)

22 Regfulation on dangers pollutants in waters (“Official Gazette of SRS” No. 31/82)

23 Decree on limit values of pollutants in surface and groundwater and sediment and deadlines for their achievement ("Official Gazette of RS", No. 50/2012)

24 Decree on limit values of priority and priority hazardous substances that pollute surface waters and deadlines for their achievement ("Official Gazette of RS", No. 24/2014)

Regulation on Labor, Working Conditions and Gender equality

25 Labor Law (“Official Gazette of RS” No. 24/05, 61/05, 54/09, 32/13, 75/14, 13/17 , 113/17 and 95/18)

26 Law on Civil Servants (“Official Gazette of RS” No. 79/05, 81/05, 83/05, 64/07, 67/07, 116/08, 104/09, 99/14, 94/17, 95/18, 157/20)

27 The Law on Peaceful Settlement of Labor Disputes (“Official Gazette of RS” No. 125/04, 104/09, 50/18)

28 Law on Employment and Unemployment Insurance (“Official Gazette of RS” No. 36/09, 88/10, 38/15, 113/17, 49/21)

29 Law on Employment of Foreign Citizens (“Official Gazette of RS” No. 128/14, 113/17, 50/18, 31/19)

30 Law on Retirement and Disability Insurance (“Official Gazette of RS” No. 34/03, 64/04, 84/04, 85/05, 101/05, 63/06, 5/09, 107/09, 101/10, 93/12, 62/13, 108/13, 75/14, 142/14, 73/18 and 46/19, 86/19, 62/21)

31 Law on Health Insurance (“Official Gazette of RS” No. 25/19)

32 Law on the Prohibition of Discrimination (“Official Gazette of RS” No. 22/09, 52/21)

33 Law on the Prevention of Harassment at the Workplace (“Official Gazette of RS” No. 36/10)

34 Rulebook on Conduct of Employers and Employees in Relation to Prevention and Protection from Harassment at Work (“Official Gazette of RS” No. 62/10)

35 Law on Protection of Whistle Blowers (“Official Gazette of RS” No. 128/14)

36 Law on Gender Equality (“Official Gazette of RS” No. 52/21)

Other relevant Serbian legislation

37 Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area (“Official Gazette of RS”, 38/09)

38 Law on Cultural Heritage ("Official Gazette of RS", Nos. 71/1994, 52/2011, 99/2011, 6/2020 - other law, 35/2021 - other law, 129/2021 - - other law and 76/2023 - other law)

39 Law on Occupational Safety and Health (“Official Gazette of RS” No. 35/2023)

40 Regulation on Categories, Testing and Classification of Waste (“Official Gazette of the RS“, No 35/2023)

41 European Environment and Health Committee. Serbia. Copenhagen, WHO Regional Office for Europe, 2006 (http://www.euro.who.int/eehc/implementation/20061010_9 accessed 29 December 2009).

42 Law on Management of Chemicals. Official Gazette of the Republic of Serbia, 2009, No. 36/09.

43 Law on Biocidal Products. Official Gazette of the Republic of Serbia, 2009, No. 36/09.

44 Law on Integrated Pollution Prevention and Control. Official Gazette of the Republic of Serbia, No. 135/04 (http://www.basel.int/legalmatters/natleg/serbia-04e.pdf, accessed 11 January 2010).

ANNEX 2: REPORT ON PUBLIC DISCLOSURE AND PUBLIC CONSULTATION

This section will be incorporated after the completion of public consultations.

ANNEX 3: RESULTS OF WATER AND SEDIMENT ANALYSIS FOR GALOVICA CHANNEL

Sampling of water and sediment from Galovica channel was carried out on 14 Sep 2024 at five measuring points.

The quality of water and sediment was compared with the values prescribed by the regulation on limit values of pollutants in surface and underground waters and deadlines for their achievement (Official Gazette of RS, 50/2012).

Water quality in all localities corresponds to class V according to the content of dissolved oxygen, suspended matter, COD, BOD, nutrients.

The sediment quality in all localities corresponds to class 2 and is considered slightly polluted. During dislocation, disposal is allowed without special protection measures in a zone up to 20 m wide in the vicinity of watercourses.

УНИВЕРЗИТЕТ У НОВОМ САДУ ПРИРОДНО-МАТЕМАТИЧКИ ФАКУЛТЕТ
ДЕПАРТМАН ЗА ХЕМИЈУ, БИОХЕМИЈУ И ЗАШТИТУ ЖИВОТНЕ СРЕДИНЕ
ЛАБОРАТОРИЈА ЗА ХЕМИЈСКА ИСПИТИВАЊА ЖИВОТНЕ СРЕДИНЕ „ДР МИЛЕНА ДАЛМАЦИЈА“
Трг Доситеја Обрадовића 3, 21000 Нови Сад
tel: 021/450-041, 021/485-2886; fax: 021/454-065
e-mail: hemijska.laboratorija@dh.uns.ac.rs, www.hemijskalaboratorija.rs
ПИБ 101635863; Број пријаве за ПДВ: 132677176 Матични број: 08104620;
Шифра делатности: 80321; Број текућег рачуна: 840-1711666-19 Управа за трезор

ATC 01-348 ЛАБОРАТОРИЈА ЗА ИСПИТИВАЊЕ ISO/IEC 17025

ИЗЈАВА О УСАГЛАШЕНОСТИ СА ЗАХТЕВИМА СТАНДАРДА

/

МИШЉЕЊА И ТУМАЧЕЊА РЕЗУЛТАТА ИСПИТИВАЊА

14.09.2023. је извршено узорковање воде и седимента из Галовице на пет мерних места.

Квалитет воде и седимента је упоређиван са вредностима које прописује уредба о граничним вредностима загађујућих материја у површинским и подземним водама и роковима за њихово достизање (Сл. гласник РС, 50/2012).

Квалитет воде на свим локалитетима одговара V класи према садржају раствореног кисеоника, суспендованих материја, ХПК, БПК, нутријената.

Квалитет седимента на свим локалитетима одговара класи 2 и сматра се незнатно загађеним. Приликом дислокације дозвољено је одлагање без посебних мера заштите у појасу ширине до 20 m у околини водотока.

Извештај израдио:
Весна Пешић, технички руководилац лабораторије

Извештај одобрио:
Снежана Малетић, шеф лабораторије

Директор Департмана за хемију, биохемију и заштиту животне средине
Проф. др Јасмина Агбаба

- крај извештаја о испитивању -

0404-59/8, 18.10.2023. Страна 35 од 35

ANNEX 4: GRIEVANCE MANAGEMENT FORM

Reference No:

Full Name

Note: you can remain anonymous if you prefer, or request not to disclose your identity to the third parties without your consent. In case of anonymous grievances, the decision will be disclosed at the Projects website www.minpolj.rs

First name _____

Last name _____

❏ I wish to raise my grievance anonymously

❏ I request not to disclose my identity without my consent Contact Information Please mark how you wish to be contacted (mail, telephone, e-mail).

❏ By Post: Please provide mailing address: _____
_____
_____

❏ By Telephone: _____

❏ By E-mail _____

❏ I will follow up on the resolution at the website as I want to remain anonymous

Preferred Language for communication ❏ Serbian ❏ Other *(indicate)*

Description of Incident or Grievance (*What happened? Where did it happen? Who did it happen to? What is the result of the problem? Date of Incident/ Grievance)*

❏ One-time incident/grievance (date _____)

❏ Happened more than once (how many times? _____)

❏ On-going (currently experiencing problem) What would you like to see happen to resolve the problem?

Signature: _____ Date: _____

Please return this form to: The Ministry of Agriculture, Forestry and Water Management, PIU,

rdvpiu@minpolj.gov.rs,

ANNEX 5: INCIDENT REPORT FORM

Part B: To be completed within 24 hours

B1: Incident Details			
Date of Incident:	**Time:**	**Date Reported to PIU:**	**Date Reported to WB:**
Reported to PIU by:	**Reported to WB by**:	**Notification Type**:	
Full Name of Main Contractor:		**Full Name of Subcontractor**:	

B2: **Type of incident (please check all that apply)**[1]
Fatality ☐ Lost Time Injury ☐ Displacement Without Due Process ☐ Child Labor ☐ Acts of Violence/Protest ☐ Disease Outbreaks ☐ Forced Labor ☐ Unexpected Impacts on heritage resources ☐ Unexpected impacts on biodiversity resources ☐ Environmental pollution incident ☐ Dam failure ☐ Other ☐

[1]See Annex 1 for definitions

B3: Description/Narrative of Incident
For example: *I. What is the incident?* *II. What were the conditions or circumstances under which the incident occurred (if known)?* *III. Are the basic facts of the incident clear and uncontested, or are there conflicting versions? What are those versions?* *IV. Is the incident still ongoing or is it contained?* *V. Have any relevant authorities been informed?*

B4: Actions taken to contain the incident			
Short Description of Action	**Responsible Party**	**Expected Date**	**Status**
For incidents involving a contractor: **Have the works been suspended *(for example, under Contract GCC7.6 or GCC8.9 of Works)*? Yes ☐; No ☐;** **Name of Contractor:** **Please attach a copy of the instruction suspending the works.**			

B5: What support has been provided to affected people

Incident Types

The following are incident types to be reported using the environmental and social incident response process:

Fatality: Death of a person(s) that occurs within one year of an accident/incident, including from occupational disease/illness (e.g., from exposure to chemicals/toxins).

Lost Time Injury: Injury or occupational disease/illness (e.g., from exposure to chemicals/toxins) that results in a worker requiring 3 or more days off work, or an injury or release of substance (e.g., chemicals/toxins) that results in a member of the community needing medical treatment.

Acts of Violence/Protest: Any intentional use of physical force, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, deprivation to workers or project beneficiaries, or negatively affects the safe operation of a project worksite.

Disease Outbreaks: The occurrence of a disease in excess of normal expectancy of number of cases. Disease may be communicable or may be the result of unknown etiology.

Displacement Without Due Process: The permanent or temporary displacement against the will of individuals, families, and/or communities from the homes and/or land which they occupy without the provision of, and access to, appropriate forms of legal and other protection and/or in a manner that does not comply with an approved resettlement action plan.

Child Labor: An incident of child labor occurs: (i) when a child under the age of 14 (or a higher age for employment specified by national law) is employed or engaged in connection with a project, and/or (ii) when a child over the minimum age specified in (i) and under the age of 18 is employed or engaged in connection with a project in a manner that is likely to be hazardous or interfere with the child's education or be harmful to the child's health or physical, mental, spiritual, moral or social development.

Forced Labor: An incident of forced labor occurs when any work or service not voluntarily performed is exacted from an individual under threat of force or penalty in connection with a project, including any kind of involuntary or compulsory labor, such as indentured labor, bonded labor, or similar labor-contracting arrangements. This also includes incidents when trafficked persons are employed in connection with a project.

Unexpected Impacts on heritage resources: An impact that occurs to a legally protected and/or internationally recognized area of cultural heritage or archaeological value, including world heritage sites or nationally protected areas not foreseen or predicted as part of project design or the environmental or social assessment.

Unexpected impacts on biodiversity resources: An impact that occurs to a legally protected and/or internationally recognized area of high biodiversity value, to a Critical Habitat, or to a Critically Endangered or Endangered species (as listed in IUCN Red List of threatened species or equivalent national approaches) that was not foreseen or predicted as part of the project design or the environmental and social assessment. This includes poaching or trafficking of Critically Endangered or Endangered species.

Environmental pollution incident: Exceedances of emission standards to land, water, or air (e.g., from chemicals/toxins) that have persisted for more than 24 hrs or have resulted in harm to the environment.

Dam failure: A sudden, rapid, and uncontrolled release of impounded water or material through overtopping or breakthrough of dam structures.

Other: Any other incident or accident that may have a significant adverse effect on the environment, the affected communities, the public, or the workers, irrespective of whether harm had occurred on that occasion. Any repeated non-compliance or recurrent minor incidents which suggest systematic failures that the task team deems needing the attention of Bank management.

ANNEX 6: Sample easement consent

AGROINDUSTRIJSKA KORPORACIJA BEOGRAD AD
Br. 441
10.02. 2025. god.
Padinska Skela, Gorskih Jasenova 12

Република Србија
МИНИСТАРСТВО ПОЉОПРИВРЕДЕ,
ШУМАРСТВА И ВОДОПРИВРЕДЕ
Број 000364224 2025 14843
11.02. 2025 године
БЕОГРАД

ИЗЈАВА О ДАВАЊУ САГЛАСНОСТИ

Као носилац права својине у обиму 1/1, Агроиндустријска корпорација Београд а.д., овом сагласношћу установљава стварну службеност права пролаза у корист Министарства пољопривреде, шумарства и водопривреде – Републичке дирекције за воде, на непокретностима у општини Сурчин, КО Јаково, кат. парцела број 2976 као послужном добру. Службеност права пролаза установљава се за пролаз грађевинске механизације и транспорта материјала за потребе извођења грађевинских радова на уређењу главног канала „Галовица" који је део хидромелиорационог система Галовица.

Службеност права пролаза засновано овом сагласношћу реализоваће се тако да у највећој мери штеди послужно добро и подразумева да се возила крећу у оквиру путног појаса установљен постојећом трасом атарског пута на ободима наведених парцела.

За право службености пролаза власник послужног добра не потражује накнаду.

Право службености пролаза наступа даном потписивања ове сагласности и њеним прихватом од стране Министарства пољопривреде, шумарства и водопривреде — Републичке дирекције за воде, и остаје на снази до окончања радова на уређењу канала Галовица. Право службености се даном потписа уговора о извођењу радова преноси на извођача радова.

Обавезује се Министарство пољопривреде, шумарства и водопривреде — Републичка дирекција за воде, да о почетку извођења радова и роковима за њихов завршетак обавести Агроиндустријска корпорација Београд а.д. писаним путем.

Агроиндустријска корпорација Београд а.д.
Давалац сагласности

Дејан Томашевић, генерални директор

Републичка дирекција за воде

Маја Грбић, в.д. директорке

ANNEX 7: Biodiversity Management Plan (BMP) for Rehabilitation works for Galovica channel

Purpose and scope
To ensure that cleaning and maintenance of the existing Galovica channel (mechanical removal of deposited material and vegetation) are planned and executed so as to avoid or minimize impacts on local habitats and small fauna within the ±20 m corridor, in accordance with ESS6.
Roles and responsibilities
1. Contractor prepares the BMP (this framework + detailed methodology and schedule), organizes the site, implements measures, keeps records. 2. Contractor's Biology Expert – BE (qualified biologist/ornithologist) obligations are pre-work inspection by sections; crew induction (toolbox talk); daily/periodic oversight of sensitive points; authority to require temporary stoppage/method change. 3. Project Supervision /PIU oversees implementation, coordinates with competent authorities as needed.
BE Pre-work activities (by 300–500 m section)
1. Ecological survey 3–7 days before start. Record any active nests (especially lowland birds nesting in reeds), potential amphibian spawning sites, and micro-refugia for small mammals/reptiles. 2. Sensitivity mapping. Plot points/buffers and propose the sequencing/phasing to avoid sensitive spots. 3. Seasonal scheduling. Where feasible, plan works outside peak bird breeding (approximately April–July) and amphibian spawning (March–June). If works must occur in these windows, apply stricter phasing.
Method of execution (avoidance and minimization)
1. Phased cleaning – "one bank per pass". Work one bank per section (300–500 m), then switch to the opposite bank; avoid simultaneous clearing of both banks on the same section. 2. Two-stage mowing/vegetation removal. First cut to ~20–30 cm and pause ≥48 h to allow fauna to disperse; then complete removal. 3. Retention of "refugia". Within each linear kilometre, retain 10% vegetation mosaic (small reed/shrub clumps) where this does not compromise hydraulic function. 4. If the BE identifies an active nest, establish a temporary buffer of 20–50 m (species-dependent) and skip that section until fledging/abandonment is confirmed. 5. Noise and working hours. Daytime only (no night works), avoid horns/alarms; well-maintained machinery; avoid flattening reedbeds during active nesting. 6. Avoiding spill onto the water surface.
Post-works (micro-habitat rehabilitation)
1. Remove any temporary barriers/ramps immediately after each section is completed.
Supervision and monitoring (BE + Contractor)
1. BE logbook shall contain observations on fauna/nests; pre–during–post photos; record of skipped areas and return dates. 2. Performance indicators are:

- 0 incidents of mass fish kill;
- 0 disturbed active nests;
- refugia mosaic achieved (≥10% per km);

3. Report to the Client on monthly basis during works;
4. Deliver final “as-built” BMP report per section to the PIU.

Stop/adjust triggers

1. Discovery of active nests within the work zone → immediate switch to the next section; return only after BE confirmation.
2. Unexpected high downstream turbidity (**visually**) → slow the pace, install micro-barriers, adjust operations.

Documents the Contractor submits before start

1. Brief BMP Addendum by sections (sensitivity map, sequencing, phasing, equipment).
2. Toolbox talk record for the crew (ESS6 requirements, nest/amphibian identification, protocols).
3. Contact list and authorities of the BE; daily log and incident report templates.