Ministry of Agriculture and Environmental Protection
Directorate for Water Management
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FLOODS EMERGENCY AND RECOVERY PROJECT (FERP)

ENVIRONMENTAL MANAGEMENT PLAN

for

Construction of flood protection in Novi Pazar including the regulation of the river Raska and its tributaries for the protection of the industrial zone in Novi Pazar, from the Careva cuprija downstream to the border of the town

FINAL DOCUMENT
B E L G R A D E, October 2015

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Abbreviations

DoEIA	Department of Environmental Impact Assessment within the Relevant Institution
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESMF	Environmental Management Framework Document
ESSS	Environmental and Social Safeguard Specialist
FERP	Floods Emergency Recovery Project
MAEP	Ministry of Agriculture and Environmental Protection
OP	Operational Policy
PIU	Project Implementation Unit
PSC	Project Supervision Consultant
PWMC	Public Water Management Company
SSIP	Site Specific Implementation Plan
WB	The World Bank Group
WMP	Waste Management Plan

INTRODUCTION

In May 2014 the Republic of Serbia is afflicted with massive flooding caused by heavy rains which caused the formation of torrential streams, rivers overflowing across the dams and breach of embankments at several places resulting in flooding of much of the territory of Serbia. The flood affected 49 municipalities and thousands of hectares of arable land.

This document presents the Environmental Management Plan (EMP), which has been prepared to ensure that the proposed Floods Emergency Recovery Project is implemented in accordance with the World Bank operational policies and local legislation related to environmental protection. The main purpose of this EMP is to serve as a valuable tool for identifying possible key environmental and social impacts that will result from the project and proposing mitigation measures to address the most significant impacts. The EMP also shows the responsibilities of different parties involved in the project implementation. Although major environmental issues are not anticipated (the project has been categorized as environmental Category B in according to the World bank OP/BP 4.01 on Environmental Assessment) since the investments are directed on the rehabilitation of existing embankment infrastructure, the EMP identifies several mitigation measures aimed at environment protection and maintenance of environmental conditions, mainly during the civil works execution.

1. FLOODS EMERGENCY RECOVERY PROJECT - DESCRIPTION

1.1. Background

Unprecedented rainfall started in early/mid-May 2014 causing massive floods, resulting in the declaration of a national state of emergency in Serbia on May 15, 2014. The heavy rainfall, led to a rapid and substantial increase of water levels in eight of the main rivers in western, south-western, central and eastern Serbia. Flash floods destroyed houses, bridges and sections of roads, while rising water levels resulted in flooding of both urban and rural areas. The disaster resulted in 51 deaths, with approximately 32,000 people evacuated from their homes, and around 110,000 households cut off from the electricity supply. Overall, the floods affected some 1.6 million people, or about one fifth of the total population living in 49 municipalities. Adverse weather conditions have continued during next few months, causing further damage to harvest and energy infrastructure.

The Floods Emergency Recovery Project focuses on the priority sectors identified in the Recovery Needs Assessment including energy, agriculture, and flood protection. The project would help close the financing gap and ensure continued provision of electricity services, forestall a likely decline in direct support to farmers in affected areas at a time when the fiscal accounts are under severe stress and help improve resilience to disasters by financing investments in critical flood prevention infrastructure.

1.2. Novi Pazar Project Description

The General Plan of Novi Pazar in 2020, hereinafter The 2006 Master Plan (GUP) is used as a planning basis of this project. Novi Pazar GUP area belongs to the basin of Raska River with its tributaries, of which the most important is Josanicka River, Dezevska River and Banjska (Izbicka) River. Raska River is partially regulated, in the city area in a length of about 5 km. Dezevska River and Banjska River are not regulated, except locally - in the area of road bridges.

The subject sub-project of flood protection in the area of Novi Pazar includes regulation of Raska River and its tributaries to protect the industrial zone in Novi Pazar, from the Careva cuprija downstream to the GUP border. The subject of this project are regulations of particular sections on the following rivers:

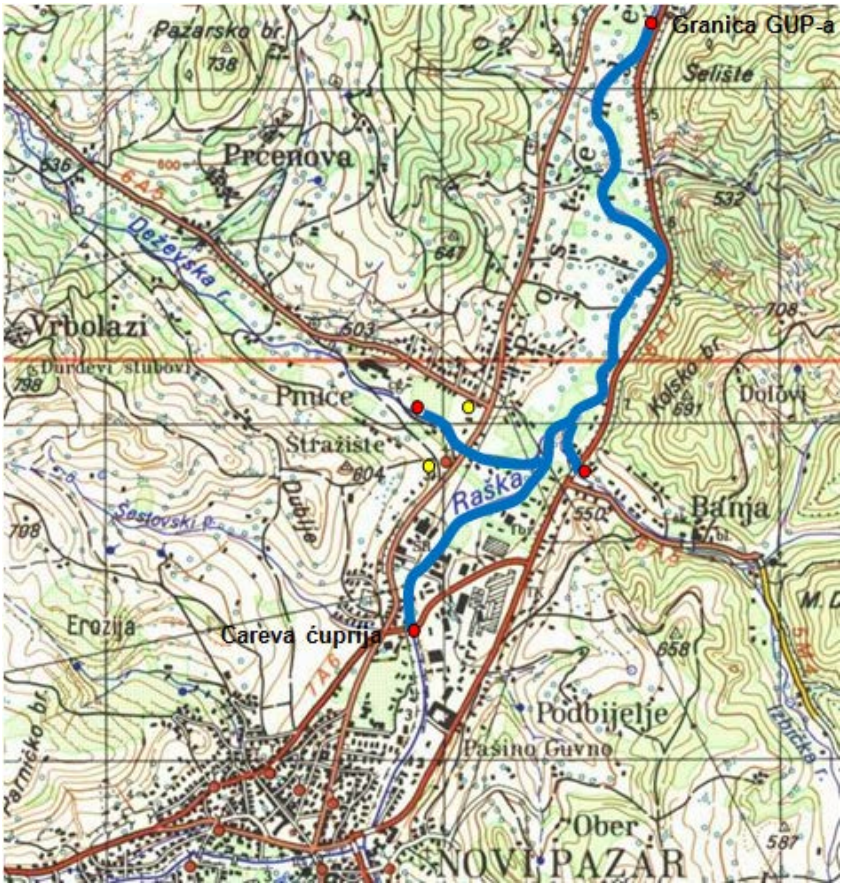
- **Raska River** from Careva cuprija, downstream to GUP border, in total length of 4300 m;
- left tributary **– Dezeva River** (Dezevska River), from its confluence to Raska River, upstream to road bridge, in total length of 500m;
- right tributary – **Banjska River** (Izbicka River), from its confluence to Raska River, upstream to road bridge, in total length of 175 m

Project works area is marked with blue bold line on picture 01.

On the subject section of the Raska River a chainages are established for the project, commencing at downstream boundary of the GUP (km 0+000) and ending at profile Careva cuprija (km 4+273.85).

Dezeva River joints into Raska River as its left tributary, at km 2+935 respecting established river chainage. Project area extends from the confluence, upstream, following the current route, on the stretch of about 590m.

Banjska River (also known as Izbicka River) joints into Raska River as its right tributary, at km 2+806 respecting established river chainage. Integral part of Novi Pazar sub-project is section of Banjska River, from its confluence, upstream, following the current route, to the bridge (km 0+173). Section is regulated in the form of trapezoidal river bed.



Pic. 01: Project location, Novi Pazar, work zone marked on Raska River, Dezevska River and Banjska River

1.2.1. Route description (existing condition)

The route of subject FERP sub-project is divided into 3 sectors (Pic. 02):

- **Sector 1 (S1)**, on which a regulation of the Raska River will be made in the stretch from the Careva cuprija to the confluence of Dezevska River, in length of 1,3 km
- **Sector 2 (S2)**, on which following works will be executed:
    - regulation of Raska River, on stretch from the confluence of Dezevska River to the confluence of Banjska (Izbicka) River, in length of 240 m,
    - regulation of Dezevska River, in length of 500 m
    - regulation of Banjska (Izbicka) River, in length of 200 m
- **Sector 3 (S3)**, on which a regulation of the Raska River will be made in the stretch from the confluence of Banjska (Izbicka) River to GUP boundary, in length of 2,7 km

<u>Sector 1 – Raska River, downstream from Careva cuprija to Confluence of Dezevska River and Banjska River</u>

The section of the Raska River through the town of Novi Pazar was rated as the first priority for the design and construction of systems for flood protection. Thus, even in 1980. a technical documentation is developed, and 1984. river regulation works were performed on the stretch of about 5 km upstream from the Careva cuprija. During 1984, regulation were performed only on two short sections downstream from the Careva cuprija. . Meanwhile, along this section, there was an accumulation of bed load, debris and rubbish which significantly reduced the throughput capacity of the riverbed and caused frequent flooding of riverside areas and causing great damage.

After the floods in 2006, City of Novi Pazar cleaned river bed from sediment and waste material, following roughly the projected route of the Main design, with the bottom width of about 10m.

Excavated material is deposited on the banks, directly along the edge of the minor-main river bed, over the existing vegetation and stumps. This resulted in the creation of dumps from the river gravel sediments, humus, non-removed stumps and debris.

According to the geodetic surveying (2010), downstream of the Careva cuprija works are completed at only 200 m. Only covering in minor river bed is done while the shoulders and slopes of the major riverbed are still not regulated. (Pic.03)

Pic. 02: Dividing of the route of the sub-project on Sectors S1, S2 and S3

Sector S1 is located downstream of the already regulated section and represents a continuation of the regulation of the Raska River through the urban area of Novi Pazar. As such it is an integral part of the Main design in 1980. by which an upstream section is regulated.

The route of the regulation of the Raska River on the sector S1 downstream of the Careva cuprija to the confluence of the Dezeva River and Banjska River, is practically defined by already executed excavation in the minor riverbed.

The criteria which are applied to other, unregulated sections of Raska River, Dezeva River and Banjska River,which are the subject of this project are as follows:

- The route of regulation mainly follows the existing riverbed;
- Defining the axis of the regulation is performed so that the dimensions of the regulated river bed, wherever possible, stay or find themselves in a zone of public - state owned land.

At the downstream end, the works have been done only on the stretch from pr.72 to pr.77 and only by the stone covering of the left-concave slope of the minor riverbed (Pic.04).

On the entire section only partial excavations in the minor bed of Raska River are carried out, with the deposit of excavated material on the bank, along the riverbed. In this way, the belt reserved major river bed with platforms on both sides, is practically covered with excavated material.

The basic principle adopted for the selection of the cross-section of the regulation is to predict the open river bed (without embankments), in order to maintain the natural function of the river as recipients for surface water and groundwater from the banks and hinterland.

Pic.03: Raska River – downstream from Careva cuprija

Pic. 04: Raska River – end of regulated section, upstream from Dezeva River confluence

For stabilisation of the regulation a gabion belts throughout the whole river bed profile (minor and major) are provided. Principle in choosing solutions was to be cost-effective and that it fits into the environment and to be environmentally friendly to the existing regime of coast drainage.

For the section of the Raska River downstream to Careva cuprija (S1), the principle was that the covering of river bed visually fit in upstream, already completed regulation.

Sector 2 – Raska River from Dezevska River confluence to Banjska River confluence

According to the geodetic surveying (2010), section of Raska River in the zone of Dezevska River and upstream, was the subject of work in the minor riverbed (Pic.05). Within the Sector 2, downstream from Dezeva River confluence to Banjska River confluence, **Raska River riverbed is unregulated**. The reason is the fact that this section of the river, with the confluences of these two tributaries, was not the subject of a prior technical documentation.

Banjska River is regulated upstream of the confluence. At the confluence of the Banjska River into Raska River, a building is located on the left bank of the Banjska River (Pic.06 and Pic.07).

For transitional section in the delta areas of Dezeva River and banjska River (S2) the design principle was that the covering of river bed visually fit into the upstream, finished regulation.

Pic. 05: Raska River – Dezeva River confluence (left bank)

Pic. 06: Raska River – Banjska River confluence (right bank)

Pic. 07: Raska River – Banjska River confluence (right bank - upstream view)

On the route of the regulated river bed of Raska River there is no crossing with infrastructure facilities. The cross section of the regulated river bed on this section is determined by existance of the confluence of Dezeva River and Banjska River, and of a residential and commercial facility that is located on the right bank of the Raska River. This residential and commercial building is treated as a permanent obstacle and on this particular section an adjusting the regulation works is carried out in order to avoid any impact of project works on subject building and its residents Confluence insurance was made by gabion belts at the bottom of the slopes of the river bed. The stone was laid over the gabion belts ensuring fitting of the regulated bottom of Banjska River in the regulated bottom of the Raska River. Thus the difference in height between bottom of Banjska River and bottom of Raska River is resolved. The hydraulic design of the confluence has resulted in displacement of the Banjska River to the right bank, and in combination with fixation and stabilization of the confluence a problem of protection of residential and commercial building on the confluence of these two rivers is simultaniously solved.

Sector 3 – Raska River, downstream from Dezeva and Banjska River confluences to GUP border

On this sector river bed of Raska River is relatively wide, generally shallow, with both sides "secured" the veins of the trees, with the presence of sediments which Banjska and Dezeva River floods brings and left in the bed of Raska River, as shown in Picture 8.

Picture 09 shows the Raska River immediately downstream from the confluence of Banjska River. Characteristic for this section of the Raska River is forming of plateau by filling on the right river bank which are located at a height of arterial road Novi Pazar-Raska. A plateau formed in this way are used for commercial use and the river Raska gets high banks. The current situation is such that plateaus are not formed at a constant length along the right bank of the Raska River, but there are breaks that allow spills of the river at the right bank. A characteristic example is the base of “Novi Pazar Roads” which is often subject to flooding of Raska River (Pic.11). One of the problems that were not the subject of this project are certainly illegal dumps formed along the entire course of the Raska River as illustrated in Figure 10.

Pic.08: Raska River, downstream from Banjska River, (existing condition)

Pic.09: Raska River, downstream from Banjska River, (forming of plateau)

Pic.10: Raska River, downstream from Banjska River, (existing condition)

Pic.11: Raska River, downstream from Banjska River, (base of NP Roads)

Pic.12: Raska River, downstream from Banjska River, (road N. Pazar – Raska)

Pic.13: Raska River, downstream from Banjska River, (end of regulation)

Dezeva River

According to the geodetic surveying (2010), section of the Dezeva River in its confluence zone and upstream was the subject of works in the minor riverbed (Pic.14-15). Picture 16 shows a road bridge on the arterial road that marks the boundary of the regulation works. Parking area in front of St. Peter's Church (Pic.17) is another place threatened by high waters.

Pic.14: Dezeva River – river bed works

Pic.15: Dezeva River – river bed works

Pic.16: Dezeva River – bridge as boundary of regulation works

Pic.17: Dezeva River - St. Peter's Church and bridge

Banjska (Izbicka) River

This section is regulated by the Main design from 1980. The river bed is in trapezoid shape, covered with stone. Bottom width is about 6 m, and inclination of the slope is about 1: 1.5. Among other changes made since the construction of this regulation until the end of 2010, a significant changes at the confluence of Banjska River into Raska River are registered.

Pic.18: Banjska River – downstream to confluence point

Pic.19: Banjska River – end of the section

Banjska River is regulated upstream of the confluence. At the confluence of Banjska River into Raska River, as well as along the river Banjska, on the left bank a residential and office buildings are located, which are shown in picture 18. End of the section on the river Banjska is located at the road bridge shown in picture 19. A small average flow as well as unfavorable hydraulic angle of confluence of Banjska River into Raska River has resulted in the sedimentation of deposits in the river bed.

1.2.2. Designed concepts of the regulation

Sector 1 – Raska River, downstream from Careva cuprija to Confluence of Dezevska River and Banjska River

It is foreseen to do the following:

- Loading and removal of the deposited material to the dump, distance up to 3km.
- The execution of the remaining earthworks (excavation and backfilling) respecting the profiles of the Main design, the longitudinal fall of 0.5%, with a reduction of the inclination of a slope of a major river bed from 1: 1 to 1: 1.5.
- Creating feet of crushed stone material from 1m3 / m for reliance of the cover of the minor riverbed slope.
- Covering of slope of minor riverbed, by stone in cement mortar with thickness of 30 cm, directly on the filter gravel layer 10 cm.
- Fixing the river bed by making transverse bands of gabion (1x1m), whose visible surfaces are covered with a concrete layer with thickness of 10 cm, over a full profile of the regulated river bed.
- Planning, topsoiling and seeding grass on shoulders-platforms, slopes of the major river bed and the crest of major river bed (width of at least 2 m measured from the edge of the bank to the protected part).
- Formation of a transitional downstream section in a length of about 100m, at the transition from regulated to unregulated riverbed.

On this section (**Sector 1**), from Careva cuprija Pr.128 – km 1+302.48 (km 4+273.85 per chainage for the entire section of Raska River regulation) to the confluence of the Dezevska River Pr. 72 - km 0+000.00 (km 2+971.37) regulation of the Raska River retains the character of the already regulated City section, with some changes to the section upstream of the Careva cuprija.

On the downstream section, ie. On the section where only excavation and cleaning of river bed are executed, the Main design proposed regulation on a given route, with the longitudinal fall of 0.4%, with double trapezoid river bed and with smooth inclination of slopes of major river bed of 1: 1,5. Slopes of minor and major river bed are covered with stone cladding, while the shoulders are grassed.

In the belt of regulation a mutual service paths exists, on the elevation of the crown of major river bed, with width of 3.00 m. The service paths are covered with gravel cover. The inside edge of the track (toward the city) a concrete curb is provided.

Sector 2 – Raska River from Dezevska River confluence to Banjska River confluence

On the stretch from pr.62 - km 0+000.00 (km 2+734.03) to pr.72 - km 0+237.34 (km 2+971.37) ie. on the stretch of Sector 2, the confluence of Dezeva and Banjska River, this project provides the change in the cross profile of the regulation of Raska River and fiting the confluences of both tributaries of the newly designed regulation of Raska River.

From pr.68 to pr.69 the construction of transitional sections from city regulation (double trapezoidal river bed) to so-called suburban regulation (single trapezoidal river bed) is envisaged. The confluence of Dezeva River is designed in a double profile of the Raska River with the bottom level of 474.0 meters above sea level, while the confluence of Banjska River is designed within the trapezoidal profile of Raska River, with the bottom level 473.6 meters above sea level.

Sector 3 – Raska River, downstream from Dezeva and Banjska River confluences to GUP border

The regulation route follows the existing flow of the Raska River. According to the geodetic surveying (2010), longitudinal fall is 4 ‰ in the entire section. Regulated river bed is trapezoidal, with slope inclination of 1: 1.5. The bottom width is 16m, natural - gravel, while the slope are

protected by the stone rolled to a height of 2.2m, and above that a filling with ground stone and gravel to a height of 3.0m is done . The rest of the slope to crown of the bank is covered with topsoil and grass. Designed crown on the river bank is at a level of control large water Q1% (depth 3.5 m) with overshoot to 0.20 m. A service path with macadam curtain will be placed on a crown, in a belt width of 3.0 m, for communication along the regulated flow, maintenance of the riverbed and implementing measures in time of flood defense.

Dezeva River

The route of the regulated river bed for the most part follows the existing flow of Dezeva River.

A double trapezoidal profile that corresponds to the urban type of regulation is designed, while the single trapezoidal river bed is adopted on the short stretch, upstream from double trapezoidal riverbed. Bottom width is 7m. Slope inclination on the minor and major riverbed are 1: 1.5. On the left bank a space for future quay road with width of 6m is provided.

The project envisages covering of the regulated riverbed on Dezevska River as follows:

- *A double river bed* - minor river bed is covered with stone cladding in cement mortar on a buffer layer of gravel and sand; walkways (shoulder) of the major river bed are covered with concrete block on gravel or macadam base; banks of major river bed are designed as a slopes with inclination of 1: 1.5 with the reno mattresses on a gravel and sand base.
- *Trapezoidal river bed* - one characteristical profile is designed, with the bottom of the 7 m, slope inclination of 1: 1.5 and height of 3.0 m.

Most changes within the new design are done at the confluence of the Dezeva River into Raska River. The route is moved so that the regulated river bed of Dezeva River fits the regulated river bed of Raska River under hydraulic favorable angle of about 45 °. This move should be achieved in the area of the left bank with a partial abstraction of the park area.

Another important change relates to the domain of regulation works, which is in this project limited to section from the confluence of the Dezeva River, upstream to the road concrete bridge on the old road to Raska, ie.on the length of 500m. Upstream of the bridge, the river is regulated only in the area of transitional section for integration into existing - unregulated river bed.

Banjska (Izbicka) River

The subject of this project is also a section of Banjska river from its confluence into Raska River, upstream to the bridge at the beginning of the Banja settlementSpa, in the length of about 190m. The right bank is formed, and on the left bank a facility is built in the bed of Raska River and Banjska River. That is why design provided a new solution of the confluence of the Banjska River in line with the regulation of the Raska River and connected with regulated river bed of Banjska River, upstream from the confluence, in the length of about 55m.

The confluence is designed by adopting the hydraulically favorable angle of about 45 ° relative to the flow of Raska River. The trapezoidal profile is retained, and it fits in the trapezoidal profile of regulated Raska River. The river bed is covering up to designed elevation of authoritative big water, while the level of the control flow of the slope are regulated in a manner as provided in the river bed of Raska.

1.2.3. An overview of the Construction work on Novi Pazar sub-project

The activities to be undertaken as a part of this sub-project will include:

- Preliminary works
    1. Organization and site restoration
    2. Geodetic marking
    3. Removal of vegetation
    4. Removal of existing facilities[1]

[1] Implementation of the project does not involve expropriation and demolition of the existing residential / commercial properties. Property relations have been resolved before the start of this project and there is no disputed cases

- Earthworks
    1. Providing bandwidth capacity of river bed
    2. Mechanical removal of topsoil
    3. Removal of material from the river bed
    4. Excavation and formation of new river bed
    5. Filling of the banks to the designed level
    6. Protection of the regulated river bed
- Protection of slopes and banks of the regulated river bed
    1. Construction of feet of protective embankments
    2. Construction of protective stone coverings
- Other works
    1. Stairs
    2. Service paths
    3. Walking paths

1.2.4. Geotechnical conditions

By in sity investigations performed on the concerned section in river bed it can beseen that the alluvial terrace is covered with soil layer with thickness of about 1.0 m, and below that is gravel and large stone boulders. This indicates that the regulated river bed will be built in alluvial terrace of gravel, sand and clay, as was the case in already built upstream sections, in the city of Novi Pazar.

From engineering-geological standpoint, the terrain is a stable environment for the construction of the regulation objects. Excavation for the regulation will be carried out in the soil of III category defined by norms GN – 200.

Respecting collected data, and in connection with the geotechnical conditions of regulation of the Raska River and its tributaries Dezevska and Banjska River, on the subject sections of their flows a following conclusions can be made:

- The terrain is made up of clay, sand and gravel, with alluvial origin.
- The groundwater water was registered at a depth of 0.80 - 2.20 and stabilized at a depth of 0.80 - 1.80 m, which means groundwater water is under certain hydrostatic pressure.
- At several places on subject section illegal dumping of municipal waste is noted.

2. LEGAL AND INSTITUTIONAL FRAMEWORK

2.1. Relevant Institutions

The Ministry of Agriculture and Environmental Protection (MAEP), is the key relevant institution for environmental management for FERP related projects.

The other aspects of environmental management related to FERP projects are dealt with several other institutions, among which are the Institute for Nature Protection of Serbia and the Institute for Protection of Cultural Monuments of the Republic of Serbia, and the Public Water Management Companies (PWMC) “Serbia Vode”, “Beograd Vode” and “Vode Vojvodina”.

Directorate of Agrarian Payments (DAP) implements the Farm Incentives Program. Farmers applying for the program have to be registered in the Farm Registry to be eligible for the support.

2.2. EIA procedure in the Republic of Serbia

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). According to that Law, preparation of the Environmental Impact Assessment is not required for the flood protection rehabilitation projects unless their alignments are placed within or in the vicinity of the nature or culture protected areas. In such cases the Project Proponent is obliged to submit so-called "Request for Decision about Need for Environmental Impact Assessment" (RDNEIA) to the MAEP. Depending on the Ministry's assessment of significance of potential environmental impacts of the project, it is decided if there is a need (or not) to apply partial or full EIA procedure for the relevant sub-project.

Request for opinion regarding necessity of EIA procedure for each sub-project which is found to be adjacent or within the nature/cultural protected area will be submitted to the Department of Environmental Impact Assessment within the Relevant Institution (DoEIA).

2.3. Relevant Government Policies, Acts, Rules, Strategies and Guidelines

Environmental protection in Republic of Serbia is regulated by several national and municipal laws and by-laws. The environmental legislation in force in Serbia is summarized in Annex 1.

The main legal documents are:

- The Constitution of Serbia ("Official Gazette of RS" No. 98/06).
- The National Strategy for Sustainable Development ("Off.Gazette of RS" No. 72/09, 81/09)
- Law on Environmental Protection ("Official Gazette of RS" No. 135/04, 36/09)
- Law on Environmental Impact Assessment ("Official Gazette of RS" No. 135/04)
- The Law on Waste Management ("Official Gazette of RS" No. 36/09)
- The Law on Water ("Official Gazette of RS" No. 30/10, 93/12)
- The Law on Occupational Safety and Health ("Official Gazette of RS" No. 101/05)
- Law on Planning and Construction ("Official Gazette of RS" No. 72/09, 81/09)
- Law on Nature Protection, ("Official Gazette of RS" No. 36/09)
- Agricultural Land Law, ("Official Gazette of RS" No. 62/06, 41/09)

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

- 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)
- 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)

2.4. Applicable Safeguards

Safeguard Policies Triggered by the Novi Pazar Project	Yes	No
Environmental Assessment OP/BP 4.01	**X**	
Natural Habitats OP/BP 4.04		**X**
Forests OP/BP 4.36		**X**
Pest Management OP 4.09		**X**
Physical Cultural Resources OP/BP 4.11		**X**

Indigenous Peoples OP/BP 4.10		**X**
Involuntary Resettlement OP/BP 4.12	**X**	
Safety of Dams OP/BP 4.37		**X**
Projects on International Waterways OP/BP 7.50		**X**
Projects in Disputed Areas OP/BP 7.60		**X**

3. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

Since the existing infrastructure, facilities and equipment will be rehabilitated, reconstructed, repaired and replaced during the realisation of the project, impacts on environment will be a consequence of human presence and construction machines, and the nature of construction works at a location, which are limited to the location of works or its surrounding vicinity.

The construction and reconstruction of flood protection structures would not pose significant risks to the environment. In addition, the project aim is only to improve the efficiency of flood control systems. As a consequence, the range of impacts is limited (impacts directly related to the rehabilitation activities) and their magnitude remains small (localized impacts and no significant effect on future operation). Considering the nature of the proposed project, it is anticipated that adverse environmental impacts can be expected in the construction phase mainly. The aspect of health and safety at work is also taken into consideration. It is to be noted that parts of the construction work are taking place in an urban environment, however in all parts in an environment already strongly influenced by human activities. Broadly, the impacts in the construction phase can be of the following types:

- **Soil and Water Pollution**: during construction activities, when using machinery, there is a possibility of soil contamination due to accidental spills of oils and fuel from construction machinery. In the area of construction works, construction waste is generated which, if not properly disposed of, may result in adverse impacts. The construction works carried out inside the river bed results in a temporary increase of turbidity of the watercourse.
- **Flora and fauna**: construction works in the river bed along with the temporary increase of turbidity in the watercourse threaten freshwater habitats. Impacts on other habitats are not expected.

- **Disposal of excavated materials and construction wastes**. Demolition debris and excessive soil are usually generated during the rehabilitation works on drainage and flood control systems;
- **Degradation of landscapes and soil erosion**. The impacts on vegetative cover will be short-term, localized, and totally associated with rehabilitation works;
- **Impacts from temporary access roads and work areas**. Establishment of temporary dirt roads to access work areas and temporary disposal sites for excavated materials can enhance soil erosion, and degrade the landscape;
- **Noise and vibration disturbances** during construction and temporary air pollution (dust) related to the transportation of construction materials and truck traffic. These impacts will occur during the construction and rehabilitation works, but will be only short-term. Effects include dust from construction activities, noise during trench excavation, possible effect of vibration caused by operation of heavy machinery, increased traffic in some sections of roads, etc.;
- **Safety hazards from construction activities**. No major hazards are expected the construction of the proposed project elements, as long as proper construction practices and safety procedures are applied;
- **Impacts on historic-cultural and archaeological monuments**. No archaeological or cultural resources are expected to be encountered during project implementation since major

works consist in rehabilitation of existing systems where excavations have already been conducted before and no findings have been reported.

3.1. Potential environmental impacts of Novi Pazar Project

In general, all negative impacts in the phase of construction are temporary and can be mitigated by applying good construction practices.
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 project aims at prevention of risks for environment, humans and civil infrastructure.

Construction of flood protection structures is based on the river bank regulation; it is about preventing the flooding of relatively small areas of urban zones, and at relatively shallow depths. T he downstream impact on other users is negligible.
Project impacts by phases are shown in following table:

Phase	Type of impact
Construction phase	Soil compaction and erosion Dust emission Noise Soil and water pollution Impact on aquatic ecosystem Degradation of riparian vegetation caused by construction work Risk to people and/or animals of unfenced and unlabelled construction site Health and safety risk for workers on the construction site due to the potential land sliding
Operational phase	Low impact on natural environment on the project location Positive impact in terms of prevention of risks for environment, humans and property
Degree of negative impact	Minimum if mitigation measures are applied

3.2. Potential social impacts of Novi Pazar Project

During the implementation of works, in certain locations some land take will be required. However, it must be noted that there are no cases of economic / physical displacement of population required.

Of the total of 84 cadastral parcels which have already been formed, according to the project, it was necessary expropriate 24 cadastral parcels that were owned by private persons. The Novi Pazar City Attorney's Office in accordance with the Law have presented proposals for Department for Property and Legal Affairs, which issued a decision on land acquisition, which transferred ownership of these cadastral parcels in favor of the City of Novi Pazar, which were resolved ownership and legal relations with the owners.

On June 06, 2015, the Novi Pazar City Attorney's Office submitted to the Novi Pazar Department for Property and Legal Affairs an 18 proposals for expropriation and transfer of public property for the benefit of the City of Novi Pazar for the realization of the project of urgent works to protect settlements and industrial zones in Novi Pazar from floods. These proposals included 24 parcels, of which 23 are owned by private owners, and at one cadastral parcel a "Polet" Ltd. Novi Pazar has the right of use on subject parcel.

The Department conducted land acquisition procedure, heard the owners / users of subject

cadastral parcels and issued 18 decisions, of which 17 decisions on expropriation and 1 decision on the transfer of rights. Details are presented within the Annex 3 of this EMP document.

By the adoption of these decisions, land acquisition procedure, launched by the proposal of the City Attorney is entirely completed.

During project preparation, in order to avoid and decrease negative impact of the project on the social environment, a written Consent of the private owner, Mr. Ladjar Adis from Novi Pazar, is obtained and signed on August 26, 2015. Tis document allow the contractor to enter the specified part of Mr. Ladjar Adis private property (cadastral parcels: 389/4, 391/3, 392/2, 393, 394, 395, 396 and 397 KO Pozezina) and temporary place construction machinery on that land. Copy of the signed consent is given in Annex 3 of this EMP document.

Since the project is hereby triggered OP 4.12. Involuntary Resettlement (in the form of permanent taking and/or temporary use of lands required for construction the project has complied with the provisions of the RPF document in order to create the preconditions for the smooth implementation of the project. A site specific abbreviated resettlement action plan (ARAP) is under preparation and will be completed and cleared by the Bank prior to commencement of the works.

The route of the regulated river bed of the Raska River doesn't cross other infrastructure facilities. WB Operational Policy Op 4.12 (Involuntary Resettlement) is triggered because subproject-related acquisition of strips of agricultural land and relocation of structures built by privates near the river's embankment. The project will be carried out within the originally planned location, in accordance with the General plan of Novi Pazar, 2020, hereinafter referred to as the 2006 Master Plan (GUP).

During Project implementation there will be no involuntary physical displacement (relocation or loss of shelter). The details related to the acquisition of private agricultural lands and relocation or compensation for structures build near the river will be covered in a stand-alone Abbreviated Resettlement Action Plan (ARAP). Preparation and disclosure of ARAP is mandatory part of Project preparation and this activity is planned to be completed before the Contract with the Construction Contractor is signed. ARAP document is required and will be prepared by PIT during October 2015 and will be separately disclosed before the work commencement.

3.2.1. Main design and avoiding negative social impacts of the project

During design phase the Designer considered all feasible project alternatives in order to avoid physical and/or economic displacement, while balancing environmental, social, and financial costs and benefits.

Residential and commercial building located at the confluence of Banjska River in Raska River are treated as permanent obstacles, and in these area an adjusting the regulation works is carried out in order to avoid any impact of project works on subject building and its residents. Confluence insurance was made by gabion belts at the bottom of the slopes of the river bed. The stone was laid over the gabion belts ensuring fitting of the regulated bottom of Banjska River in the regulated bottom of the Raska River. Thus the difference in height between bottom of Banjska River and bottom of Raska River is resolved. The hydraulic design of the confluence has resulted in displacement of the Banjska River to the right bank, and in combination with fixation and stabilization of the confluence a problem of protection of residential and commercial building on the confluence of these two rivers is simultaniously solved.

3.2.2. Community information and grievance mechanism

Before beginning works people located in close proximity of the areas were such works will be conducted will be informed about: nature of works, duration and contact information in case they have further questions or concerns.

A grievance mechanism is available on this project. The grievance mechanism is established by the client in order to receive and address, in a timely manner, specific concerns about

impacts during construction (e.g. noise, dust, vibration, etc.) and possible compensation and relocation that could be raised by project affected persons in Novi Pazar municipality and/or members of host communities. A summary of complaints and the measures taken to resolve them will be publicly available.

The project proponent will ensure that during the project implementation phase the people who are directly affected by the project, particularly those residing in close proximity of the works receive information on ongoing basis and also have access to a contact person to voice any concerns or complaints.

Prior to commencing construction the implementing agency should:

- Distribute a one-page information brochure to directly affected people with the following information: (i) the purpose, nature, and scale of the project; (ii) the duration of proposed project activities and working hours; (iii) any risks (e.g. landslides) to and potential impacts on such people and relevant mitigation measures; and (iv) contact information to receive further information of submit concerns or complaints.
- At the work site there should be a visible sign with the name of the project, planned duration and contact information.

Below is a brief description of the procedure and responsibilities for receiving, processing and responding to communication and complaints from the public regarding the project:

- Communications and complaints can be received directly by the contractor at the work site or by the Municipality through the contact information it provides to the public. It must be noted that the Municipality is the responsible for responding to any communication.
- Such communications are noted in a “communications log” to be maintained by the Municipality and the person sending the communication (verbally or on writing) receives an acknowledgement of receipt of his/her communication
- The communication should be processed and responded two in no more than 15 days.
- The response to the communication, and any corrective action required as a result of it, must also be registered in the “communication log”.

3.2.3. Resettlement Policy Framework for FERP[2]

Prior to appraisal, a resettlement policy framework was developed for integral FERP project. It describes the policies, procedures and processes that will be followed throughout the project in the course of mitigation of adverse social impacts due to project activities among the project affected persons, with and without legal title, whose land/properties, businesses and other assets are expropriated for the execution of the sub-project works included in the FERP.

3.3. Other positive impacts of FERP Project

The repair of flood-damaged infrastructure and facilities will bring economic, social, health and ecological benefits, to population and local community in Novi Pazar municipality. Experiences of similar projects show that the project will have many positive effects on society through the creation of conditions for population's standard growth in almost all segments (education, health protection, additional employment).

In case of unemployment and poverty in the project area, manpower resources will not be reduced. If some of the unemployed are employed or if employment has impact on unemployment, the project creates social benefits due to decreased social support or aid to the unemployed. That is the case in the flood emergency response project.

[2] RPF for FERP available at http://www.rdvode.gov.rs/doc/RPF%20SERBIA%20FERP%20(rev%20%20WB%20March%203_2015)%20final%2003.03.pdf

3.4. Potential negative Impacts and recommended Mitigation Measures

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

impact	Signifi-cance	comment
impacts on land use/ settlements,	mediu m	There will be some marginal land acquisition and relocation of minor structures and therefore WB OP 4.12 will be applied. The implementing agency will prepare a site-specific Abbreviated Resettlement Plan (ARAP) in line with OP 4.12 and FERP's RPF. . Additionally, temporary occupation of private owned land is a possible social impact of this project too. Adequate mitigation and compensation measures are envisaged according to ARAP document, together with the measures prescribed within this EMP document.
ground and surface water,	low	Due to low amount of drainage water that can be potentially drained into Raska River, Dezeva River and Banjska River the consequential impact is expected to be minimal to negligible. Also, improper disposal of excavated materials and construction wastes could adversely impact ground and surface water
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 elevated levels of nitrogen oxide (NOx) and sulphur oxide (SOx) from construction equipment exhausts. Impact can be mitigated by following GEMM procedures
flora and fauna (protected areas and species),	low	Minimal loss or damage of vegetation and loss and damage or disruption to fauna can occur during works. Impacts can be offset or mitigated by following GEMM procedures. There will be no negative impacts on protected areas due to nature of works.
noise and vibration,	low	Only limited temporary impact during the rehabilitation 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 GEMM procedures.
soil quality,	low	Soil contamination can occur from: drainage of dredged materials, spillage of hazardous and toxic chemicals. Impact can be mitigated by following GEMM procedures
Loss of top soil	low/n egligi ble	Loss of top soil due to temporary access roads and work areas, Landscape degradation

impact	Signifi-cance	comment
waste	low	Health hazards and environmental impacts can happen due to improper waste management practices. Impact can be mitigated by following GEMM procedures
cultural and religious issues,	low/negligible	Regular rehabilitation activities could, if not properly managed, cause disturbance to the cultural and religious sites. Impact can be avoided by implementing EMP related measures.
cumulative impacts etc.	medium/ moderate	Temporary, rehabilitation works may cause a slight increase of noise levels and air pollutants concentrations during the works only
Staff safety	low	Construction workers may be affected adversely due to hazardous working environments where high noise, dust, unsafe movement of machinery etc. may be present.

4. MITIGATION MEASURES AND ENVIRONMENTAL MONITORING ACTIVITIES

For each FERP sub-project ESSS is obliged to produce a site-specific EMP document. EMP is an Action Plan that indicates which of the Environmental Assessment report recommendations and alternatives will actually be adopted and implemented. EMP could be produced as a part of Main Design or as a free-standing document. It will ensure incorporation of the relevant environmental factors into the overall project design and will identify linkages to other safeguard policies relating to the project.

4.1. Mitigation Measures

4.1.1. General

This section details out the potential environmental impacts of the FERP sub-projects.

4.1.2. Environmental Impacts and Respective 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 in such a way that the slope of the embankment should be within right of way. 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 activities with vegetation or with the appropriate surface treatments as soon as practicable following completion of activities.

Potential air pollution - Dust

Impact - Possible sources of air pollution will be dust due to maintenance activities, machinery movement and other sources. Rehabilitation works 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.

Potential water contamination

Impact - Water contamination may occur during the execution of the project from site run off, spills from the equipment maintenance areas and sanitary wastewater effluent from the work camps. As for the potential pollution during operation, these are mostly limited to accidents. In such a case, procedures for action in incidental situations, as defined by the Ministry of Interior and in the Water Law, will apply.

Mitigation Measures - 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 Water Law.

Potential contamination of soils due to pesticide usage and improper waste disposal

Impact - Potential contamination of soils due to increased use of pesticides during implementation of Farm Incentives Program (FERP – Component 2).

Mitigation Measures - Integrated Pest Management Approach (IPM) is mandatory during project execution. Ensuring of appropriate selection and safe use of pesticides when they are needed by project demands related to safeguard OP 4.09 - Pest Management. Avoiding of use of pesticides that fall in WHO classes IA, IB or II.

Impact - Potential contamination of soils and watercourses as a result of improper disposal of liquid and solid wastes from rehabilitation activities.

Mitigation Measures - The mitigation measure to avoid contamination of soils and watercourses is to ensure that waste materials are properly disposed to the suitable locations. Partly, inert waste materials can be used as filling material.

Contractor should produce a Waste Management Plan for the Project. Mitigation measures should, among other requirement, contain contractor obligations to:

- locate the garbage pit/waste disposal site min 500 m away from the residential area so that people from Novi Pazar and surrounding settlements are not disturbed with the odour 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

Equipment maintenance and fuelling

Impact - equipment maintenance and fuelling 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.

Occupational Health and Safety

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

Mitigation Measures - The Contractor shall instruct his workers in health and safety matters, and require from the workers to use the provided personal safety equipment. Contractor has to ensure that all operators of heavy or dangerous machinery are properly trained/certified, and also insured. He will have to provide first aid facilities, rapid availability of trained paramedical personnel, and emergency transport to nearest hospital with accident and emergency facilities.

Noise

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

Mitigation Measures - In sensitive areas (schools, nature parks, hospitals) special care regarding noise emission will be taken by the Contractor, strictly respecting the EMP requirements. 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 Management Plan (EMP) are listed as follows:

- Identify and locate on project plans any sensitive natural resources in the 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 embankment 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 construction and rehabilitation works.
- 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 construction and rehabilitation works.

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-river works management plan
- Camp management plan
- Re-foresting plan
- Emergency response plan

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

4.2. Mitigation Plan for FERP Sub-Project NOVI PAZAR

Phase	Problem/activity impact	Mitigation measures	Costs		Institutional responsibility		Comment
			Planning	implementation	Planning	implementation	
Planning/ Designing	Assure compliance with relevant construction field legislation	Acquire construction permit Provide Water management guidelines if subprojects are executed near surface watercourses,	n/a	n/a	Project applicant	Project applicant	
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.	n/a	n/a	Designer	Project applicant in cooperation with designers and representatives of relevant institutions of local authority.	
Planning/ Designing	Increased possibility of employment and gaining income in the local community.	Prioritise qualified local population in employment.	n/a	n/a	Project applicant	Contractor	Problems should be regulated through tender documentation.
Rehabilitation/ Reconstruction/ Repair	Supply of material	Use the existing quarries, asphalt and concrete bases for the supply of material Use licenced suppliers for other materials	n/a	n/a	Contractor	Contractor	Borrow pits from which materials of asphalt and concrete base are supplied must have valid environmental permits.
Rehabilitation/ Reconstruction/ Repair	Transport of material.	Using trucks with awning and special vehicles depending on the type of material.	n/a	n/a	Contractor	Contractor	When transporting material, drivers must observe speed limitations
Rehabilitation/ Reconstruction/ Repair	Violation of vegetation cover	Replant or re-seed vegetation. Apply measures of good construction practice	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.

Phase	Problem/activity impact	Mitigation measures	Costs		Institutional responsibility		Comment
			Planning	implementation	Planning	implementation	
Rehabilitation/ Reconstruction/ Repair	Emissions of dust from the landfill of earth material, due to vehicles' movement on macadam roads and construction works execution.	Compact deposited earth material. Sprinkle dust sources with water in order to reduce impacts on the surrounding population and vegetation. Control the speed of vehicles in order to reduce dust rising. Prepare and implement a Plan for construction site organisation that includes good construction practices.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.
Rehabilitation/ Reconstruction/ Repair	Emission of gases and particles from vehicles, mechanisation and generators.	Regular equipment maintenance. The contractor is obliged to submit evidence of vehicle roadworthiness in line with the regulations on hazardous gases emission. Prepare and implement the Construction Site Organisation Plan that incorporates good construction practice measures.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.
Rehabilitation/ Reconstruction/ Repair	Noise in the operation of heavy mechanisation and generators.	Observe law-defined working hours at the construction site. Make the generator casings sound proof if they are located near residential units. Ensure mufflers for heavy machinery. Prepare and implement the Construction Site Organisation Plan that incorporates good construction practice measures.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.

Phase	Problem/activity impact	Mitigation measures	Costs		Institutional responsibility		Comment
			Planning	implementation	Planning	implementation	
Rehabilitation/ Reconstruction/ Repair	Increased water turbidity as a consequence of the works.	Construction works should be executed in a way that surfaces and natural contents outside the project are not damaged and that works are performed so that watercourses are not unnecessarily made turbid and watercourses discontinued. Works should be executed in dry weather. Prepare and implement a Construction Site Organisation	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.
Rehabilitation/ Reconstruction/ Repair	Soil, groundwater and surface water pollution, with oils and lubricants due to equipment poor maintenance and repairs and refuelling at the construction site.	Avoid servicing and refuelling at the site. Use protective foils during possible vehicle refuelling 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. Prepare and implement the Construction Site Organisation Plan that incorporates good construction practice measures, measures from water management documents and measures from the Waste management report.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.

Phase	Problem/activity impact	Mitigation measures	Costs		Institutional responsibility		Comment
			Planning	implementation	Planning	implementation	
Rehabilitation/ Reconstruction/ Repair	Water and soil pollution due to inadequate disposal of communal, inert and hazardous waste.	Typical containers for solid communal waste are placed at the construction site locations; Acceptance of collected communal waste and its disposal by authorised 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 authorised 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. Actions in line with the waste management report.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.
Rehabilitation/ Reconstruction/ Repair	Reconstruction of damaged brides	Avoid driving on the riverbank or river; Ensure riverbed and bank in the zone of bridges, upstream and downstream from bridges, as to ensure their protection from erosion processes.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.

Phase	Problem/activity impact	Mitigation measures	Costs		Institutional responsibility		Comment
			Planning	implementation	Planning	implementation	
Rehabilitation/ Reconstruction/ Repair	Reduced passability through the area where the works are executed.	Plan the relocation of equipment at times when daily traffic is not jammed; Provide alternative passage for pedestrians and vehicles in cooperation with local authorities or provide a safe passage through the construction site; Avoid roads through inhabited areas especially near schools and hospitals; Prepare and implement the Construction Site Organisation Plan that incorporates good construction practice measures.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.
Rehabilitation/ Reconstruction/ Repair	Potential pollution of soil and water due to the discharge of waste sanitary waters from the construction site	Installation of ecological toilettes for workers	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.
Rehabilitation/ Reconstruction/ Repair	Population at increased risks of traffic accidents and construction works to population.	Assure adequate warning signs, lighting, protective fencing etc. Observe traffic rules. Clean construction waste form 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 Organisation Plan.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.

Phase	Problem/activity impact	Mitigation measures	Costs		Institutional responsibility		Comment
			Planning	implementation	Planning	implementation	
Rehabilitation/ Reconstruction/ Repair	Risk of injuries at work.	Demand from all workers to abide by the Protection at work measures; Provide protective equipment; Install warning signs at the construction site; Prepare and implement the Construction Site Organisation Plan and Protection at work measures plan.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.
Construction site closure	Construction material leftovers of after the closure of temporary construction sites	All shivers and material that remain after the closure of temporary construction sites are to be removed from the location and re-used/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.	n/a	n/a	Contractor	Contractor	Problems should be regulated through the Works execution contract.

Summary of Potential Environmental Impacts and Mitigation Measures

POTENTIAL IMPACTS	STAGE / MECHANISM	MAGNITUDE	DURATION	SUGGESTED MITIGATION MEASURE	RESIDUAL EFFECT	RESPONSIBILITY	TIMING	COSTS
HYDROLOGY & HYDROGEOLOGY Changes to surface and ground water quantity and quality	Construction Activities	Negligible	Construction Period	No mitigation measures required.	None	Not applicable.	-	-
	Operation and Maintenance	Negligible	Lifespan of embankment	No mitigation measures required.	None	Not applicable.	-	-
SOILS Erosion or compaction of soils	Construction Activities	Minor	Construction Period	• Salvage of topsoil and sod for reclamation following completion of the works.	None	Contractor & Local Water Authority	During and at completion of construction. Periodic monitoring until reclamation criteria achieved.	Included in the bill of quantity
	Operation and Maintenance	Negligible	Lifespan of embankment	No mitigation measures required.	None	Local Water Authority	-	-
AQUATIC RESOURCES Disturbance of wetlands or fish habitat	Construction Activities	Minor	Construction Period	• Follow approved dredging practices. • Minimize disturbance to riparian wetlands.	None	(Ministry or Directorate responsible for fish management) Institute for Nature Conservation (in protected areas)	During dredging.	-
	Operation and Maintenance	Negligible	Lifespan of embankment	No mitigation measures required.	None	Not applicable.	-	-

POTENTIAL IMPACTS	STAGE / MECHANISM	MAGNITUDE	DURATION	SUGGESTED MITIGATION MEASURE	RESIDUAL EFFECT	RESPONSIBILITY	TIMING	COSTS
VEGETATION Disturbance to vegetation communities, tree removal	Construction Activities	Minor	Construction Period	• Locate borrow pits and sand drainage areas to minimize new areas of disturbance. • Utilize existing disturbed areas whenever possible.	Removal of some trees and vegetation	Tendering agency/ local water authority	Main design (tender specification).	Included in the bill of quantity
	Operation and Maintenance	Negligible	Lifespan of embankment	No mitigation measure required.	None	Not applicable.	-	-
WILDLIFE Disturbance and dislocation from habitat	Construction Activities	Minor	Construction Period	• Schedule construction to minimize disturbance to nesting birds.	None	Tendering agency.	Main design (tender specification)	
	Operation and Maintenance	Negligible	Lifespan of embankment	No mitigation measures required.	None	Not applicable.	-	-
POLLUTION Fuel spills or improper waste disposal	Construction Activities	Minor	Construction Period	• Equipment free from leaks and in good operating condition. • Refuel at least 15 m away from surface water. • Prompt clean-up of fuel spills. • Solid and human waste management plan for the construction site.	None	Tendering agency/ local water authority/ contractor	Construction start-up and construction period. (condition of tender)	Normal construction cost(Included in the bill of quantity)
	Operation and Maintenance	Negligible	Lifespan of embankment	No mitigation measures required.	None	Not applicable.	-	-

5. MONITORING ACTIVITIES

DWM/PIU and PSC will monitor overall environmental performance during project implementation. Each FERP sub-project will have a site specific EMP document in which a monitoring plan(s) and check-lists are presented.

For each of the environmental components, the monitoring plan specifies the parameters to be monitored; location of the monitoring sites and duration of monitoring. The monitoring plan also specifies the applicable standards, implementation and supervising responsibilities.

In addition to the critical locations selected during design stage, the environmental monitoring will also be done at the construction camp site and any other plant site as determined relevant during rehabilitation works stage.

World Bank guidance on the environmental aspects of project monitoring, including its health and socio-economic aspects, is provided in Environmental Assessment Sourcebook Update 14 Environmental Performance Monitoring and Supervision (June 1996).

The project's monitoring program included surface and groundwater quality impacts, disturbance to important ecological habitats including riverside ecosystems, unscheduled environmental compliance inspections during construction, final inspection upon completion to ensure site condition is satisfactory, and assessment of sites prior to and after construction to ensure no loss of natural values.

Elements of an environmental performance-monitoring program:

Objectives

Indicators linked to project impacts and mitigation measures

Measured parameters

Institutional responsibilities, timing

Reporting arrangements

Cost and financing provisions

The following table presents the monitoring activities and responsibilities over the implementation of proposed mitigation measures, during execution of FERP sub-project Novi Pazar.

5.1. Monitoring Plan for FERP Sub-Projects NOVI PAZAR

Phases	Monitoring parameter	Monitoring location	Monitoring manner / monitoring equipment	Monitoring time – measurement frequency or permanently	Why is monitoring necessary	Costs		Responsibility	
						Planning	Implement.	Planning	Implement.
Supply of material	Possession of environmental permits for plants of quarries, asphalt and concrete bases from which material is supplied	Legal entities that own the plants	Insight into the documentation	During material supply	Assure that the plant conforms to the requirements of environment protection, health protection and human safety		Incorporated into the supervision implementation costs	Supervising body	Supervising body
Transport of material	If trucks are covered during powdered material transport	At the construction site and transport roads	Visual supervision	During material transport	See that no dust is emitted into the air and material spilled into environment		Incorporated into the supervision implementation costs	Supervising body	Supervising body
Rehabilitation/ Reconstruction/ Repair	Degradation and soil pollution	At the construction site and directly around the construction site	Visual supervision	Weekly	To establish if liquid oil derivatives leaked, soil erosion and landslide occurred due to construction works		Incorporated into the supervision implementation costs	Supervising body	Supervising body
Rehabilitation/ Reconstruction/ Repair	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 the works execution	To assure environment protection and prevent the occurrence of incident situations at the construction site.		Incorporated into the supervision implementation costs	Supervising body	Supervising body

Phases	Monitoring parameter	Monitoring location	Monitoring manner / monitoring equipment	Monitoring time – measurement frequency or permanently	Why is monitoring necessary	Costs		Responsibility	
						Planning	Implement.	Planning	Implement.
Rehabilitation/ Reconstruction/ Repair	Occurrence of noise and air pollution	At the works execution location	Standard air quality and noise level measurement equipment.	Upon received citizens' complaints	In order to establish the level of air pollution and noise and make comparison with legal limit values. In case of aberration additional mitigation measures.		1100 KM/ per measurement spot	Contractor	Company that has licence to perform environment monitoring works
Rehabilitation/ Reconstruction/ Repair	Destruction of crops, woods, meadows etc.	At the works execution location and in the vicinity	Visually	Upon received citizens' complaints	In order to establish that works are only executed at project-envisaged locations		Incorporated into the supervision implementation costs	Supervising body	Supervising body
Rehabilitation/ Reconstruction/ Repair	Working hours control.	At the works execution location	Visually and comparison with the construction site organisation plan.	Upon received citizens' complaints	In order to establish that working hours and noise emission limitations are observed during daily working hours.			Supervising body	Supervising body
Rehabilitation/ Reconstruction/ Repair	Waste management during the works execution	At the construction site	Visually and by comparison with the waste management report.	Permanently	Are containers/bins for communal waste installed, is hazardous waste treated in adequate manners, in order to prevent uncontrolled waste disposal		Incorporated into the supervision implementation costs	Contractor	Supervising body

Phases	Monitoring parameter	Monitoring location	Monitoring manner / monitoring equipment	Monitoring time – measurement frequency or permanently	Why is monitoring necessary	Costs		Responsibility	
						Planning	Implement.	Planning	Implement.
Rehabilitation/ Reconstruction/ Repair	Number of registered accidents Existence of hygienic conditions for workers, Protective equipment application	At the construction site	Visually and insight into the register	Permanently during the works execution	In order to establish that protection at work measures are implemented.		Incorporated into the supervision implementation costs	Contractor	Supervising body
Rehabilitation/ Reconstruction/ Repair	Impact on population due to the limitation of business activity and right to use land	Local community	Insight into the register	Upon received citizens' complaints	In order to timely prevent impact		Incorporated into the supervision implementation costs	Project applicant	Project applicant
Rehabilitation/ Reconstruction/ Repair	Quality of executed works Quality of material that is installed	At the construction site	Visual monitoring and through register	Permanently during the works execution and construction site removal	Poor monitoring and works execution quality assessment can cause damages to environment, bad quality structures and usage of poor quality material, can result in damages to structures and expose inhabitants to risks and possible accidents		Incorporated into the supervision implementation costs	Contractor	Supervising body
Construction site closure	Waste remnants and soil degradation	At the project location	Visually	After the works completion	In order to establish whether all waste was removed from the construction site whether field was restored		Incorporated into the supervision implementation costs	Contractor	Supervising body

POTENTIAL NEGATIVE IMPACT	MONITORING PARAMETER	MONITORING SITE	MONITORING TYPE /EQUIPMENT	TIMING	RESPONSIBLE PARTY
Pollution of water and soil because of improper disposal of excavated materials and construction wastes	Existence of zones/sites for preliminary accumulation of wastes	At and near work site	Inspection	During construction works	Contractor, Supervisor Engineer
Loss of top soil due to temporary access roads and work areas, Landscape degradation	Clear delineation of access roads and work sites to prevent their expansion	At access roads and work sites	Inspection, Observation	During construction works	Contractor, Supervisor Engineer
	Cleaning of access roads and work sites after construction works completion	At access roads and work sites	Inspection, Observation	After construction works	Contractor, Supervisor Engineer
	Restoration of landscape to quasi-original condition after completion of works and after use of quarries	At work site and quarries	Unannounced Inspection	After works completion.	PIT Environmental Specialist
Temporary air pollution (dust) related to the transportation of construction materials and truck traffic	Sprinkling of water to suppress the dust	At access roads and work sites	Inspection, Observation	During construction works	Contractor, Supervisor Engineer
Noise and vibration disturbances	Termination of construction works at the established time (e.g. work on daylight hours)	At access roads and work sites	Inspection, Observation	During construction works	Contractor, Supervisor Engineer
	Measure noise levels (Db)	At and near the work site	Inspection	During construction works	Contractor, Supervisor Engineer
Staff safety	Use of protective equipment, organization of by-passing traffic	At work site	Inspection	During construction works	Contractor, Supervisor Engineer
Degradation of the canal	O & M	At work site	Regular supervision inspection	During canal operation	PWMC:”Srbijavode”, “Vode Vojvodine”, “Beogradvode”

6. ENVIRONMENTAL MANAGEMENT RESPONSIBILITIES

For each potential impact the EMP identifies:

- the proposed mitigation measure(s); and
- the parties or agencies charged with implementing those measures, separated into:

- Executing agencies responsible for executing the measure. For this specific assignment the executing agencies (e.g. contracted design institutes) 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 construction works are tendered out. Construction contractors shall take the responsibility for physical implementation of mitigation measures provided under the EMP during the construction phases according to the Bank's policies and Serbia environmental legislation.
- Supervising agencies responsible for supervising the executing agencies to ensure that they execute the mitigation measures as planned. The Directorate of Water and Serbia Floods Emergency Recovery Project Implementation Team (PIT) will be responsible for supervising the timely, proper and reliable implementation of works and measures in the consequence provided by the EMP. PIT will also ensure that all necessary agreements and permits are obtained by appropriate contractors from relevant state and local authorities before the construction works 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 EMP mitigation and monitoring aspects are implemented on the ground during the construction phases according to the Bank's policies and Serbia environmental legislation.
- Various Ministries give different permits. Ministry of Finance together with Ministry of Infrastructure and Ministry of Agriculture and Environmental Protection control License process for works. Ministry of Agriculture and Environmental Protection 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 take water samples and monitoring quality of water.

6.1. Environmentally sound clauses for civil works contracts

Most construction phase impacts will be possible to mitigate by including appropriate clauses into the civil works contracts. Revisions of clauses should cover, but not limited to, the following issues:

- Compliance with general national environmental guidelines;
- Compliance with relevant World Bank Operational Policies;
- Protection of Historic-cultural monuments;
- Adequate disposal of construction and excavation wastes;
- Proper location of construction camps;
- Restoration of the quasi-original conditions of landscape in construction sites after works completion;

- Occupational safety and health (Consultants and contractors working on the program will be required to adhere to all applicable laws and regulations controlling workplace health and safety), etc.

Construction works contracts should include this EMP with its Environmental Mitigation Plan and Environmental Monitoring Plan presented within the chapter 4 and chapter 5 of this EMP document.

7. IMPLEMENTATION ARRANGEMENTS

The Office for Reconstruction will be responsible for overseeing the overall project implementation. Project management functions and day to day operations will be the responsibility of EPS, the Directorate for Agrarian Payments (DAP) (with the support of Treasury), and the Project Implementation Unit (PIU) established under DWM.

8. MONITORING AND REPORTING ARRANGEMENTS

8.1. FERP Project Monitoring

The FERP project will be monitored by EPS, and the PIU under the DWM. Information and data collected at each of the implementation agencies will be fed into overall monitoring and evaluation (M&E). The Office for Reconstruction will oversee M&E activities regularly through the project reports, evaluate the results achieved and guide the implementing agencies on corrective management actions.

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

Supervision Consultant is responsible to monitor all construction activities, including environmental protection during project rehabilitation. PSC will be authorized to perform additional sampling in case he finds this needed.

8.2. Environmental Monitoring Plans

Monitoring plan for FERP projects should be in respect of the bidding documents. The main components of the monitoring plans include:

- Environmental issue 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 prepare his compliance reports in respect to EMP and his SSIP as a Quarterly Progress Reports and submit them to PIU, in both Serbian and English language, in hard copy and electronic versions.

Construction Contractor will provide quarterly reports to PIU which document the environmental mitigation and protection measures, together with prescribed monitoring activities carried out during that quarter's reporting period. Construction Contractor will take care of the environment quality according to the mitigation and monitoring plan which are part of EMP.

The same applies to the Environmental Monitoring and Supervision Contractors for their part of mitigation and environmental monitoring activities.

If any kind of accident or endangerment of environment happens, reporting will be immediate. PIU and the Contractor have joint responsibility for reporting and investigating incidents. The Contractor is obliged to inform the project manager and local authorities about accident immediately after it happened.

8.3.2. Project Supervision Consultant to PIU

The findings of the regular monitoring activities, including activities specified in the Generic Monitoring Plan, carried by the Contractor will be included in the quarterly PSC progress reports.

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

Each Contractor is obliged to produce and deliver to PIU an Semi-Annual Environmental and Social Report covering all project activities during 6 month period PIU shall provide Semi-Annual reports to MAEP 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 EMPs, including monitoring of implementation of site-specific measures on each sub-project/section during project implementation will be undertaken by PIU and its implementation unit, and reported in writing to the Bank on semi-annual basis. An environmental specialist will be appointed to the Project by PIU to ensure quality in the implementation of EMPs.

9. PUBLIC CONSULTATIONS AND PUBLIC DISCLOSURE OF THE EMP

In accordance with WB OP4.01 a draft version of EMP will be publicly disclosed in the Ministry of Agriculture and Environmental Protection, the Directorate of Water building and in the Novi Pazar municipality during September 2015.

Public Consultation and presentation of EMP document were held in the premises of Novi Pazar Municipality, on September 24, 2015, from 12:00 PM to 02:00 PM. There were 28 attendees on public consultation meeting in Novi Pazar . Most of them were local citizens. Among the others, there were local municipals, PIU representative, local media journalist and local residents.

EMP document was presented in detail to the interested attendees by the PIU representatives. During the public consultations, there were no comments, remarks or complaints related to issues presented in the EMP, and no environmentally-/ socially related issues were raised.

There were no comments, remarks or complains on prepared draft EMP document.

Full Report on public consultations is attached as Annex 2 of this EMP document.

10. REFERENCES

1 The Main design of regulation of the Raska River in Novi Pazar, from the confluence of Banjska River and Dezeva River downstream to the gorge, "Jugoprojekt", Belgrade, 1980

2 Excerpt from the Main design of regulation of the Raska River in Novi Pazar from the Careva cuprija to the Banjska River (from km 0+000 to km 1+491.55), "SUMADIJA PROJECT", Cuprija, 2007

3 The Main design of regulation of the Raska River and its tributaries from the confluence to the border of GUP, TESECO, Belgrade, 2007

4 The Main design of regulation of the Raska River and its tributaries to protect the industrial zone in Novi Pazar, from the Careva cuprija downstream to the border of the town, amendments, EHTING Ltd. Belgrade, 2011

2 Environmental Assessment Sourcebook No 25, Environmental Management Plans, The World Bank Environment Department, January 1999

3 Project Appraisal Document, PAD1129, Serbia - Floods Emergency Recovery Project, September 2014

4 Integrated Safeguards Data Sheet, ISDSA1019, Integrated Safeguards Data Sheet (Appraisal Stage) - Floods Emergency Recovery Project - P152018, September 2014

5 Project Information Document, PIDA12087, Project Information Document (Appraisal Stage) - Floods Emergency Recovery Project - P152018, September 2014

6 Environmental and Social Management Framework, ESMF, Floods Emergency Recovery Project - P152018, February 2015

7 Resettlement Policy Framework, RPF, Floods Emergency Recovery Project - P152018, February 2015

Annex 1

LEGISLATION

MAIN SERBIAN LEGISLATION:

ANNEX 1: RELEVANT NATIONAL LEGISLATION AS OF JANUARY 2015

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

1. Law on planning and construction ("Official Gazette of RS" No. 72/2009, 81/2009)
2. Law on nature protection ("Official Gazette of RS", 36/09)
3. Law on environmental protection ("Official Gazette of RS" No. 135/04, 36/09, 72/09)
4. Law on EIA ("Official Gazette of RS" No. 135/2004, 36/2009)
5. Law on Strategic EIA ("Official Gazette of RS" No. 135/2004)
6. Law on waste management ("Official Gazette of RS", 36/09)
7. Law on noise protection ("Official Gazette of RS", 36/09, 88/10)
8. Law on water ("Official Gazette of RS", 30/10, 93/12)
9. Law on forest ("Official Gazette of RS", 46/91, 83/92, 54/93, 60/93, 53/93, 67/93, 48/94, 54/96, 101/05)
10. Law on air protection ("Official Gazette of RS", 36/09)
11. Law on Safety and Health at Work ("Official Gazette of RS", 101/05)

Regulations established on the basis of the Law on EIA include the following:

12. 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)
13. 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)
14. Rulebook on the contents of the EIA Study ("Official Gazette of RS" No. 69/05)
15. Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study ("Official Gazette of RS" No. 69/05)
16. Rulebook on the work of the Technical Committee for the EIA Study ("Official Gazette of RS" No. 69/05)
17. Regulations on permitted noise level in the environment ("Official Gazette of RS" No. 72/10)
18. Decree on establishing class of water bodies ("Official Gazette of SRS" No. 5/68)
19. Regulations on dangers pollutants in waters ("Official Gazette of SRS" No. 31/82)

Other relevant Serbian legislation

20. 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)

22. 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).

24. National Assembly. Law on Protection against Environmental Noise. Official Gazette of the Republic of Serbia, No. 36/09, 88/10.

25. National Assembly. Law on Waste Management. Official Gazette of the Republic of Serbia, 2009, No. 36/09.

26. National Assembly. Constitution of the Republic of Serbia. Official Gazette of the Republic of Serbia, 2006, No. 98/06.

27. National Assembly. Law on Environmental Protection. Official Gazette of the Republic of Serbia, 2004, No. 135/04.

28. National Assembly. Law on Air Protection. Official Gazette of the Republic of Serbia, 2009, No. 36/09.

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

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

31. National Assembly. The Law on Environmental Protection. Official Gazette of the Republic of Serbia, 2009, No. 36/09.

32. National Assembly. Law on Occupational Safety and Health. Official Gazette of the Republic of Serbia, 2005, No. 101/05

33. National Assembly. Law on Environmental Impact Assessment. Official Gazette of the Republic of Serbia, 2004, No. 135/04 (http://www.basel.int/legalmatters/natleg/serbia-02e.pdf, accessed 11 January 2010).

39. Federal Assembly. Regulation on permitted level of noise in the environment. Official Gazette of the Republic of Serbia, 2010, No. 72/10.

40. National Assembly. 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 CONSULTATIONS

ANNEX 2: REPORT ON PUBLIC DISCLOSURE AND PUBLIC CONSULTATION

BACKGROUND

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Unprecedented rainfall started in early/mid-May 2014 causing massive floods, resulting in the declaration of a national state of emergency in Serbia on May 15, 2014. The heavy rainfall, led to a rapid and substantial increase of water levels in eight of the main rivers in western, south-western, central and eastern Serbia. Flash floods destroyed houses, bridges and sections of roads, while rising water levels resulted in flooding of both urban and rural areas. The disaster resulted in 51 deaths, with approximately 32,000 people evacuated from their homes, and around 110,000 households cut off from the electricity supply. Overall, the floods affected some 1.6 million people, or about one fifth of the total population living in 49 municipalities. Adverse weather conditions have continued during next few months, causing further damage to harvest and energy infrastructure.

The Floods Emergency Recovery Project focuses on the priority sectors identified in the Recovery Needs Assessment including energy, agriculture, and flood protection. The project would help close the financing gap and ensure continued provision of electricity services, forestall a likely decline in direct support to farmers in affected areas at a time when the fiscal accounts are under severe stress and help improve resilience to disasters by financing investments in critical flood prevention infrastructure.

Flood Protection of Novi Pazar area includes regulation of Raska River and its tributaries to protect the industrial zone in Novi Pazar, from the Careva cuprija downstream to the GUP border. The subject of this project are regulations of particular sections on the following rivers:

- **Raska River** from Careva cuprija, downstream to GUP border, in total length of 4300 m;
- left tributary **– Dezeva River** (Dezevska River), from its confluence to Raska River, upstream to road bridge, in total length of 500m;
- right tributary – **Banjska River** (Izbicka River), from its confluence to Raska River, upstream to road bridge, in total length of 175 m.

The Project has been classified as Environmental Category B. i.e. a project requiring an EMP pursuant to IFIs Safeguard Policies.

Project Implementation Unit (PIU) prepared draft EMP document for the construction of flood protection system for Novi Pazar, which was submitted to WB for comments and remarks during September 2015. EMP has been prepared in order to ensure that the proposed Floods Emergency Recovery Project is implemented in accordance with the World Bank operational policies and local legislation related to environmental protection. The preparation of EMP was undertaken through a desk study and field investigations, including consultations with regional level representatives and local stakeholders. The EMP is based primarily on field investigations performed during June, July and August 2015.

On September 10, 2015, WB final comments on EMP document were delivered to the PIU. PIU addressed the comments received and started public consultations and disclosure.

On September 10, 2015, PIU announced invitation for Public Consultations for the public, bodies and organizations interested in EMP for reconstruction of flood protective system in Novi Pazar. Public and other interested parties and organizations were invited to participate in process of public consultation on draft EMP document. Prior to announcement in the newspapers, the EMP was delivered to the Municipality of Novi Pazar. Representatives of the local municipality informed the public through their local media of the time and place of public consultations. Invitation was placed on Ministry of Agriculture and Environmental Protection web site too. Insight into the EMP document was ensured on following addresses:

- the premises of the Novi Pazar municipality within 14 days starting from Sep 10, 2015.
- on the web site of the Ministry of Agriculture and Environmental Protection: http://www.rdvode.gov.rs/
- the premises of the Project Implementation Unit, Bulevar umetnosti 2a, Beograd, every working day from 11:00 to 13:00 hours within 14 days starting from Sep 10, 2015

Public Consultation and presentation of EMP document were held in the premises of Novi Pazar Municipality, on September 24, 2015, from 12:00 PM to 02:00 PM and there were no comments, remarks or complains on prepared draft EMP document.

REPORT ON PUBLIC CONSULTATION, NOVI PAZAR, SEP 24, 2015

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In accordance with OP/BP 4.01, PIU has prepared EMP document for construction of flood protection in Novi Pazar including the regulation of the river Raska and its tributaries, from the Careva cuprija downstream to the border of the town.

The in-country disclosure of the EMP document started on September 10, 2015, when draft EMP document was placed on Ministry web site, together with the announcement inviting interested parties to participate during Public Consultations. On September 10, 2015 additional announcement and invitation to the interested parties were published in the daily newspaper "Politika", inviting the public, authorities and relevant institutions to have an insight into the proposed road rehabilitation works and environmental impact of the project with presented mitigation and monitoring measures. Prior to announcement in the newspapers, all documents were delivered to the Municipality of Novi Pazar and made publicly available on site, and also placed at Ministry web site.

Representatives of the local self-government informed the public through local media of the time and place of public consultations. Disclosure of draft EMP document finished on September 24, 2015, when the public meeting was held in city of Novi Pazar.

There were 28 attendees on public consultation meeting in Novi Pazar[3]. Most of them were local citizens. Among the others, there were local municipals, PIU representative, local media journalist and local residents.

On behalf of PIU the meeting was attended by:

1.	Mr. Nenad Brkic	PIU, Belgrade	Project Manager
2.	Mr. Djuradj Surlan	PIU, Belgrade	Project Manager

On behalf of Local Municipality the meeting was attended by:

3.	Mr. Milos Radovanovic	JVP "Srbijavode"
4.	Mr. Muzafer Dragolovcanin	City of Novi Pazar
5.	Ms. Sabina Totic	City of Novi Pazar
6.	Mr. Pemba Dzankovic	City of Novi Pazar
7.	Mr. Mujo Sacirovic	City of Novi Pazar
8.	Mr. Naser Crnovrsanin	City administration Novi Pazar
9.	Mr. Fahrudin Mekic	City administration Novi Pazar
10.	Ms. Mihrija Zekovic	City administration Novi Pazar
11.	Ms. Menza Rakovic	City administration Novi Pazar

[3] List of participants is presented within the Chapter 3.

12.	Ms. Hahefija Brnicanin	PE “Vodovod i kanalizacija”, Novi Pazar
13.	Mr. Nihad Hasanovic	PSSS Novi Pazar
14.	Mr. Hidajet Plojocic	City administration Novi Pazar
15.	Mr. Almir Lekovic	Secretary of the City Assembly, Novi Pazar
16.	Mr. Dzemal Divanefendic	Josanica Municipality
17.	Mr. Besar Hadzic	City administration Novi Pazar
18.	Mr. Nedzib Plojovic	PE “Direkcija”, Novi Pazar
19.	Mr. Ahmedin Binjos	City administration Novi Pazar
20.	Mr. Vahidin Melajac	City administration Novi Pazar
21.	Mr. Aldin Imamovic	local resident
22.	Ms. Katarina Radovic	Television Novi Pazar
23.	Ms. Dalida Kolasinac	local resident
24.	Mr. Enes Pljakic	local resident
25.	Mr. Elvir Hamidovic	City administration Novi Pazar
26.	Mr. Fuad Mujovic	local resident
27.	Mr. Ramiz Panjevac	Head of the Department for Economy, City of Novi Pazar
28.	Mr. R. Savkovic	local resident

Picture 1: Public consultation in Novi Pazar, September 24, 2015

The meeting started according to schedule at 12:00 PM. EMP document was presented in detail to the interested attendees by the PIU representatives. During the public consultations, there were no comments, remarks or complaints related to issues presented in the EMP, and no environmentally-related issues were raised.

Respecting social impacts of this project, PIT representatives informed all participants that temporary occupation of a private land is consisting part of a project on some locations. In order to avoid any problems related to this, agreement is signed with land owner on locations aimed for temporary location of construction machinery (cadastral parcels 389/4, 391/3, 392/2, 393, 394, 395, 396 and 397, owner: Ladjar Mujo). Additionally, it was clarified during consultations that **preparation and disclosure of site-specific Abbreviated Resettlement Action Plan (ARAP) is mandatory part of Project** preparation and this activity is planned to be completed before the Contract with the Construction Contractor is signed. **ARAP document is required and will be prepared by PIT during October 2015 and will be separately disclosed** before the work commencement.

Questions and Answers:

During the public presentation of EMP document, and then public discussions held, there were no comments or complaints about the EMP document or related to the future construction works.

Participants asked for quick start of proposed Project and were interested to know when the works will commence, because the flooding of the rivers caused lot of trouble and damage in Novi Pazar area during recent years.

Participants expressed their gratitude to the Directorate of Water, PIU team and “Srbijavode” for developing of the Main Design, and for their effort and commitment in relation to the preparation and upcoming implementation of the project.

During the 14 days aimed for insight into the EMP document, nobody came into PIT premises to see the EMP document. During disclosure period there were no telephone or E-mail contacts regarding proposed EMP document.

During Public Consultation process and EMP document disclosure no interested groups or other stakeholders visited the environmental department of Novi Pazar municipality in order to have insight into the EMP document.

Consultation started at 12:00 AM and ended at 02:00 PM, local time.

LIST OF PARTICIPANTS

Предмет ЈАВНИХ КОНСУЛТАЦИЈА: **ПЛАН УПРАВЉАЊА ЗАШТИТОМ ЖИВОТНЕ СРЕДИНЕ (Environmental Management Plan – EMP)**		*Место одржавања ЈАВНИХ КОНСУЛТАЦИЈА:* Нови Пазар	
Заштите од поплава на Новог Пазара		*Датум јавних консултација:* 23. септембар 2015.	
Р.б.	*Име и презиме*	*Организација / адреса*	*Телефон.; Факс; E-mail*
1	Бркић Нонад	FER-Projekat	FER.PROJECT@YAHOO.COM
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4	Музафер Драголовчанин	Град Нови Пазар	
5	Сабина Тотић	Град Нови Пазар	064/890-72-90
6	Ремза Бранковић	Град Н.П.	064 29 07287
7	Шаћировић Муја	М. Зора	065/3 800 801 sacirovicmuja@gmail.com
8	Назер Црновршанин	Градска управа	NASER.CRNOVRSANIN@NOVIPAZARSK.RS 065/190 41 041

страна 1

Р.б.	Име и презиме	Организација / адреса	Телефон.: Факс; E-mail
9	FAHRUDIN MEKIĆ	Gradska uprava Kanc. B32	kabinet@novipazar.org.rs
10	Ulvrija Zeković	Gradska uprava	
11	Merita Ramović	Gradska uprava	ramovicmerita@hotmail.com
12	~~HAMDIJA~~ BRKIĆ/K	JKP VIK	064/8399753 JKPVIK04@YEPOT.NET
13	Nihad HASANOVIĆ	PSSS - Novi Pazar	064/8435584 nihad.r.hasanovic@gmail.com
14	HIDAJET PLOJOVIĆ	GRADSKA UPRAVA Novi Pazar	064/890 73 36
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16	Nermin Hasanović	N.2. Jasenica	069/1197521
17	Hadžić Bekir	GRADSKA UPRAVA	064/8909340 bekir.hadzic@gmail.com
18	Plojović Nedeljko	JP, Direkcija	064/1784022
19	Bikjoš Ahmedin	Gradska uprava	ahmedin.bikjos@novipazar.org.rs
20	Vahidin Melajac	Gradska uprava	065/90-11-080 vmelajac@gmail.com

страна 2

Р.б.	Име и презиме	Организација / адреса	Телефон.; Факс; E-mail
21	Aladin Mamović	Građanin, mještanin	065/569 1111 aladin-mamovic@yahoo.com
22	Katarina Radović	RTV Novi Pazar	060/41-41-611 KLEVAREN@GMAIL.COM
23	Dalida Kolašinac		069/177 1774
24	Emes Pljakić	Sportsko saobraćajna ustanova Pendik	ssupendik@gmail.com 064/890-73-16
25	ELVIR HAMIDOVIĆ	GRADSKA UPRAVA GRADA N. PAZARA	arh.elvir@novipazar.org.rs
26	Mygrbuta Ejup	-	bfgradnja@hotmail.com
27	Rajko Pajčevac	NAČELNIK ODELJENJA ZA PRIVREDU N. PAZAR	PRIVREDA@N.PAZAR ORG.25/065 90 11075
28	Gabrijela Ilić	Novi Pazar	
29			
30			
31			
32			

страна 3

DOCUMENTATION

Republic of Serbia
MINISTRY OF AGRICULTURE
AND ENVIRONMENTAL PROTECTION
Directorate for Water
404-02-376/2015-07
September 10, 2015

In accordance with the WB Operational Policies (OP 4.01)

Project Implementation Unit of the Floods Emergency Recovery Project

issues an invitation for

PUBLIC CONSULTATIONS

for the public, bodies and organizations interested in

ENVIRONMENTAL MANAGEMENT PLAN (EMP)

"Construction of flood protection in Novi Pazar including the regulation of the river Raska and its tributaries for the protection of the industrial zone in Novi Pazar, from the Careva cuprija downstream to the border of the town"

Interested parties can get an insight into the EMP document on following addresses:

- the premises of the Novi Pazar Municipality within 14 days of publication of this notice,
- on the website of the Ministry of Agriculture and Environmental Protection: http://www.rdvode.gov.rs/
- the premises of the Project Implementation Unit, Bulevar umetnosti 2a, Belgrade, every working day from 11:00 to 13:00 hours within 14 days from the date of publication of this notice.

Remarks and suggestions in regards to the EMP document shall be submitted in written form to the Project Implementation Unit of FER Project, Bulevar umetnosti 2a, Belgrade. Remarks can be also provided on following internet address: fer.project@yahoo.com

On September 24, 2015 at 12:00 hours (local time), public consultations and presentation of the subject EMP document will be organized on the premises of Novi Pazar (municipal hall; Stevana Nemanje 2, 36300 Novi Pazar).

For any additional information, please contact:

Floods Emergency Recovery Project (FERP)
Bulevar umetnosti 2a
11000 Belgrade, Serbia
tel.: +381-(0)11- 21-74-153
e-mail: fer.project@yahoo.com

11509191-1

Република Србија
МИНИСТАРСТВО ПОЉОПРИВРЕДЕ
И ЗАШТИТЕ ЖИВОТНЕ СРЕДИНЕ
Републичка дирекција за воде
404-02-376/2015-07
10. септембар 2015. године
Београд

Сагласно оперативној политици Светске банке (ОП 4.01)

Јединица за имплементацију пројекта хитне санације од поплава

позива на

ЈАВНЕ КОНСУЛТАЦИЈЕ

јавност, органе и организације заинтересоване за

ПЛАН УПРАВЉАЊА ЗАШТИТОМ ЖИВОТНЕ СРЕДИНЕ

„Изградња система за заштиту од поплава у Новом Пазару укључујући регулацију реке Рашке и притока за заштиту индустријске зоне у Новом Пазару, од Цареве ћуприје низводно до границе насеља"

Увид у предметни План управљања заштитом животне средине може се извршити:

- у просторијама у Новом Пазару (скупштинска сала) у року од 14 дана од дана објављивања овог обавештења,
- на интернет страници Министарства пољопривреде и заштите животне средине: http://www.rdvode.gov.rs/
- у просторијама Јединице за имплементацију пројекта, ул. Булевар уметности 2а, Београд, сваког радног дана од 11 до 13 часова у року од 14 дана од дана објављивања овог обавештења

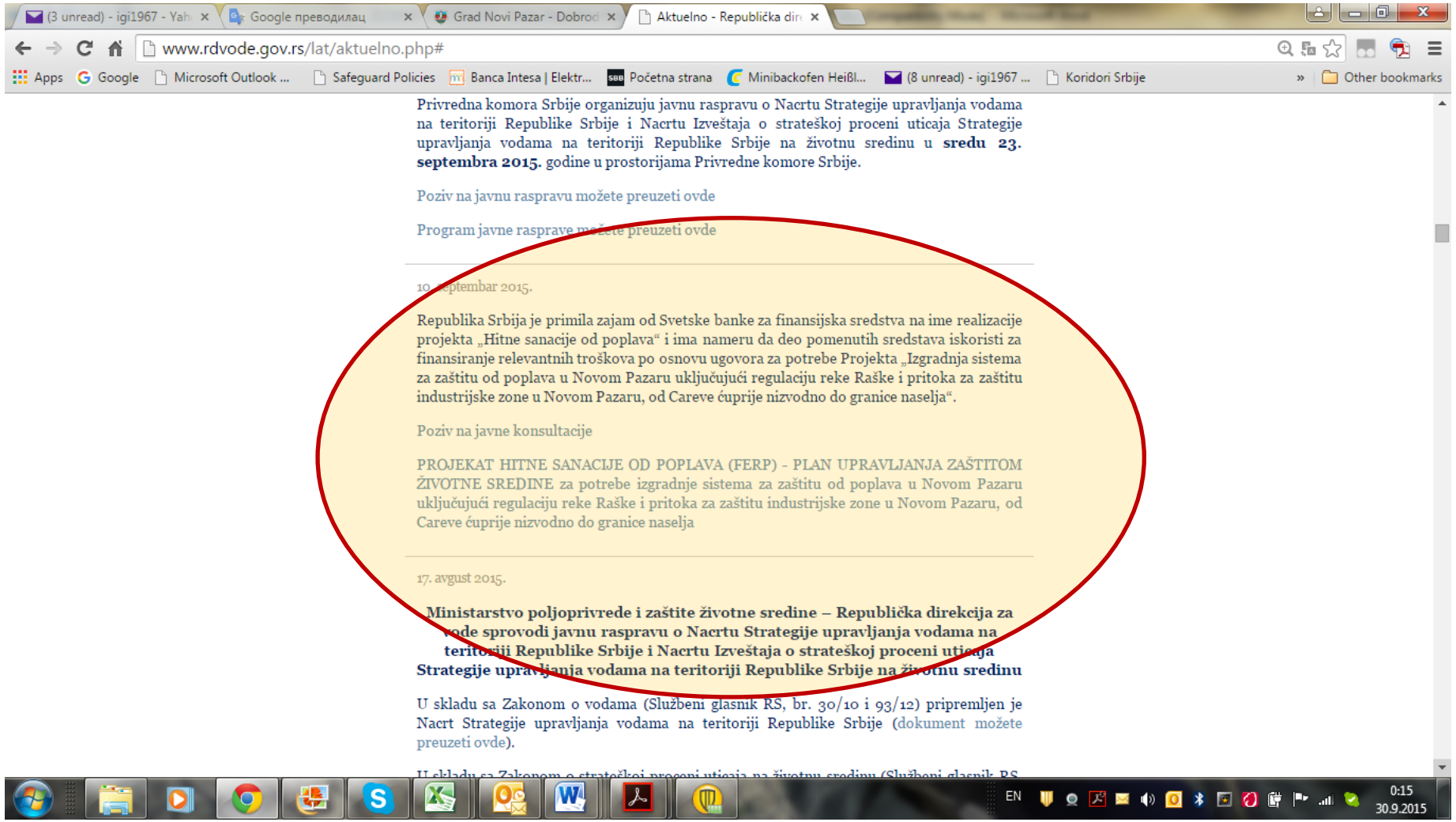
Примедбе и мишљења на Извештај о заштити животне средине се подносе у писаном облику и достављају Јединици за имплементацију пројекта на адресу Булевар уметности 2а, Београд. Примедбе се могу доставити и електронском поштом на адресу: fer.project@yahoo.com

Јавна презентација Плана управљања заштитом животне средине одржаће се у просторијама у Новом Пазару (сала скупштине општине; ул. Стевана Немање бр. 2, 36300 Нови Пазар) дана 24. 9. 2015. године, са почетком у 12 часова.

За додатне информације обратити се на следећу адресу:

Floods Emergency Recovery Project (FERP)
Булевар уметности 2а
11000 Београд, Република Србија,
e-mail: fer.project@yahoo.com
тел.: 011/21-74-153

Picture 2: Announcement of public consultation in daily newspaper ("Politika", Sep 10, 2015)



Picture 3: Announcement of public consultation on Ministry web site and public disclosure of SECOND DRAFT EMP document on Ministry web site (Sep 10, 2015 to Sep 24, 2015)

Annex 3

EVIDENCE OF RESOLVED PROPERTY ISSUES

ANNEX 3: EVIDENCE OF RESOLVED PROPERTY ISSUES

A) Report on the land acquisition procedure and adopted decisions

Republika Srbija
GRAD NOVI PAZAR
Grasdska uprava za izvorne i poverene poslove
lokalne samouprave
Odeljenja za imovinsko pravne poslove
Broj: SI.
Dana: 28.08.2015.godine
NOVI PAZAR

RADNA GRUPA ZA REALIZACIJU PROJEKTA ZAŠTITE NASELJA I INDUSTRIJSKE ZONE U NOVOM PAZARU OD POPLAVA-REGULACIJA REKE RAŠKE
-Koordinatoru Radne grupe g. Muzaferu Dragolovčaninu

PREDMET: Izveštaj o provedenom postupku eksproprijacije i donesenim rešenjima

Gradsko pravobranilaštvo Grada Novog Pazara je dana 12.06.2015.godine ovom Odeljenju podnelo 18 predloga za eksproprijaciju i prenos u javnu svojinu u korist Grada Novog Pazara radi realizacije Projekta hitnih radova za zaštitu naselja i industrijske zone u Novom Pazaru od poplava.

Ovim predlozima obuhvaćene su 24 parcele, od kojih su 23 u vlasništvu fizičkih lica, a na jednoj parceli je pravo korišćenja imao „Polet" D.O.O. Novi Pazar.

Ovo Odeljenje je provelo postupak eksproprijacije, saslušalo vlasnike, odnosno korisnika navedenih parcela i donelo 18 rešenja, od čega 17 rešenja o eksproprijaciji i 1 rešenje o prenošenju prava korišćenja sa „Poleta" D.O.O. Novi Pazar na Grad Novi Pazar .

Donošenjem ovih rešenja postupak eksproprijacije, pokrenut predlogom Gradskog pravobranioca je u celosti završen.

U prilogu Vam dostavljamo fotokopije donesenih rešenja.

N A Č E L N I C A,
Hasiba Murić, dipl. pravnica

B) Temporary land occupation – Consent of private owner

REPUBLIKA SRBIJA
GRAD NOVI PAZAR
GRADSKO PRAVOBRANILAŠTVO
BR. R. 62/14
DATUM: 26.08.2015.GODINE
NOVI PAZAR

ZAPISNIK
O SASLUŠANJU STRANKE

Sastavljen dana 27.08.2015.godine u Gradskom pravobranilaštvu Novog Pazara u postupku realizacije Projekta Zaštita naselja i industrijske zone u Novom Pazaru od poplava-regulacija reke Raške od ušća reke Banjske do mosta Careva Ćuprija“ - deonica 1.

Na usmeni poziv pristupio je Lađar Adis iz Novog Pazara, čiji je idetititet utvrđen na osnovu lične karte br.004166230 izdate od strane PU Novi Pazar, pa pošto bi upoznat da je Grad Novi Pazar zaključio Sporazum o zajedničkom izvršenju hitnih radova za zaštitu naselja i industrijske zone u Novom Pazaru br.82-3/15 zaključenog dana 20.05.2015.godine sa JVP“Srbijavode“, kojim je predviđeno da je Grad u obavezi da obezbedi lokaciju za smeštaj mehanizacije i za odlaganje nekvalitetnog materijala i nekvalitetne drvne mase, daje sledeću

SAGLASNOST

Saglasan sam da Grad Novi Pazar, JVP“Srbijavode“ i izabrani izvođač radova mogu privremeno koristiti bez naknade moje kat.parcele br.389/4, 391/3, 392/2, 393, 394, 395, 396 i 397 KO Požežina, za smeštaj mehanizacije i odlaganje materijala u skladu sa Sporazum o zajedničkom izvršenju hitnih radova za zaštitu naselja i industrijske zone u Novom Pazaru br.82-3/15 od 20.05.2015.godine zaključenog između Grada Novog Pazara i JVP“Srbijavode“, do završetka svih radova.

Napominjem da na navedenim kat.parcelama posedujem parking prostor sa sa fizičkim obezbeđenjem i video nadzorom, koji takođe dajem na korišćenje bez naknade, s tim što trazim da se materijal rasporeduje ravnomerno na svim parcelama i da se grederom i valjkom izravna teren.

Stranka
Lađar Adis
Lađar Adis

Zamenik gradskog pravobranioca
Sabina Totić
Sabina