State Water Holding Polish Waters
Regional Water Management Authority in Wrocław

ENVIRONMENTAL MANAGEMENT PLAN

ODRA-VISTULA
FLOOD MANAGEMENT PROJECT – 8524 PL

Environmental category B – according to OP 4.01 of WB

Component 1:

Flood Protection of the Middle and Lower Odra

Sub-component 1B:

Flood Protection on the Middle and Lower Odra

Contract for works 1B.6:

Flood protection of Nowa Sól and Below Krosno Odrzańskie

Task 1B.6/2:

Wężyska – Chlebowo

FINAL VERSION

Issue	Date	Author	Checking person	Approval by the Client	Description
	February 15th, 2018				

ODRA-VISTULA
FLOOD MANAGEMENT PROJECT
co-financed by:
World Bank, Loan Agreement No. 8524 PL
Council of Europe Development Bank, Framework Loan Agreement No. LD 1866
Cohesion Fund of the European Union (IEOP 2014-2020)
State budget

ENVIRONMENTAL MANAGEMENT PLAN

Component: ***1 – Flood Protection of the Middle and Lower Odra***
Sub-component: ***1B – Flood Protection on the Middle and Lower Odra***
Contract: ***1B.6 – Flood protection of Nowa Sól and Below Krosno Odrzańskie***
Part of Contract: ***Implementation of Task 1B.6/2 – Wężyska – Chlebowo***

Project Implementation Unit:
State Water Holding Polish Waters
Regional Water Management Authority in Wrocław

Authors of the study:

State Water Holding Polish Waters
Regional Water Management Authority in Wrocław
PIO II OVFMP

Technical Assistance Consultant –
Joint Venture of *AECOM I&E UK Ltd, Halcrow Group Ltd, BRL Ingenierie and AECOM Polska Sp. z o.o.*

Wrocław/Zielona Góra, February 2018

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List of basic definitions and abbreviations used in the EMP

Name	Description
BGW	Body of Ground Water
BP	Bank Procedure[1]
BSW	Body of Surface Water
Consultant / Engineer / Contract Engineer	A company or a legal person providing the service of a Technical Assistance Consultant for the Investor as part of OVFMP
Contract / Contract for works	Contract for works *1B.6 – Flood protection of Nowa Sól and Below Krosno Odrzańskie*
Contractor / Task Contractor / Contract Part Contractor	A company or a legal person implementing the Part of Contract for works *1B.6 – Flood protection of Nowa Sól and Below Krosno Odrzańskie* concerning Task *1B.6/2 Wężyska – Chlebowo*
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
Environmental decision / DEC	Decision on the environmental conditions
ESMF	Environmental and Social Management Framework for OVFMP[2]
EU	European Union
GDOŚ	General Directorate for Environmental Protection
IEOP	Infrastructure and Environment Operational Programme
Investor / Employer / PIU *(since January 1st 2018)*	State Water Holding Polish Waters Regional Water Management Authority in Wrocław / OVFM Project Implementation Unit
Investor / Employer / PIU *(until December 31th 2017)*	Lubuskie Board of Amelioration and Hydraulic Structures in Zielona Góra / OVFM Project Implementation Unit
LA&RAP	Land Acquisition and Resettlement Action Plan
LSMP	Local spatial management plan
LZMIUW	Lubuskie Board of Amelioration and Hydraulic Structures in Zielona Góra
OP	Operational Policy (of the World Bank)[3]

[1] The World Bank's Operational Policies and Procedures are presented in the document entitled *The World Bank Operational Manual*, available on the following website: https://policies.worldbank.org/sites/PPF3/Pages/Manuals/Operational%20Manual.aspx.

[2] The document is available on the website of OVFM PCU, at the following address: http://www.odrapcu.pl/popdow_dokumenty_RPZSiSS.html. and on the World Bank's website, at the following address: http://documents.worldbank.org/curated/en/717671468333613779/Poland-Odra-Vistula-Flood-Management-Project-environmental-and-social-management-framework.

[3] See the footnote for *BP* (Bank Procedure)

ORBMP	Odra River Basin District Management Plan
PAD	Project Appraisal Document[4] for OVFMP
Part of Contract / Part of Contract for works	Part of Contract for works *1B.6 – Flood protection of Nowa Sól and Below Krosno Odrzańskie* concerning Task *1B.6/2 Wężyska – Chlebowo*
PCU / OVFM PCU	Project Coordination Unit / OVFM Project Coordination Unit
PGWWP	State Water Holding Polish Waters
PIO	Project Implementation Office – an organisational unit allocated as part of PIU
POM	Project Operations Manual[5] for OVFMP
Project / OVFMP / OVFM Project	Odra-Vistula Flood Management Project
RDOŚ	Regional Directorate for Environmental Protection
Road manager	An organizational unit fulfilling the obligations of managing public roads as defined by the *Public Road Act* or the obligations of managing a non-public road
RZGW	Regional Water Management Authority
SHP Plan	Safety and health protection plan
Task	Task *1B.6/2 Wężyska – Chlebowo*, constituting a Part of Contract for works *1B.6*
UBSW	Unified Body of Surface Water
WMP	Waste Management Programme
World Bank / WB	International Bank for Reconstruction and Development / World Bank
ZMiUW	Board of Amelioration and Hydraulic Structures

[4] The document is available on the World Bank's website, at the following address: *http://documents.worldbank.org/curated/en/320251467986305800/Poland-Odra-Vistula-Flood-Management-Project*.

[5] The document is available on the website of OVFM PCU, at the following address: *www.odrapcu.pl/lp.php?plik=doc/POM_PL.pdf*.

List of abbreviated names of legal acts used in the EMP

The names of legal acts cited in the text of this EMP are provided in abbreviated versions. Full names of those legal acts are stated on the list below.

Name in the text	Full name (with publication reference)
Birds Directive	Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (EU OJ L 288 of 06.11.2007)
Construction Law	Act of July 7th, 1994 Construction Law (consolidated text: Journal of Laws of 2017, item 1332, as amended)
Environmental Protection Law	Act of April 27th, 2001 Environmental Protection Law (consolidated text: Journal of Laws of 2017, item 519, as amended)
EIA Regulation	Regulation of the Council of Ministers of November 9th, 2010 on projects likely to have significant effects on the environment (consolidated text: Journal of Laws of 2016, item 71)
Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (EU OJ L 206 of 22.07.1992, as amended)
Inland Fishing Act	Act of April 18th, 1985 on inland fisheries (consolidated text: Journal of Laws of 2015, item 652, as amended)
Nature Conservation Act	Act of April 16th, 2004 on nature conservation (consolidated text: Journal of Laws of 2016, item 2134, as amended)
Public Road Act	Act of March 21st, 1985 on public roads (consolidated text: Journal of Laws of 2017, item 2222, as amended)
Waste Act	Act of December 14th, 2012 on waste (consolidated text: Journal of Laws of 2018, item 21)
Water Framework Directive (WFD)	Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (EU OJ L 327 of 22.12.2000, as amended)
Water Law	Act of July 20th, 2017 Water Law Act (Journal of Laws of 2017, item 1566, as amended)

EXECUTIVE SUMMARY

This Environmental Management Plan (EMP) concerns Task *1B.6/2 Wężyska – Chlebowo*, which constitutes a part of Sub-component *1B* within the Odra-Vistula Flood Management Project (OVFMP) and is implemented as the Part of Contract for works *1B.6*.

The EMP presents i.a. the following information:

- a short description of the OVFM Project and its Component 1, which includes the Task in question (chapter 1.1 and 1.2);
- a description of the Task constituting the subject of this EMP (chapter 2);
- characterization of institutional, legal and administrative conditions of Task implementation, including the current status of EIA procedures for the Task (chapter 3);
- a description of individual elements of the environment in the surroundings of the Task (chapter 4);
- a summary of the Environmental Impact Assessment for the Task (chapter 5);
- a description of mitigation measures aimed at eliminating or limiting the potential negative environmental impact of the Task (chapter 6) together with tables presenting those measures (Appendix 1);
- a description of environmental monitoring measures binding on the Task (chapter 7) together with tables presenting those measures (Appendix 2);
- a description of the course of public consultations conducted at particular stages of developing the environmental documentation for the Task (chapter 8);
- a description of the organizational structure of EMP implementation (chapter 9);
- an EMP implementation schedule and a description of reporting procedures (chapter 10);
- a list of source materials cited in the EMP (chapter 11);
- copies of administrative decisions in the scope of environmental protection issued for the Task (Appendix 4).

Characterization of the Task

The subject of the Task discussed in this EMP is the construction of a new left-bank flood embankment of the Odra river (with partial liquidation of the present embankment) on the section between villages Wężyska and Chlebowo, from km 527.4 to km 532.2 of the river. The Task shall be implemented in the Lubuskie Province, krośnieński district, municipalities Maszewo, Gubin and Krosno Odrzańskie, in three village administration units: Połęcko, Chlebowo and Czarnowo.

Scope of the Task

The scope of Task *1B.6/2 Wężyska – Chlebowo* includes the following elements:

- construction of a new flood embankment on the left bank of the Odra river, between villages Wężyska and Chlebowo;
- expansion of existing flood embankment on the left bank of the Odra river, upstream of the new flood embankment;
- partial demolition of existing flood embankment on the left bank of the Odra river, on the section covered by the construction of new flood embankment;
- expansion of sections of existing roads (provincial and municipal roads) in the vicinity of the new flood embankment;

- reconstruction of the network of drainage ditches within and outside the embanked area;
- change of landscaping (raising) of the terrain outside the embanked area;
- reconstruction of overhead power line
  on the section running above the new flood embankment;
- performance of additional activities in the scope of environmental protection.

Institutional, legal and administrative conditions

The Task is implemented in accordance with relevant national provisions of environmental protection in the scope of its characteristics, anticipated potential environmental impact and location in relation to protected areas.

The status of EIA administrative procedures

The following administrative letters and decisions in the scope of environmental protection are among the ones issued for the Task in question in years 2015-2017:

- a decision on the environmental conditions for the construction of the left-bank flood embankment of the Odra river Wężyska – Chlebowo;
- information on lack of objection to implementation of the planned undertaking.
- a decision on the environmental conditions for the construction of the left-bank flood embankment of the Odra river Wężyska – Chlebowo, refusing to overrule the previous environmental decision for the undertaking.

The status of elements of the environment in the surroundings of the undertaking

As a result of works related to identifying the values of the natural and cultural environment it has been established that the Task implementation area and its surroundings are characterized by i.a. the following environmental conditions:

- the Task implementation area is located within the boundaries of three Bodies of Surface Water (BSW), named PLRW6000211739 *Odra od Czarnej Strugi do Nysy Łużyckiej*, PLRW60001717346 *Strumień od źródła do Raczy* and PLRW60001917349 *Strumień od Raczy do Odry,* and also within the boundaries of one Body of Ground Water (BGW) No. GW600068;
- the presence of the following was established in the Task implementation area and its immediate surroundings: 2 protected species of plants, 112 protected animal species and 5 types of natural habitats listed in Annex I to EU *Habitats Directive*;
- the Task implementation area is located within the boundaries of two Natura 2000 sites and two other areas protected by the *Nature Conservation Act*;
- in the Task implementation area and its immediate surroundings, there are no monuments, objects of high cultural value or cultural property.

Summary of the Environmental Impact Assessment

Earth surface and landscape

Task implementation is related to permanent transformation of the earth surface and clearance of trees and shrubs for the construction of the new flood embankment, which shall also have a small influence on the landscape on a local scale.

Climate

Task implementation has no influence on the climate status.

Atmospheric air

The influence of Task implementation on the sanitary status of the air is limited in time to the construction stage and is not significant.

Soils and grounds

Task implementation is related to permanent transformation of the earth surface (including soil and grounds) for the construction of the flood embankment, as well as to the possibility of polluting the substrate at the construction stage. At the operation stage, Task implementation has no influence on the soil and ground status. If the conditions set out in Appendix 1 to the EMP are correctly fullfilled, Task implementation will not have any negative impact on the condition of soils and grounds (including the soils and grounds within protected areas listed in chapter 4.8.2).

Surface waters

At the construction stage, Task implementation may have a little influence on the surface water status (by influencing the biological, hydromorphological and physical-chemical elements of water quality), but the influence shall be local and partially reversible, so it shall not be significant or constitute a hazard to the achievement of the environmental objective for the Body of Surface Water (BSW). At the operation stage, Task implementation has no influence on surface waters.

Groundwater

Task implementation has no negative influence on groundwater.

Acoustic climate

The influence of Task implementation on the acoustic climate is limited in time to the construction stage and is not significant.

Biotic nature

Task implementation may have a negative impact on 2 types of natural habitats, 2 protected plant species and several dozen protected animal species present on the terrains of planned works and in the immediate vicinity thereof. That impact stems first and foremost from the necessary scope of land occupation and tree/shrub felling, and shall be significantly reduced owing to planned mitigation measures. Task implementation does not influence the status of Natura 2000 sites nor other protected areas or natural objects.

Cultural monuments and material goods

Task implementation has no negative influence on cultural monuments.

The influence of Task implementation on the status of the remaining material goods is related to the necessity of introducing changes to the existing infrastructural objects (flood embankments, roads, power lines) and changes to the use of the lands located within Task boundaries. Additional impacts related to using the existing road network as access roads to the construction site may occur at the construction stage.

Human health and safety

Task implementation does not generate significant hazards to human health and safety. These may only occur in the case of breakdowns, catastrophes and other random incidents (e.g. pollutant leak, fire, finding unexploded bombs or unfired rounds, flood). The EMP defines appropriate conditions aimed at preventing such events and minimizing their potential effects.

Mitigation and monitoring measures

Chapter 6 and 7 and Appendix 1 and 2 to the EMP describe and present in tables a set of mitigation and monitoring measures aimed at eliminating or limiting the negative environmental impact of the Task and ensuring effective implementation of EMP conditions. Those measures contain conditions defined in the issued administrative decisions in the scope of environmental protection and additional conditions established when developing the EMP.

Public consultations

Chapter 8 of the EMP contains a report of public consultations conducted as part of EIA procedures for the planned Task, including:

- public consultations for the document entitled *Environmental and Social Management Framework (ESMF)* for OVFM Project (2015);
- public consultations conducted at the stage of issuing environmental decision for the Task (2014-2015);
- public consultations for this Environmental Management Plan (2017).

1. INTRODUCTION

This Environmental Management Plan (EMP) concerns Task *1B.6/2 Wężyska – Chlebowo*, which constitutes a part of Sub-component *1B* within the Odra-Vistula Flood Management Project (OVFMP) and is implemented as the Part of Contract for works *1B.6*.

1.1. ODRA-VISTULA FLOOD MANAGEMENT PROJECT (OVFMP)

The Odra-Vistula Flood Management Project (OVFMP) is aimed at increasing the flood protection level of people living in selected areas of the Odra river basin and the Upper Vistula river basin as well as institutional strengthening of governmental administration in the scope of ensuring more effective protection against summer floods, winter floods and flash floods.

The project has five components (including three investment components and two institutional/organizational components):

Component 1 – Flood Protection of the Middle and Lower Odra, including:

Sub-component 1A – Flood protection of areas in Zachodniopomorskie Voivodship;

Sub-component 1B – Flood Protection on the Middle and Lower Odra;

Sub-component 1C – Flood protection of Słubice city.

Component 2 – Flood Protection of the Nysa Kłodzka Valley, including:

Sub-component 2A – Active protection;

Sub-component 2B – Passive protection.

Component 3 – Flood Protection of the Upper Vistula, including:

Sub-component 3A – Flood protection of Upper Vistula towns and Kraków;

Sub-component 3B – Protection of Sandomierz and Tarnobrzeg;

Sub-component 3C – Passive and active protection in Raba Sub-basin;

Sub-component 3D – Passive and active protection in San basin.

Component 4 – Institutional Strengthening and Enhanced Forecasting

Component 5 – Project Management and Studies

Detailed information and additional documents concerning the OVFM Project are available on the website of the Odra-Vistula Flood Management Project Coordination Unit (*http://www.odrapcu.pl*) and on the website of the World Bank (*http://documents.worldbank.org/curated/en/docsearch/projects/P147460*).

1.2. FLOOD PROTECTION OF THE MIDDLE AND LOWER ODRA (COMPONENT 1 OF THE OVFMP)

Component 1 of the OVFM Project entitled *Flood Protection of the Middle and Lower Odra* aims to enhance protection against summer floods and winter floods to the cities of Szczecin and Słubice, to the town of Gryfino, as well as other smaller towns along the river.

Three Sub-components shall be implemented within the Component:

Sub-component 1A – Flood protection of areas in Zachodniopomorskie Voivodship, consisting of the following elements:

- 1A.1 – Chlewice-Porzecze. Backwater embankment of Odra River at Myśla River and Modernization of Marwicki polder stage I and II.
- 1A.2 – Flood protection of Ognica village on Odra River Osinów-Łubnica. Modernization of inter-embankment.
  Flood protection of Radziszewo and Daleszewo villages on Odra River at 726+400÷727+960 km.
  Modernization of Marwicki polder stage III - pump station.
- 1A.3 – Restoring natural values of Lower Odra Valley by improving retention and flood protection capacities of Międzyodrze.

Sub-component 1B – Flood Protection on the Middle and Lower Odra, consisting of the following elements:

- 1B.1 – Reconstruction and modernization of river control infrastructure on the Odra River.
- 1B.2 – Modernization works on boundary sections of Odra River.
- 1B.3 – Construction of docking-mooring infrastructure.
- 1B.4 – Improvement of flood water-flow from Dąbie Lake in winter and Dreding of Klucz-Ustowo ditch.
- 1B.5 – Reconstruction of bridges to ensure a minimum clearance (4 bridges).
- 1B.6 – Flood protection of Nowa Sól and Below Krosno Odrzańskie.
  Task 1B.6/1 – Nowa Sól stage I and II.
  Task 1B.6/2 – Wężyska – Chlebowo.

Sub-component 1C – Flood protection of Słubice city, consisting of the following elements:

- 1C.1 – Extension and construction of flood embankments and Reconstruction of Czarny Kanał and Racza Struga.

2. DESCRIPTION OF THE TASK

The Task constituting the subject of this EMP concerns the construction of a new left-bank flood embankment of the Odra river (with partial liquidation of the present flood embankment), on the section between villages Wężyska and Chlebowo. The Project Implementation Unit (PIU) for the Task is the State Water Holding Polish Waters, Regional Water Management Authority in Wrocław.

2.1. LOCATION OF THE TASK

The Task shall be implemented in the Lubuskie Province, krośnieński district, municipalities Maszewo, Gubin and Krosno Odrzańskie, in three village administration units: Połęcko, Chlebowo and Czarnowo.

New flood embankment shall be built on the left bank of the Odra river, from km 527.4 to km 532.2 of the river, between villages Wężyska and Chlebowo.

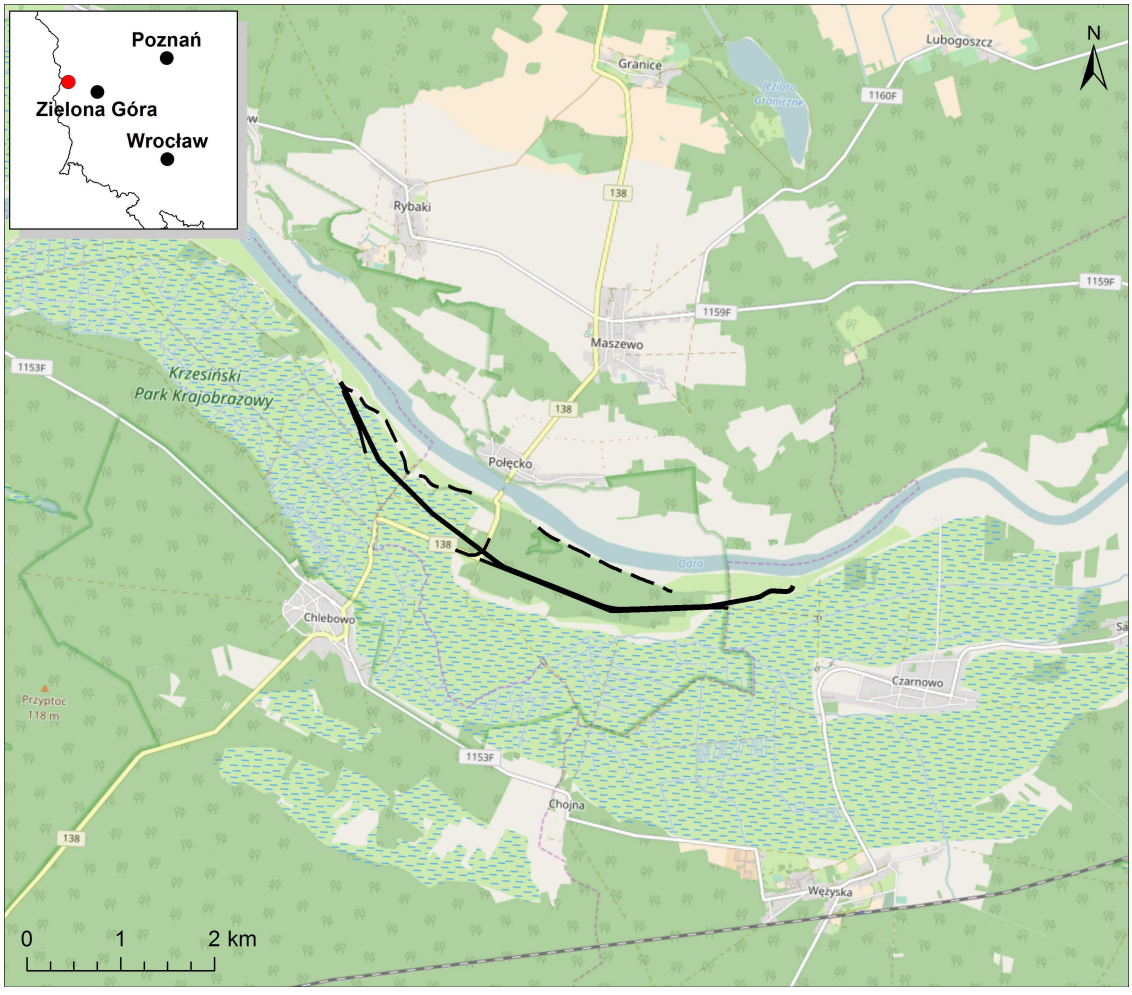

Figure 1. Task location – an overview map
(source: © authors of OpenStreetMap; license: *http://www.openstreetmap.org/copyright*)

2.2. CHARACTERIZATION OF THE TASK

The Task comprises the following elements (see also the map in Appendix 6 to the EMP):

Construction of new flood embankment

New flood embankment shall be built on the left bank of the Odra river (on the section from km 527.4 to km 532.2 of the river), which shall be located in at a greater distance from the river and shall comprise part of the terrains which hitherto were located outside the embanked area.

The basic technical parameters of the designed embankment are as follows:

- length of embankment – approx. 5.5 km;
- width of crest – 5.0 m (in passing places – 5.0-8.0 m);
- inclination of slopes – 1:3;
- height of embankment – 4.5-5.0 m;
- sealing of embankment body – anti-filtering membrane made from bentonite mat.

In order to maintain communication, the embankment shall be equipped with few exits and embankment crossings.

A technical - protecting lane was separated on both sides of the embankment.

Expansion of a section of existing flood embankment

A fragment of existing flood embankment on the left bank of the Odra river, adjacent from the east to the newly built embankment, shall be expanded (broadened) on the side opposite to the river. The reconstruction shall comprise approx. 0.4 km long section of the embankment (from km 526.9 to km 527.4 of the river).

Partial demolition of existing flood embankment

The existing flood embankment on the section covered by boundaries of the new embankment shall be partially demolished (two sections of total length of approx. 3.7 km: from km 528.15 to km 529.8 and from km 530.5 to km 532.15 of the river). The left section of existing embankment shall serve as a steering wheel for flood waters.

Expansion of road sections in the vicinity of new embankment

In connection with the construction of new embankment it is necessary to carry out a reconstruction of sections of existing roads in the vicinity of the embankment. The reconstruction shall comprise the following roads:

- provincial road No 138 Gubin – Połęcko, on the section approx. 0.35 km long;
- municipal road No 003407F (running from Czarnowo to provincial road No 138) and internal municipal roads within the Połęcko and Czarnowo precincts, on the section of total length approx. 3 km;
- internal municipal road within the Czarnowo precinct along with the construction of the embankment's service road on the extension of municipal road, on the section of total length approx. 0.7 km.

Reconstruction of melioration system

In connection with the construction of new embankment it is necessary to carry out a reconstruction of melioration system within and outside the embanked area, including:

- construction of embankment ditches and road ditches outside the embanked area, of total length approx. 5.8 km;

- construction of drainage ditches within the embanked area, of total length approx. 0.13 km;
- segmental liquidation of drainage ditches within the embanked area, of total length approx. 5.3 km.

Raising of the terrain outside the embanked area

The soil acquired from demolishing of existing embankment shall be used i.a. for the purposes of raising the terrain outside the embanked area. This activity shall comprise the area of approx. 9.3 ha, which shall be raised by approx. 0-0.6 m.

Reconstruction of overhead power line

In connection with the construction of the new embankment it is necessary to reconstruct (raise) the existing 110 kV power line on the section running above the planned embankment, of approx. length 260 m.

Performance of additional activities in the scope of environmental protection

Additional activities in the scope of environmental protection include i.a.:

- plantings of Pedunculate oaks (sites of protected beetle species);
- increase of the area of meadows with a Great burnet (habitat of protected butterfly species);
- installation of nest boxes for bats.

With respect to the environmental screening described in the *Environmental and Social Management Framework* for the OVFM Project, the proposed works are listed at item "ID 1_471_O" (ordinal number: 787) of List No. 1 in the Annex No. 2 to the *Master Plan for the Odra basin district* (2014).

3. INSTITUTIONAL, LEGAL AND ADMINISTRATIVE CONDITIONS

3.1. INSTITUTIONS INVOLVED IN TASK IMPLEMENTATION

Until December 31th, 2017 the Task investor was the Lubuskie Province, represented by the Lubuskie Board of Amelioration and Hydraulic Structures in Zielona Góra (LZMiUW). Since January 1st, 2018 the Task investor is the newly-established unit: State Water Holding Polish Waters, Regional Water Management Authority in Wrocław (PGWWP, RZGW in Wrocław).

Moreover, at the construction and operation stages, Task implementation may require involving public administration bodies on the central, regional and local level. For the purposes of the current coordination of the Project implementation, an organizational unit named Odra-Vistula Flood Management Project Coordination Unit was established.

3.2. BINDING NATIONAL LEGAL ACTS CONCERNING THE ENVIRONMENT

Under Polish law, the investment process in the scope concerning the environment is governed by about a dozen of acts and regulations. Appendix 3 presents a list of selected primary legal acts related to the abovementioned thematic scope and binding in the period of the works on the EMP. The number and content of the legal acts listed there may change when the national provisions in the scope of environmental protection are amended. In each case, the Contractor is obliged to observe all legal regulations binding in Poland throughout the Contract term.

3.3. THE EIA PROCEDURE IN POLAND

A description of the Environmental Impact Assessment procedure binding under Polish law is included in the *Environmental and Social Management Framework (ESMF)*, published i.a. on the website of the Odra-Vistula Flood Management Project Coordination Unit[1] and of the World Bank[2].

3.4. GUIDELINES OF THE WORLD BANK

The Task in question is co-financed by the World Bank and its implementation conditions in the scope of environmental protection comply with WB *Operational Policies* and *Bank Procedures* in the scope of environmental protection, including i.a. the following policies and procedures: *OP/BP 4.01* (concerning the Environmental Impact Assessment), *OP/BP 4.04* (concerning natural habitats) and *OP/BP 4.11* (concerning cultural resources).

The source texts of the abovementioned policies and procedures are included in a document entitled *The World Bank Operational Manual*[3] and their descriptions are presented i.a. in the *Environmental and Social Management Framework (ESMF)*.

[1] On the website: http://www.odrapcu.pl/popdow_dokumenty_RPZSiSS.html.

[2] On the website: http://documents.worldbank.org/curated/en/717671468333613779/Poland-Odra-Vistula-Flood-Management-Project-environmental-and-social-management-framework.

[3] On the website: https://policies.worldbank.org/sites/PPF3/Pages/Manuals/Operational%20Manual.aspx.

3.5. CURRENT STATUS OF EIA PROCEDURES FOR THE TASK

The following decisions in the scope of environmental protection have been obtained for the Task in question:

A) A decision on the environmental conditions

The undertaking concerning the construction of a new left-bank flood embankment of the Odra river Wężyska – Chlebowo belongs to group II, i.e. to undertakings which might have a potential significant impact on the environment and for which conducting an EIA may be required before issuing a decision on the environmental conditions.

In the course of the conducted proceedings concerning issuing a decision on the environmental conditions, the conducting body (Regional Director for Environmental Protection in Gorzów Wielkopolski) having analyzed the collected evidence, issued a decision determining lack of the necessity for conducting an Environmental Impact Assessment for the investment in question. The proceedings concerning issuing a decision on the environmental conditions were concluded by issuing a decision of the Regional Director for Environmental Protection in Gorzów Wielkopolski of February 3rd, 2015 on the environmental conditions (ref. No.: WOOŚ-II.4233.11.2014.NC – Appendix 4a to the EMP), stating lack of the necessity for conducting an Environmental Impact Assessment.

In August 2017, on the stage of public consultation for the draft EMP for Task *1B.6/2*, RDOŚ in Gorzów Wielkopolski revived proceedings in case of the environmental decision for the investment Wężyska-Chlebowo, due to the comments of an ecological organization *Klub Przyrodników* given in the letter dated August 11th, 2017 r. (see chapter 8.3). The proceedings in that case were concluded by issuing a decision of the Regional Director for Environmental Protection in Gorzów Wielkopolski of October 11th, 2017 on the environmental conditions (ref. No.: WZŚ-4233.2.2017.KS – Appendix 4c to the EMP), in which the conducting body refused to overrule the previous environmental decision of February 3rd, 2015, justifying that with the absence of new factual circumstances in the subject case.

B) Information on lack of objection to implementation of the undertaking

In connection with obtainment of a decision on the environmental conditions (of 2015) determining lack of the necessity for conducting an Environmental Impact Assessment for the investment, in accordance with applicable regulations LZMiUW in Zielona Góra (as the investor) declared to RDOŚ in Gorzów Wielkopolski an intention to perform activities in the area of Natura 2000 site. In response the Regional Director for Environmental Protection in Gorzów Wielkopolski issued a letter of November 18th, 2015 (ref. No.: WPN-I.670.327.2015.KH – Appendix 4b to the EMP), informing about lack of objection to implementation of the planned undertaking.

In the same letter the authority informed the investor about the need to obtain decisions exempting from provisions related to protection of species of plants, fungi or animals if the planned scope of works requires the performance of forbidden activities in respect to protected species.

Copies of the abovementioned administrative decisions and letters are shown in Appendix 4 to the EMP.

Regardless of the above, the Contractor is obliged to obtain all further administrative decisions if it becomes necessary during Task implementation.

4. DESCRIPTION OF ELEMENTS OF THE ENVIRONMENT IN THE SURROUNDINGS OF THE TASK

This chapter describes the status of elements of the environment in the surroundings of the Task on the basis of the information contained in the EIA Report (2010) with supplementations.

4.1. EARTH SURFACE AND LANDSCAPE

Considering the physical-geographical division of Poland, the planned investment is located within the Middle Odra Valley mesoregion, being part of macro-region Pradolina Warciańsko-Odrzańska (the so-called Berlińska).

The landscape surrounding the area of the planned Task is dominated by flat sculpture of the surface, which is typical for valleys of big lowland rivers. Terrains within the embanked area are covered by grass communities with a great amount of willow and poplar trees and bushes. Quite numerous moist land depressions are noticeable, as well as small water reservoirs on the Odra's floodplain. Terrains outside the embanked area are covered by agricultural land and forests (including the bigger dense forest complex in the eastern part of the terrain).

4.2. CLIMATE

In the area of the Task in question the climate is moderate, central European, "interim", with explicit advantage of oceanic climate features. Winters are usually mild, with frequent periods of thaw, whereas summers are relatively cold, with a bit higher number of rainfalls. Because of the location in the valley of a big lowland river, the local climate is distinguished by high inversion, lower temperatures and increased air humidity, as well as high frequency of radiation fogs.

4.3. ATMOSPHERIC AIR

Sanitary condition of air in the Task implementation area does not deviate significantly from the condition typical for the whole area of the Lubuskie Province. Due to the fact that the level of industrialisation is relatively lower than in other parts of the country, air condition in this part of Poland is classified as good. Values of admissible air pollution can be exceeded only locally, in connection with the so-called low emission on developed areas, nearby busy transportation routes etc.

4.4. SOILS AND GROUNDS

The terrain in question, located on the areas of actual and historic floodplains of Odra river, is dominated by soils such as alluvial soils, locally with participation of peat soils, peat and silty soils, etc.

4.5. SURFACE WATERS

Task implementation area is located in the drainage basin of the Odra river, in the Middle Odra river basin region and in the Przyodrze's balance drainage basin.

The Odra river is a quaternary watercourse, approx. 855 km long, with surface area of river basin on the territory of Poland amounting to approx. 118 000 km^2. The river has its mouth in

the Odrzańskie Mountains (in the Czech Republic) and it escapes to the Baltic Sea (through the Zalew Szczeciński).

On the section in question Odra flows westwards, along mild bents. The river bed is regulated by a spur development with characteristic for such a development morphological elements in the bed, such as deep water zone between heads of opposite spurs, spurs and also shallowing and deepening in spaces between spurs.

The Odra river is a controlled watercourse. The nearest water gauge is situated in the Połęcko water gauge profile, in km 530.3 of the Odra river. Design flows (Q_m) and control flows (Q_k) on the Odra section in question are:

Flow	Flow intensity Q [m^3/s]
$Q_m = Q_{1\%}$	2394
$Q_k = Q_{o,3\%}$	3354

Arrangements stemming from the *Odra River Basin District Management Plan* (ORBDMP)

Task implementation area is located in the Middle Odra water region, in the basin of three Bodies of Surface Water (BSW) named: *Odra od Czarnej Strugi do Nysy Łużyckiej* (PLRW6000211739), *Strumień od źródła do Raczy* (PLRW60001717346) and *Strumień od Raczy do Odry* (PLRW60001917349). Since the planned Task affects most of all the first of a/m BSWs, the characteristics presented below shall be limited only to that BSW.

The length of watercourses in the basin of *Odra od Czarnej Strugi do Nysy Łużyckiej* BSW amounts to 109 km, while the basin area – 186 km^2.

According to the binding *Odra River Basin District Management Plan*, the BSW in question belongs to type 21 – a great lowland river. *Odra od Czarnej Strugi do Nysy Łużyckiej* BSW is a strongly inverted water body the status of which was assessed as bad. The environmental objective for this BSW is the achievement of a good water status by obtaining a good ecological capacity and a good chemical status, as well as enabling the migration of aquatic organisms on the Odra river section within the BSW.

The BSW in question is threatened with a risk of failure to achieve the environmental objective according to the WFD, and therefore it received a derogation – a prolongation of deadline for the achievement of environmental objective (by 2027.). In respect of other planned investment, which consists in the reconstruction and modernization of river control infrastructure on the Odra river on the section from the city of Ścinawa to the mouth of Nysa Łużycka river, the said BSW also received a derogation under Article 4(7) of the WFD.

Moreover, the area of *Odra od Czarnej Strugi do Nysy Łużyckiej* BSW features detailed environmental objectives, set out due to the presence of protected areas, such as:

- areas sensitive to eutrophication caused by pollution coming from municipal sources (the entire area of Poland),
- areas intended for protection of natural habitats or species for which maintenance or improvement of water status is an important protection factor (Natura 2000 sites: Dolina Środkowej Odry [PLB080004], Nowosolska Dolina Odry [PLH080014] and Kargowskie Zakola Odry [PLH080012], as well as a route for migration of anadromous subject of

protection to the Natura 2000 site [TRANSIT RW6000211739], the objective of which is an ecological continuity according to needs of the salmon).

4.6. GROUNDWATER

Task implementation area is located within the hydrological unit No XIII3, the Wielkopolski Region, the Wielkopolsko-Śląski sub-region, where the elementary aquifer horizon is in quaternary deposits, the thickness of which amounts to tens of meters. Water table has in general a free character, within the Odra river bottom slightly tensed by Surface layer of alluvial loam deposits. The planned Task is located within the Main Groundwater Reservoir (GZWP) No 149 (Sandr Krosno – Gubin, a pore reservoir in quaternary deposits).

Task implementation area is located within the boundaries of the Body of Ground Water (BGW) code GW600068. The groundwater quantitative status and chemical status was assessed as good and the groundwater is not threatened with a risk of failure to achieve the environmental objectives.

4.7. ACOUSTIC CLIMATE

Within the Task implementation area the main sources of noise are communication structures – mainly provincial road No 138. The other roads are of local character. There is also a ferry crossing in Połęcko. The Task area does not border directly with any developed areas. The nearest villages are: Połęcko (approx. 400 m away, on the other side of Odra river), Chlebowo (approx.1.5 km in the south-west direction) and Czarnowo (approx. 2 km in south-east direction).

4.8. BIOTIC NATURE

4.8.1. Protected natural habitats and species

Natural habitats from Annex I to the *Habitats Directive*

5 types of natural habitats from Annex I to the *Habitats Directive* were determined in the area of the planned Task. They are:

- *3150* – Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation with *Nympheion* and *Potamion communities*. 2 patches of habitat were identified (in the form of water reservoirs), located on the outer side (i.e. outside the embanked area) of existing flood embankment, planned to be demolished.
- *6410 – Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*). 1 patch of habitat was identified, located on the eastern verge of the Task area, on outer side (i.e. outside the embanked area) of existing flood embankment, planned to be demolished.
- *9190* – Old acidophilous oak woods with *Quercus robur* on sandy plains (*Quercion robori-petraeae*). The habitat is in the form of several dispersed patches located outside of the embanked area. All patches are characterized by poor evolvement and representativeness.
- **91E0* – Riparian mixed forests of willow, poplar, alder and ash tree (*Salicetum albo-fragilis, Populetum albae, Alnenion glutinoso-incanae*) as well as alder forests on percolating mires. The habitat is in the form of a swathe of variable width, located on both sides of existing flood embankment, planned to be demolished. From the inner side (i.e.

within the embanked area) the habitat is represented by sub-type **91E0-1* – riparian willow forest, whereas from the outer side (i.e. outside the embanked area) it is represented by sub-type **91E0-3* – ash and alder forest.

- *91F0* – Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ficario-Ulmetum*). The habitat is located on the outer side (i.e. outside the embanked area) of existing flood embankment, planned to be demolished, in the vicinity of afore-mentioned ash and alder forest.

Information on the occurrence of natural habitats are also presented in the EIA Report, prepared in 2010 (with subsequent additions of that report). Location of the abovementioned natural habitats (based on data from EIA Report) is presented on the map in Appendix 8 to the EMP.

Protected species of plants

Occurrence of 2 protected plant species was determined in the area of the planned Task.

A list of protected plant species is presented in Table 1 in Appendix 5 to the EMP.

Protected species of animals

A total of at least 112 protected animal species was identified within the impact area of the planned Task, including:

- at least 10 species of invertebrates;
- 4 species of fish and lampreys;
- 12 species of amphibians and 4 species of reptiles;
- 74 species of birds;
- 6 species of flightless mammals;
- 2 species of bats.

A list of the above mentioned protected species of animals is presented in Tables 2-7 in Appendix 5 to the EMP.

4.8.2. Protected areas and objects

Natura 2000 sites

Task implementation area is located within the boundaries of two Natura 2000 sites, belonging to a category of so-called habitat areas (PLH) or so-called bird areas (PLB). These are:

1) "Dolina Środkowej Odry" (PLB080004)

   Protected site (with area of about 33700 ha) covers areas of the middle Odra valley (184 km of the river, including 50 km long boundary section) from Głogów to the area of Słubice. The area is especially important for the protection of breeding and migrating populations of 14 species of birds from Annex I of the Bird Directive (especially Black kite, Red kite and White-winged tern).

2) "Krośnieńska Dolina Odry" (PLH080028)

   Protected site (with area of about 19500 ha) covers areas of the middle Odra valley (95 km of the river, including 24 km long boundary section) from Cigacice to Urad. The area is especially important for 14 types of natural habitats from Annex I of the Habitat

Directive and for 16 species of animals from Annex II of the Habitat Directive (including: 8 species of insects, 6 species of fish and lampreys, 2 species of mammals).

Other protected areas and objects

Task implementation area is located within the boundaries of two protected areas, other than Natura 2000 sites. These are:

1) Krzesiński Landscape Park

   Protected site (with area of about 8500 ha) covers areas of the middle Odra valley (25 km of the river, including 10 km long boundary section) and the estuary section of Nysa Łużycka, having huge environmental and landscape values. Numerous stands of water-mud plants and breeding sites of rare bird species (including one of the biggest breeding places of the White stork in Poland – breeding colony in Kłopot village).

2) Protected Landscape Area "Krośnieńska Dolina Odry"

   Protected site (with area of about 12500 ha) covers parts of the middle Odra valley from Cigacice to Połęck (about 55 km of the river), with numerous ox-bowl lakes, riparian forests, flood meadows, and breeding places of fish and lampreys.

In addition, approx. 180 m south-east of the Task implementation area there is 1 more protected area: ecological site "Odra" (protecting a small wetland within the embanked area in the Odra valley).

4.9. CULTURAL MONUMENTS

Neither in the Task implementation area nor in its close proximity there are monuments, objects of high cultural value or cultural property. No presence of archaeological sites was identified here either.

4.10. POPULATION AND MATERIAL GOODS

Task implementation area is situated in the undeveloped, left-bank section of Odra river. It comprises agricultural lands and forests and the existing flood embankment. The nearest buildings are situated in the following villages:

- in Połęcko – more than 0.3 km away from existing embankment, on the opposite bank of the Odra river;
- in Chlebowo – approx. 1.3 km away from designed embankment;
- in Czarnowo – approx.1.5 km away from designed embankment;
- in Wężyska – approx. 2.7 km away from designed embankment.

Due to the fact that the Task is located outside developed areas, the terrain's technical infrastructure is poor.

There are main and field drainage systems (main watercourses and drainage ditches) and dirt agricultural roads.

Provincial road No 138 runs through the investment site, which crosses with existing and designed embankment. A municipal dirt road runs through the forest produce, directly at the designed embankment. Two boreholes used for gas extraction are located approx. 0.4 km south-east of the ferry crossing in Połęcko (outside the embanked area).

An overhead high-voltage power line 110 kV runs through the eastern verge of the investment site (above the existing and designed flood embankment).

5. SUMMARY OF THE ENVIRONMENTAL IMPACT ASSESSMENT

5.1. EARTH SURFACE AND LANDSCAPE

Earth surface

The impact exerted on the earth surface shall be related to temporary and permanent land occupation. At the construction phase, temporary exclusion of land from its previous use in the Task area shall be related i.a. to establishing a construction site backyard, staking yards and access roads – in total approx. 29 ha. After construction completion, the construction site backyard and the access roads shall be demolished and the land shall be reinstated.

Surface area of the most important permanent exclusion of land from its previous use connected with the Task implementation amounts to:

- designed flood embankment, with related facilities (crossings, exits, embankment protection lane, road lane and embankment ditches) – approx. 31 ha;
- demolition of existing embankment, with related facilities – approx. 10 ha;
- construction or liquidation of melioration facilities (drainage ditches) – approx. 0.6 ha;
- reconstruction of provisional road – approx. 0.6 ha;
- reconstruction of 110 kV power line – approx. 0.04 ha;
- storage of soil and change of landscaping – approx. 11 ha.

Additional information on this issue is presented in the *Land Acquisition and Resettlement Action Plan* (LA&RAP), which is available on the website of OVFM PCU (*www.odrapcu.pl*).

Landscape

Existing flood embankment of the Odra river is already permanently connected with existing landscape. Segmental demolition of the embankment body shall not significantly change the landscape, since in the area of demolished sections the embankment is surrounded by riparian forests (on both sides of the flood embankment). The newly built embankment, as an earth structure covered with grass vegetation, shall not significantly change the present landscape of opened areas on the river valley section in question. Within forest areas the newly constructed embankment shall remain a new landscape element, similar to the ones present in many other afforested areas in the Odra Valley (e.g. in a section between Cigacice and Pomorsko, and others).

Due to the fact that a part of the Task implementation area is placed within lands grown with arborescent plants (including afforested areas), as a result of the Task implementation it is necessary to remove significant quantity of trees and shrubs (including: approx. 1900 pieces of single trees, approx. 50 000 m^2 of shrubs and approx. 14 ha of forests). Logging of trees and shrubs shall be mainly performed within areas in the line of designed flood embankment and on the surface of liquidated sections of the old embankment. Due to the fact that the logging shall be done within generally highly afforested land, it shall neither form a significant environmental nor landscape loss, even in the local scale. It shall not be significant in terms of protected areas (listed in chapter 4.8.2), as those usually are extensive areas (from few to few tens of thousands ha) covering e.g. extensive afforested areas. Considering the fact that due to implementation of the Task a huge afforested area – located previously behind the left bank Odra embankment – will be included within the boundaries of flood plains, one shall expect

improvements to the ecological status of forest habitats, which would compensate with interest losses in forest resources, associated with the construction stage. Furthermore, numerous conditions to minimize environmental and landscape losses associated with the necessary logging of trees and shrubs were implemented in Appendix 1 to the EMP (see i.a. items 13-17, 25, 38, 43 and 44 in Appendix 1 to the EMP).

5.2. CLIMATE

Modification of climatic conditions

Implementation of the planned Task is not connected with the occurrence of any factors which could have an impact on the modification of climatic conditions, either regional or local.

Greenhouse gas emission

Exhaust fumes (including carbon dioxide, classified as a greenhouse gas) shall be emitted at the construction stage as a result of fuel combustion by vehicles and construction machinery. Moreover, demand for electrical energy shall occur in connection with using the construction site backyard, operating machines and devices and lighting the construction site (electrical energy consumption is related to greenhouse gas emission during its production in power plants).

At the operation stage the constructed structures shall not affect the emission of greenhouse gases (lack of demand for electrical energy, the scope of maintenance works similar to the present one).

Making the Task resistant to negative phenomena accompanying climate changes

The planned flood embankment was designed in accordance with binding hydraulic provisions, which take into account extreme phenomena taking place in the environment in connection with climate changes (this is governed by appropriate provisions concerning design, construction and operation of hydraulic structures). On the other hand, the Task implementation contributes to the improvement of flood protection on the terrains located outside of the embanked area in the Odra valley and thus contribute to limiting the effects of negative phenomena accompanying climate changes.

5.3. ATMOSPHERIC AIR

At the construction stage, unorganized emission of exhaust fumes generated in connection with operating vehicles and construction machinery shall be the source of pollution emission to atmospheric air. The primary pollutants emitted to the air due to diesel oil combustion in machine and car engines shall be: SO_2, NO_2, CO, aliphatic hydrocarbons, soot and dust rising during the passage of cars and during earthworks, especially in long rainless periods. Since the construction site covers a relatively spacious area and the vehicles and construction machinery emitting the pollution shall not work on its entire surface area simultaneously (the works shall be performed section by section, according to their progress), one should not expect a significant influence of the works on the air pollution status beyond the Task area. One should expect local, short-term, increased concentration values of the abovementioned pollutants in the neighborhood of operating vehicles and machines, which is a typical phenomenon of construction works and withdraws after completing the works.

At the operation stage, impact on the air in connection with road transportation (emission of pollutants to the air) shall be limited only to periodic passage of cars carrying technical supervision staff arriving to inspect the embankment and to carry out maintenance works. Impact of the traffic of vehicles using the reconstructed sections of provincial and municipal roads shall not deviate from the impact observed at present (the traffic volume is not foreseen to increase on the reconstructed road sections).

5.4. SOILS AND GROUNDS

The impact exerted on the soils at the construction stage shall be first and foremost related to direct transformations of the earth surface (excavations), permanent exclusion of a part of the land from its previous use, changes to earth structure on temporarily occupied land (access roads, construction site backyards) and the possibility of soil pollution as a result of a petroleum derivative leak caused by a breakdown. Construction of the new flood embankment shall require provision of soil, meeting detailed technical conditions for objects of this type. Selection of soil source locations shall be done by the Contractor of works, at keeping the conditions determined in item 11 of Appendix 1 to the EMP.

After completing the construction stage and performing correct soil reinstating, one should not expect significant changes in the soil-water conditions or soil productivity in the areas of temporary occupation.

5.5. SURFACE WATERS

Biological elements of water quality

Macrophytes, benthic macroinvertebrate fauna and phytobenthos

The works comprised by the Task consist mainly in demolishing part of the present flood embankment and building a new section of flood embankment (approx. 5 km long), located from tens to 600 m away from the present embankment. The basic works – the construction of new embankment, shall not be carried out in the vicinity of the river, hence no adverse impacts on the surface water quality elements in questions are foreseen. Potential adverse impacts can be connected with failures of equipment and intrusion of oil derivatives into the soil and water. Application of mitigation measures shall significantly limit the risk of such adverse impacts. It is likely that while demolishing the embankment sections the structure of riparian vegetation shall be disturbed on the sections where the embankment runs directly by the Odra river. Nevertheless, the above impact shall be minor, short-term and irrelevant. Permanent changes, connected with the liquidation of a small water body outside the embanked area (in the eastern part of the Task implementation area) and with the liquidation of few sections of drainage ditches, shall not have a significant impact on the surface water quality elements in question, due to the fact that the said impacts shall be only of local character and shall refer to small surfaces.

At the operation stage the undertaking shall not have impact on the surface water quality elements in question.

Fish fauna

Like in the previous sub-chapter.

Hydromorphological elements of water quality

Hydrological conditions

As a result of moving the flood embankment away from the banks of Odra river, approx. 150 ha of the river valley terrains shall be within range of its freshets. Such an area is so small that comparing to Surface of other part of the river valley it shall not have any impact on hydrological conditions of the Odra's BSW.

Morphological conditions

In respect of designed scope of works, no adverse impacts of the task on morphological conditions in the BSWs in question are foreseen. Moving the embankment away from the river shall have a positive impact on the formation of a broad bank zone with its micro-sculpture and possibility of the creation of mosaic of habitats on terrains within the embanked area.

Physical-chemical elements of water quality

Short-term and local impacts on particular physical-chemical elements of water quality are likely to occur at the construction stage, in connection with demolition of the embankment on the sections located close to the Odra river bed, which shall be manifested by increased concentration of suspension in pelagic zone. Due to small scale of the said impact, its influence on the environment shall be minor and it shall not pose a threat to the achievement of the environmental objective.

Assessment of the impact on the BSW covered by the Task and on the neighboring BSW

The impact of the planned works on the aquatic environment quality of *Odra od Czarnej Strugi do Nysy Łużyckiej* BSW, including the impact on its biological, physical-chemical and hydromorphological elements, shall not be significant. The planned Task shall not cause status deterioration of the BSW covered by the Task or the neighboring BSW and does not constitute a hazard to WFD environmental objectives.

5.6. GROUNDWATER

The influence on the groundwater status

The construction and demolition of flood embankments and the construction of anti-filtering membranes in the embankment body shall not change water regime in a significant way on adjacent terrains. The construction of shallow anti-filtering membranes nearby the embankment and suspended in permeable soils shall limit water filtration through the embankment body during freshets, but will not have any significant impact on groundwater movement underneath it. This manner of preventing the embankment from being washed out cannot change hydrogeological conditions in the ground within the embankment area. Expanding the embankments and accompanying structures, as well as their functioning, is not connected with production of wastes and does not cause emission of any harmful substances to the water and soil environment.

Assessment of the impact on the achievement of BGW environmental objectives

The planned Task shall not infringe WFD objectives, i.e. shall not cause deterioration of the groundwater quantitative status or chemical status within the boundaries of the body of ground water (BGW) covered by the Task.

5.7. ACOUSTIC CLIMATE

The anticipated scope of works shall be related to periodic noise emission at the construction stage. The sources of noise shall be the work of individual construction machines and the traffic of vehicles, including trucks. Given that the nearest residential buildings are situated over 300 m away from the works performance locations, as well as taking into account the influence of local vegetation (the presence of large terrains covered by trees, which shall constitute natural acoustic barriers limiting noise distribution to surrounding areas), one should assume that the noise level related to works performance shall not cause significant troublesomeness to the surroundings. This shall be favored by limiting the works performance time to daytime and by the Contractor's care for the technical state of machines and devices operating on the construction site.

After completing the construction stage, the use of constructed structures is not related to noise emission.

5.8. BIOTIC NATURE

5.8.1. Protected natural habitats and species

Natural habitats from Annex I to the *Habitats Directive*

Implementation of the planned Task shall cause an insignificant negative impact on 2 types of natural habitats occurring in its area. They are:

- *6410 – Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*). In relation to Task implementation, it is necessary to remove the entire patch of habitat which was recorded here. Due to scant surface area within the Task area such an impact shall not be significant nor in regional or in local scale.
- *9190* – Old acidophilous oak woods with *Quercus robur* on sandy plains (*Quercion roboripetraeae*). Implementation of the Task shall result in damaging of small surfaces of this habitat, on the terrains acquired for the construction of the new embankment and the accompanying infrastructure (roads, surrounding ditch, etc.). Due to small total area and poor quality of identified patches of habitat 9190, the losses caused by the task implementation should be considered insignificant.

This impact shall be of permanent nature (the liquidated habitat patches shall not be restored in those locations after works completion) and its joint influence shall be reduced i.a. owing to the planned planting of trees and owing to the activities aimed to increase surface area of meadow habitats (see items 48 and 50 in Appendix 1 to the EMP).

Protected species of plants

Occurrence of 2 protected plant species was determined in the area of the planned Task. At the construction stage, both of a/m species can be adversely affected by the planned Task, however such an impact shall not be significant. The population resources of the abovementioned protected species shall not be significantly reduced on a regional or local scale. The protected species determined here are locally frequent or relatively frequent and are not significantly endangered.

Protected species of animals

Invertebrates

The implementation of the planned Task might have a potential adverse impact on the population of two butterfly species of genus Large blues (*Maculinea*/*Phengaris*), living in fragments of existing flood embankment intended for liquidation. In order to counteract those impacts, a number of mitigation measures was designed, aiming to limit the losses in the resources of caterpillars and puppies of the butterflies a the embankment liquidation stage and enabling finding by the butterflies new sites (see items 41, 42, 43 and 50 in Appendix 1 to the EMP).

Fish and lampreys

The implementation of the planned Task shall cause a negative impact on a small fish population inhabiting the small water body outside the embanked area which is planned to be backfilled. The effects of this impact shall be limited through the application of adequate mitigation measures, concerning catching and moving the animals that inhabit the small water body before commencement of backfilling it. (see item 45 in Appendix 1 to the EMP).

Amphibians and reptiles

The planned construction works may pose a danger of trapping amphibians or reptiles in performed excavations. Vehicle and machine traffic is also a hazard as it may deteriorate the conditions of their living and breeding or pose a direct hazard to the life of their specimens. Potential pollution of the aquatic-soil environment may also be a danger to this group of animals. All the above impact is of potential nature and performing the works in accordance with the conditions determined in Appendix 1 to the EMP shall significantly reduce the risk of its occurrence.

Birds

The main forms of the negative impact of the planned Task on the bird fauna include the following:

- destruction of potential breeding grounds (groups of trees and shrubs as well as patches of herb growths) and feeding grounds – this impact shall not cause a significant influence on the populations of individual species due to the availability of other areas of similar nature in the surroundings of the construction site;
- increased penetration of the area by humans as well as intense vehicle and construction machine traffic (scaring and disturbing of specimens) – this impact is local, short-term and limited to the period and time of works performance.

Flightless mammals

In the case of species of small land mammals, the planned construction works pose hazards analogous to those mentioned in the case of amphibians and reptiles (see above); mitigation measures leading to a significant reduction of the unfavorable effects of this impact are analogical.

Bats

The hazards to this group of animals are analogous to those in the case of birds, but the bats living in tree hollows are additionally more vulnerable to death during tree felling. This type of hazards was minimized owing to appropriate mitigation measures described in Appendix 1 to the EMP.

5.8.2. Protected areas and objects

Natura 2000 sites

The implementation of the planned Task (both at the construction and operation stages) does not cause a negative impact on Natura 2000 sites (lack of a negative influence on Natura 2000 site integrity or network coherence).

In the scope relating to the impact on the integrity of Natura 2000 sites, the implementation of the Task performed in the manner described in this EMP (i.e. taking into account mitigation measures described in Appendix 1 to the EMP):

- does not threaten the occurrence of significant negative impact in relation to any type of natural habitats or any species of protected animals within the boundaries of Natura 2000 sites;
- does not affect significantly the preservation of ecological structures and processes necessary for the durability and proper functioning of natural habitats and species populations constituting objects of protection of Natura 2000 sites.

In the scope relating to the impact on the coherence of the Natura 2000 network, the implementation of the Task performed in the manner described in this EMP:

- does not threaten the occurrence of the decline in the completeness of natural habitat and species resources within the the Natura 2000 network, neither in the country nor the biogeographical region;
- does not cause any changes that may result in a deterioration of functional connectivity between Natura 2000 sites.

Other protected areas and objects

The implementation of the planned Task (both at the construction and operation stages) does not cause a significant negative impact on other protected areas and objects (no significant negative impacts in relation to the objectives and principles of protection of the areas in question established in the regulations applicable to them).

5.9. CULTURAL MONUMENTS

Implementation of the planned Task – at the construction and operation stage – shall not adversely affect heritage sites, archaeological sites and other objects of cultural value.

5.10. POPULATION AND MATERIAL GOODS

In connection with implementation of the planned Task, it shall be necessary to introduce i.a. the following changes to the existing infrastructural objects: liquidation of two sections of existing flood embankment on the left bank of the Odra river (this embankment shall be replaced by the new constructed flood embankment, located at a greater distance from the river), reconstruction of the section of a high voltage 110 kV power line, reconstruction of melioration system within and outside the embanked area and reconstruction of sections of provincial and municipal roads.

The issues related to land purchase or changing land use, as well as possible problems connected with the influence of implementation of the Task on temporary occupation areas and their surroundings, are discussed in detail in the *Land Acquisition and Resettlement Action Plan* (LA&RAP) for the Task in question.

The potential negative influence on material goods at the construction stage is related to using the existing road network as access roads to the construction site. Introduction of mitigation measures in this scope shall enable limiting this impact category.

5.11. HUMAN HEALTH AND SAFETY

The implementation of the planned Task may be related to the following impact on human health and safety:

- Increase of air pollution emission

  At the construction stage, the pollution level of atmospheric air may locally and periodically increase in connection with using vehicles and construction machinery (emission of exhaust fumes). Since this impact is dispersed, local and not very intense, and owing to the distance between the construction site and the nearest buildings, the impact should not cause significant effects in relation to the health of the Contractor's staff or residents from the vicinity (see also chapter 5.3).

- Increased noise emission

  At the construction stage, the noise level related to performing the works and using vehicles and construction machinery may locally and periodically increase. Taking into account the circumstances discussed in chapter 5.7, this phenomenon should not cause significant effects in relation to the health of the Contractor's staff or residents from the vicinity.

- Petroleum derivative pollution hazard

  Bad organization of works or failure to observe appropriate standards could lead to water and soil pollution with fuels at the construction stage, which could constitute a direct or indirect hazard to the health of the Contractor's staff or residents from the vicinity. To prevent such hazards, Appendix 1 to the EMP introduces a number of conditions aimed at limiting the risk of petroleum derivative pollution at the construction stage (see also chapter 6.11).

- The possibility of a flood embankment breakdown or catastrophe at the operation stage

  The issues related to the potential influence of a flood embankment breakdown or catastrophe on the health and safety of the residents of towns and villages located outside the embanked area are discussed in chapter 5.12.

5.12. SPECIAL HAZARDS (CRITICAL AND EMERGENCY SITUATIONS)

The implementation of the planned Task is related to the possibility of occurrence of the following critical or emergency situations which could cause special environmental hazards:

- Uncontrolled emission (leak) of petroleum derivatives

  An emergency situation may take place at the construction stage, resulting in a leak of petroleum derivatives from vehicles, construction machinery, tanks etc. polluting surface waters or the earth surface (including soil). The risk and effects of this type of events are limited by appropriate organization of the construction site backyard, care for the appropriate technical condition of vehicles, machines and equipment used on the construction site as well as, if those events do occur, strict observance of procedures concerning emergency and critical situations, described in Appendix 1 to the EMP.

- Fire or explosion of flammable substances

  An emergency situation may take place at the construction stage in relation to a fire (e.g. as a result of an equipment breakdown, staff negligence, an explosion of flammable substances, a lightning strike etc.). The risk and effects of this type of events are limited by strict observance of OSH provisions, appropriate organization of the construction site backyard, care for the appropriate technical condition of vehicles, machines and equipment used on the construction site as well as, if those events do occur, strict observance of procedures concerning emergency and critical situations, described in Appendix 1 to the EMP.

- Finding unexploded bombs or unfired rounds

  Hazardous materials of military origin, such as unexploded bombs or unfired rounds, may be found at the construction stage. Potential hazards related to this type of situations are limited by pre-emptive sapper examination of the construction site before commencing the works, ensuring sapper supervision over the works on a running basis as well as, if such materials are found, strict observance of procedures concerning situations related to the presence of unexploded bombs or unfired rounds, described in Appendix 1 to the EMP.

- Sudden freshets, flood

  A sudden water level increase in the river on the construction site or a flood may take place at the construction stage, threatening the staff's health and life and causing material losses on the construction site. In order to minimize the possible effects of this type of events, the Contractor shall take into account the flooding risk when organizing the construction site backyard and the remaining part of the works area as well as develop a *Construction site flood management plan* and strictly observe the conditions contained in it.

- The possibility of a flood embankment breakdown at the operation stage

  The operation of a flood embankment is related to a potential risk of water spillway above the embankment crest or an embankment break, as a result of occurrence of a strong and long-term freshet of the river water causing long-term flooding of terrains within the embanked area or an exceptional increase of water level on terrains within the embanked area. The occurrence risk of this type of catastrophes is limited by specific design and technical solutions applied in the planned embankment, in accordance with applicable guidelines for the designed hydraulic structures (i.a. specified dimensions of a flood embankment, proper selection of material for the embankment construction, application of required membranes, works technology considering the requirement of satisfactory compaction of the embankment, etc.). Given the abovementioned protections and the fact that the embankment design takes into account the hydrological data characterizing the scale of flows in the rivers in this area during calculation periods, one can state that the discussed hazard is very much of a potential nature and its probability of occurrence is slight.

6. DESCRIPTION OF MITIGATION MEASURES

In order to limit the negative environmental impact of the planned Task, Appendix 1 to the EMP defines a set of mitigation measures binding on the Task Contractor. Those measures were developed on the basis of the conditions contained in the binding administrative decisions in the scope of environmental protection issued for the Task, which were supplemented with additional conditions determined at the EMP preparation stage. A list of main categories of the mitigation measures is presented below, dividing them into the environment components discussed in chapters 4 and 5 of the EMP.

6.1. EARTH SURFACE AND LANDSCAPE

The primary forms of the negative impact of the planned Task on earth surface and landscape are presented in chapter 5.1.

To limit that impact, Appendix 1 to the EMP introduces mitigation measures aimed i.a. at:

– limiting the influence related to land occupations on the status of earth surface and landscape (item 3, 4, 6, 7, 8, 47, 58 in Appendix 1 to the EMP);
– limiting the landscape value losses related to tree and shrub felling (item 15, 48, 51).

6.2. CLIMATE

Due to lack of a negative impact on the climate (see the description in chapter 5.2), it was considered as unnecessary to introduce mitigation measures.

6.3. ATMOSPHERIC AIR

The primary forms of the negative impact of the planned Task on atmospheric air are presented in chapter 5.3.

To limit that impact, Appendix 1 to the EMP introduces mitigation measures aimed i.a. at:

– limiting the electrical energy consumption at the works stage (item 73);
– limiting air pollution with exhaust fumes, dusts etc. (item 74, 75, 76, 77).

6.4. SOILS AND GROUNDS

The primary forms of the negative impact of the planned Task on soils and grounds are presented in chapter 5.4.

To limit that impact, Appendix 1 to the EMP introduces mitigation measures aimed i.a. at:

– limiting the soil resource losses related to land occupations (item 3, 4, 5, 8, 47, 55, 58);
– limiting the topsoil layer loss (item 12, 47);
– ensuring an appropriate chemical quality of grounds in the area of works (item 9, 11);
– limiting the ground pollution risk at the works stage (item 5, 6, 7, 54, 55, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 78, 79, 80, 81).

6.5. SURFACE WATERS

The primary forms of the negative impact of the planned Task on surface waters are presented in chapter 5.5.

To limit that impact, Appendix 1 to the EMP introduces mitigation measures aimed i.a. at:

– limiting the water pollution risk at the works stage (item 5, 6, 7, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 78, 79, 80, 81);
– ensuring an appropriate chemical quality of grounds in the area of works (item 9, 11);
– limiting the negative influence on the biological elements of water quality (item 45).

6.6. GROUNDWATER

Due to lack of a significant negative impact on groundwater (see the description in chapter 5.6), it was considered as unnecessary to introduce mitigation measures. Groundwater protection is indirectly related to a part of the mitigation measures listed in chapter 6.5 concerning protection of surface waters against pollution.

6.7. ACOUSTIC CLIMATE

The primary forms of the negative impact of the planned Task on atmospheric air are presented in chapter 5.7.

To limit that impact, Appendix 1 to the EMP introduces mitigation measures aimed at:

– limiting the noise generated at the works stage (item 69, 70, 71, 72, 73).

6.8. BIOTIC NATURE

The primary forms of the negative impact of the planned Task on biotic nature resources are presented in chapter 5.8.

To limit that impact, Appendix 1 to the EMP introduces mitigation measures aimed i.a. at:

– limiting the natural resource losses related to land occupations (item 4, 5, 6, 7, 8, 12, 24, 44, 47, 52, 55, 57, 58);
– limiting the natural resource losses related to the felling of trees and shrubs (item 13, 14, 15, 16, 17, 48);
– eliminating or limiting the natural resource losses related to accidental deaths of specimens of protected species on the land (item 28, 29, 30, 31, 32, 35);
– eliminating or limiting the natural resource losses related to accidental deaths of specimens of protected species in the aquatic environment (item 38, 45);
– eliminating or limiting the influence of works implementation on the breeding results of protected animal species (item 13, 14, 15, 19, 24, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44);
– eliminating or limiting the influence of works implementation on the migration conditions of protected animal species (item 31, 32);
– limiting the influence of works implementation on the status of natural habitats and habitats of protected species (item 24, 25, 27, 35, 36, 37, 48, 49, 50, 51, 52);
– limiting the influence of works implementation on the status of trees and shrubs not anticipated for felling (item 18, 19, 20, 21, 22, 23, 35);

– eliminating or limiting the influence of works implementation on the spreading of invasive plant species of foreign origin (item 33).

6.9. CULTURAL MONUMENTS

In order to prevent a negative influence of Task implementation on cultural resources, (see the description in chapter 5.9), Appendix 1 to the EMP introduces three mitigation measures aimed at ensuring the arrangement of works performance conditions with a relevant heritage conservator and implementing appropriate procedures in the case of discovering movable monuments or archaeological sites at the works stage (item 92, 93, 94).

6.10. POPULATION AND MATERIAL GOODS

In accordance with the information provided in chapter 5.10, the issues related to land purchase or changing land use, as well as possible problems connected with the influence of the implementation of Task on temporary occupation areas and their surroundings, are discussed in detail in the *Land Acquisition and Resettlement Action Plan* (LA&RAP) for the Task in question. The impact related to using the existing road network as access roads to the construction site shall be limited by implementing the conditions of access road use, described in item 3 and 4 of Appendix 1 to the EMP.

6.11. HUMAN HEALTH AND SAFETY

The primary forms of the negative impact of the planned Task on human health and safety are presented in chapters 5.11 and 5.12.

To limit that impact, Appendix 1 to the EMP introduces mitigation measures aimed i.a. at:

– limiting the influence of the planned Task on the sanitary status of atmospheric air (listed in chapter 6.3);
– limiting the influence of the planned Task on the acoustic climate (listed in chapter 6.7);
– eliminating or limiting the risk of chemical pollution of water and ground at the works stage (listed in chapters 6.4 and 6.5);
– ensuring safety on the construction site and in its surroundings (item 83, 84, 85, 86, 87, 88);
– ensuring appropriate response in situations of special hazards (item 89, 90, 91).

6.12. SPECIAL HAZARDS (CRITICAL AND EMERGENCY SITUATIONS)

The primary types of special hazards (with characteristics of a critical situation) that may potentially occur in connection with Task implementation are presented in chapter 5.12.

To limit the possible effects of this type of events, Appendix 1 to the EMP introduces mitigation measures aimed i.a. at:

– eliminating or limiting the risk of chemical pollution of water and ground at the works stage (listed in chapters 6.4 and 6.5);
– ensuring safety on the construction site and in its surroundings (item 83, 84, 85, 87);

– ensuring appropriate response in situations of special hazards (item 89, 90, 91).

6.13. REQUIREMENTS IN THE SCOPE OF DEVELOPMENT AND IMPLEMENTATION OF THE CONTRACTOR'S SELECTED DOCUMENTS

In order to ensure appropriate organization of works performance and implement correctly the conditions determined in Appendix 1 and 2 to the Environmental Management Plan, the Contractor is obliged to develop the following documents, obtain the Engineer's approval for them and then implement them:

1) A construction site organization design, which should include i.a. the following elements:
   - backyard location;
   - backyard management;
   - backyard protection;
   - access roads;
   - environmental protection in the backyard.
2) A waste management plan, which should include i.a. the following elements:
   - found and anticipated types and quantities of waste;
   - manners of preventing the negative environmental impact of the waste;
   - the waste management manner taking into account collection, transportation, recovery and treatment;
   - the type of generated waste and the manner of its storage.
3) Quality assurance plans for individual categories of works and other types of the Contractor's measures (as needed, including as required by the Engineer), which should contain i.a.:
   - information about the planned organization of performing a given category of works or measures;
   - information about the conditions of implementing a given category of works or measures contained in the EMP;
   - information about other possible manners of preventing the negative environmental impact of a given category of works.
4) A construction site flood management plan, which should include i.a. the following elements:
   - monitoring of the hydrological-meteorological situation;
   - conditions of passing freshet flows in the works performance period;
   - rules of the Contractor's staff work during the flooding risk period;
   - primary obligations of key members of the company flood management team;
   - a list of officers during the flooding risk period;
   - a list of equipment and means of transport needed to conduct rescue actions.
5) A Safety and Health Protection Plan, which should include i.a. the following elements:
   - indication of plot/site development elements which could pose a hazard to human safety and health;

- information about the hazards anticipated during the implementation of construction works, specifying the scale, types, place and time of the hazards, including the relation to the natural environment;
- information about designating and marking the construction works implementation location in a manner appropriate for the hazard type;
- information about the manner of instructing the employees before commencing the implementation of particularly dangerous works;
- specification of the manner of storing and moving hazardous materials, products, substances and preparations on the construction site;
- indication of technical and organizational means preventing the dangers stemming from the performance of construction works in zones of special hazard to health or in their neighborhood, including means ensuring safe and effective communication enabling quick evacuation in case of a fire, breakdown or another hazard;
- indication of the storage location of construction documentation and documents necessary for correct operation of machines and other technical devices.

When developing the abovementioned documents, the Contractor shall take into account relevant Operational Policies and Bank Procedures of the World Bank concerning health protection, environmental protection and safety rules.

6.14. MEASURES AT THE OPERATION STAGE

A part of the mitigation measures specified in the EMP goes beyond the construction stage and shall also be implemented during operation of constructed structures.
Those measures include i.a.:

– maintenance of tree plantings on a running basis
(item 48 in Appendix 1 to the EMP);
– performance of maintenance and possible repairs of boxes for bats on a running basis
(in relation to the content of item 49 in Appendix 1 to the EMP);
– ensuring appropriate rules for use of terrains within the embanked area and other terrains in close proximity of the flood embankment
(item 50, 51 in appendix 1 to the EMP).

In the Defect Notification Period, the Contractor is the party responsible for implementation of the abovementioned measures. After Contract completion, the Investor is responsible for implementation of all of the abovementioned measures.

7. DESCRIPTION OF MONITORING MEASURES

Appendix 2 to the EMP defines a set of monitoring measures binding on the Task Contractor. Those measures were developed on the basis of the conditions contained in the binding administrative decisions issued for the Task, which were supplemented with additional conditions determined at the EMP preparation stage.

The monitoring measures listed in Appendix 2 to the EMP belong to one category:

- monitoring of implementation of the mitigation measures listed in Appendix 1 to the EMP (item 1-102 in Appendix 2 to the EMP).

8. PUBLIC CONSULTATIONS

8.1. PUBLIC CONSULTATIONS FOR THE *ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK* FOR THE OVFMP (2015)

The draft of the document entitled *Environmental and Social Management Framework* (*ESMF*) for the OVFM Project (including Component 2, which covers the present Task) was subject to the procedure of public consultations conducted in accordance with *OP 4.01* Operational Policy of the World Bank. Their aim was to enable the public to familiarize itself with the content of that document and ensure the possibility of submitting remarks, questions and motions concerning the content.

The documentation of the public consultation process for the abovementioned document is available on the website of the Odra-Vistula Flood Management Project Coordination Unit[1].

8.2. PUBLIC CONSULTATIONS AT THE STAGE OF ENVIRONMENTAL PROCEDURES FOR THE TASK (2014-2015)

At the stage of issuing the decision on the environmental conditions for the undertaking consisting in the construction of the left-bank flood embankment of the Odra river "Wężyska – Chlebowo" (see chapter 3.5), the consultations with the public's participation were conducted by a relevant local body issuing the decision, i.e. the Regional Director for Environmental Protection in Gorzów Wielkopolski.

In an announcement of November 18th, 2014 (ref. No.: WOOŚ-II.4233.11.2014.NC), the Regional Director for Environmental Protection in Gorzów Wielkopolski published information on the initiation of proceedings concerning issuing a decision on the environmental conditions for the planned investment. That announcement was placed on the notice board and the website of the Regional Directorate for Environmental Protection in Gorzów Wielkopolski and on the notice board of the Town Hall of Krosno Odrzańskie, Office of Maszewo Municipality and Office of Gubin Municipality, and the information about it was entered in the publicly available data list.

Within the deadline provided by the law, the conducting body received no remarks or motions related to the undertaking in question.

On February 3rd 2015, the Regional Director for Environmental Protection in Gorzów Wielkopolski issued a decision on the environmental conditions for the construction of the flood embankment of the Odra river "Wężyska – Chlebowo" (ref. No.: WOOŚ-II.4233.11.2014.NC – Appendix 4a to the EMP). That decision was published via an announcement.

8.3. PUBLIC CONSULTATIONS FOR THE EMP (2017)

The draft of the present document is subject to the public consultation procedure conducted in accordance with the Operational Policies of the World Bank (*OP 4.01*).

After preparing the draft EMP and obtaining – upon its basis – the World Bank's acceptance (so-called "OK") for commencing the publication procedure, on the 11th of August 2017 a digital version of the draft EMP was published at publicly accessible websites: website

[1] On the website: *http://www.odrapcu.pl/popdow_dokumenty_RPZSiSS.html*.

of the Lubuskie Board of Amelioration and Hydraulic Structures (LZMiUW) in Zielona Góra – *http://melioracja.lubuskie.pl* (Fig. 2) and website of the OVFMP Project Coordination Unit – *http://www.odrapcu.pl* (Fig. 3), and a hard copy was made available in the office of the LZMiUW in Zielona Góra (Zielona Góra, 2B. Ptasia Street) and in the office of the District Starosty in Krosno Odrzańskie (Krosno Odrzańskie, 10B. Piastów Street).

Detailed information on the access to this document and on the possibility of informing conclusions and comments (along with indication of detailed contact data: e-mail address, snail mail addresses, where the project document was made accessible, office opening hours) were publicly informed in the announcement (Fig. 4) placed in the following locations:

- websites of the LZMiUW in Zielona Góra – *http://melioracja.lubuskie.pl* (Fig. 5), websites of the OVFM PCU – *http://www.odrapcu.pl* (Fig. 3) and websites of the District Starosty in Krosno Odrzańskie – *http://www.powiatkrosnienski.pl* (Fig. 6);
- in local press – local supplement to *Gazeta Wyborcza* (Fig. 7) and local supplement to *Gazeta Tygodniowa* (Fig. 8);
- on information boards in: LZMiUW in Zielona Góra, District Starosty in Krosno Odrzańskie and localities of Chlebowo and Czarnowo.

The aforementioned announcement also included information on the possibility of taking part in a meeting and in a discussion opened for interested people, organizations and institutions, which was planned for the 29th of August 2017 (including information on a place, date and time of the meeting).

The publication of the draft EMP, officially launched on **the 14th of August 2017,** was completed after 10 working days, i.e. on **the 28th of August 2017**. During the publication period the visits of persons familiarizing themselves with the available draft EMP were not observed.

On the 14th of August 2017 LZMiUW in Zielona Góra obtained comments of an ecological organization (*Klub Przyrodników* [*Naturalists' Club*], Świebodzin, ul. 1 Maja 22 – letter dated 11th of August 2017) on an environmental impact assessment procedure and on contents of conditions determined under the environmental decision for the subject Task. The same remarks were also provided by the ecological organization to the RDOŚ in Gorzów Wielkopolski.

On the 29th of August 2017 LZMiUW in Zielona Góra obtained as a CC a decision of the Regional Director for Environmental Protection in Gorzów Wielkopolski of the 25th of August 2017 on the revival of proceedings in case of the environmental decision for the investment Wężyska-Chlebowo, due to the aforementioned letter of the *Klub Przyrodników*.

After completion of the publication, an opened meeting for interested people, organizations and institutions was held on the **29th of August 2017** at 5:00 p.m. in the office of the District Starosty in Krosno Odrzańskie, where a public presentation of and discussion on the draft EMP were organized (Fig. 9 and 10). Six people participated in the meeting, including: the representatives of local community, PCU, LZMiUW in Zielona Góra, and the Consultant. The meeting lasted for about 1 hour and the following questions were asked:

1) *Why the authors of remarks to the draft EMP for Task 1B.6/2 did not attend to today's opened meeting on the draft EMP?*

   It was answered that the meeting's organizer does not know the reason for the authors' absence on today's meeting. Contents of remarks provided to the draft EMP clearly prove that they knew contents of the announcement of public hearings for the draft EMP, thus

they needed to know the date and the venue of the planned opened meeting in the subject case.

2) *What was the reason for planning the removal of water pond at the existing flood embankment within the framework of Task 1B.6/2?*

   It was answered that the necessary removal of that water pond results from the fact that it is a spot of hydraulic breaks underneath the existing embankment, and leaving it would seriously affect the stability of flood embankment, and it would therefore form a risk for the areas behind the embankment in case of the uncontrolled failure of the flood embankment.

3) *Why is the existing flood embankment demolished partially and not within its entire length?*

   It was clarified that the necessity of leaving parts of the existing flood embankment without demolition works results from the presence of protected elements of the environment within parts of the existing embankment. An obligation of leaving the selected parts of the embankment undemolished was entered to the environmental decision, and it was therefore included in Appendix 1 to the EMP.

4) *Why does the construction technology for the new flood embankment includes the development of embankment using spoil delivered from an external source instead of using spoil forming the existing flood embankment to be demolished?*

   It was clarified that the necessity of delivering new spoil for construction of the new flood embankment firstly results from the planned construction schedule for the embankment (a new flood embankment is to be constructed first in the area protected by the old embankment, and just then – on the second stage – unnecessary parts of the old embankment shall be demolished), and secondly – from the necessary assurance of proper spoil quality, which needs to meet the currently binding standard for flood structures (earth forming the old embankment not always meets the valid standards).

At the meeting its attendees also asked questions concerning the matters connected with resettlement and compensation. The persons running the meeting provided short explanations regarding the above issues, noting that such issues had been the subject of separate public consultation related to the *Land Acquisition and Resettlement Action Plan* (*LA&RAP*).

In addition to the answers to the aforementioned questions, during the meeting the lecturer read out comments included in the letter of the *Klub Przyrodników* dated 11th of August 2017 (mentioned above). In the commentary the lecturer informed that the Employer submitted the comments to the designers, with a request to analyze thereof and to present a response which would be presented to the *Klub Przyrodników*. Furthermore, the speaker informed that due to the aforementioned letter of the *Klub Przyrodników*, RDOŚ in Gorzów Wielkopolski issued a decision of the 25th of August 2017 (in appendix No. 3 to this report) on the revival of proceeding in case of the environmental decision for the subject Task, in the scope associated with the destruction of a patch of natural habitat 6410 (*Molinia* meadows). By the date of the meeting the proceeding has not been completed yet.

The meeting was closed after answers to all questions were provided.

On the 30th of August 2017 LZMiUW in Zielona Góra received a note of the Regional Director for Environmental Protection in Gorzów Wielkopolski dated 24th of August 2017 containing two remarks to the draft EMP for *Task 1B.6/2*. Those remarks were the same as the re-

marks given in the letter of the *Klub Przyrodników* dated 11th of August 2017, in the scope of redeveloping the water ponds and providing details for conditions associated with tree planting.

On the 11th of September 2017 LZMiUW in Zielona Góra received a note of the Regional Director for Environmental Protection in Gorzów Wielkopolski dated 8th of September 2017 containing information that the RDOŚ in Gorzów Wielkopolski withdraws remarks to the draft EMP, as provided in the note dated 24th of August 2017.

On the 19th of September 2017 LZMiUW in Zielona Góra received a CC of a decision of the Regional Director for Environmental Protection in Gorzów Wielkopolski dated 15th of September 2017 informing the parties on the collection of all proves in the revived procedure in case of a decision on the environmental conditions for the investment Wężyska-Chlebowo (due to the decision of the RDOŚ in Gorzów Wielkopolski dated 25th of August 2017).

On the 13th of October 2017 LZMiUW in Zielona Góra received a CC of a decision of the Regional Director for Environmental Protection in Gorzów Wielkopolski dated 11th of October 2017 on the environmental conditions for the investment "Wężyska-Chlebowo" (constituting an Appendix 4c to the EMP), issued due to the decision of the RDOŚ in Gorzów Wielkopolski dated 25th of August 2017. In that decision the RDOŚ in Gorzów Wielkopolski refused to overrule the previous environmental decision (i.e. the decision of the RDOŚ in Gorzów Wielkopolski dated 3rd of February 2015, constituting an Appendix 4a to the EMP), justifying that with the absence of new factual circumstances in the subject case.

On the 26th of October 2017 in Zielona Góra (in the office of Consultant of the Lubuskie Board of Amelioration and Hydraulic Structures in Zielona Góra) there was a meeting on remarks filed by the *Klub Przyrodników* on the stage of public hearings for the draft EMP for *Task 1B.6/2*. Representatives of the Investor, the Consultant of the Lubuskie Board of Amelioration and Hydraulic Structures in Zielona Góra, the Consultant of the Regional Water Management Authority in Wrocław (as the author of the draft EMP) and of the *Klub Przyrodników* attended the meeting. Environmental issues given in the letter of the *Klub Przyrodników* were discussed during the meeting and the possibility of solving them on the current procedural stage associated with preparation of *Task 1B.6/2* for implementation was analysed. As a result of the discussion it was established that the implementation conditions for the investment – as determined in Appendix 1 to the draft EMP – shall be updated with detailed provisions related to: (i) conditions for tree planting [item 48 of Appendix 1 to the EMP)]; and (ii) conditions for reinstatement of water ponds [item 52 of Appendix 1 to the EMP)]. The representative of the *Klub Przyrodników* stated that in case of implementing the aforementioned establishments, *Klub Przyrodników* would not raise other remarks to contents of the draft EMP for *Task 1B.6/2*.

Considering the character of aforementioned remarks and questions asked during the publication of the draft EMP for *Task 1B.6/2*, and considering the conclusion from the meeting with the representative of the *Klub Przyrodników* on the 26th of October 2017, the authors of the EMP stated that its contents need to be supplemented with information on additional procedural actions implemented by the RDOŚ in Gorzów Wielkopolski from August to October 2017, and on conditions agreed during the aforementioned meeting with the representative of the *Klub Przyrodników* (update of mitigation measures in item 48 and new mitigation measure in item 52 of Appendix 1 to the EMP). Furthermore, taking into account the fact that the Contractor selection procedure for the *Task 1B.6/2* shall be implemented in 2018, i.e. in a new

organizational system for water management in Poland, contents of the EMP require adaptation to the new organizational system valid from the 1st of January 2018. After supplementation of the document with a memo on the publication procedure and the implementation of the aforementioned corrections, the final EMP was submitted to the World Bank in order to obtain the final acceptance clause, i.e. “no objection”.

Figure 2. Digital version of the draft EMP
published at the website of the LZMiUW in Zielona Góra.

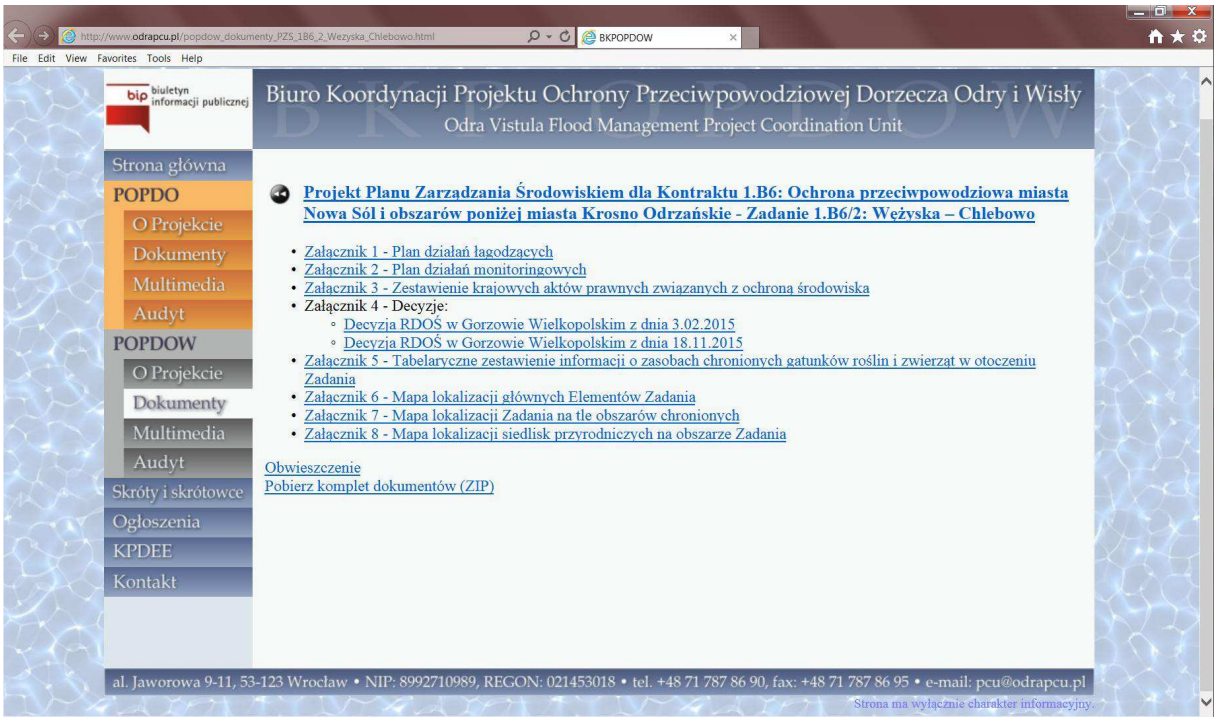

Figure 3. Digital version of the draft EMP
published at the website of the OVFMP Project Coordination Unit.

OBWIESZCZENIE

Zgodnie z wymaganiami Banku Światowego (polityka operacyjna OP 4.01), instytucji współfinansującej realizację *Projektu ochrony przeciwpowodziowej w dorzeczu Odry i Wisły*,

podaje się do publicznej wiadomości, co następuje:

Lubuski Zarząd Melioracji i Urządzeń Wodnych w Zielonej Górze (LZMiUW) udostępnił do wglądu wszystkim zainteresowanym osobom i instytucjom **PROJEKT PLANU ZARZĄDZANIA ŚRODOWISKIEM** dla Komponentu *1 – Ochrona przed powodzią Środkowej i Dolnej Odry*, Podkomponent *1B – Ochrona przed powodzią na Środkowej i Dolnej Odrze*, Kontrakt *1B.6 – Ochrona przeciwpowodziowa miasta Nowa Sól i obszarów poniżej miasta Krosno Odrzańskie* , **Zadanie *1B.6/2 – Wężyska-Chlebowo*** (nazywany dalej PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM).

Każdy zainteresowany może:

A) zapoznać się z PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM od dnia 14 sierpnia 2017 r. do dnia 28 sierpnia 2017 r włącznie (10 dni roboczych, z wyłączeniem dnia 15 sierpnia 2017 r.), w siedzibie:

- Lubuskiego Zarządu Melioracji i Urządzeń Wodnych w Zielonej Górze, ul. Ptasia 2B, 65-514 Zielona Góra, w dniach roboczych od godziny 8:30 do 14:30;
- Starostwa Powiatowego w Krośnie Odrzańskim, ul. Piastów 10B, 66-600 Krosno Odrzańskie, w dniach roboczych od godziny 8:30 do 14:30.

lub poprzez stronę internetową:

- Lubuskiego Zarządu Melioracji i Urządzeń Wodnych w Zielonej Górze pod adresem: melioracja.lubuskie.pl (w zakładce Inwestycje)
- Starostwa Powiatowego w Krośnie Odrzańskim, pod adresem: www.powiatkrosnienski.pl
- Biura Koordynacji Projektu, pod adresem: www.odrapcu.pl

B) składać uwagi i wnioski odnośnie PROJEKTU PLANU ZARZĄDZANIA ŚRODOWISKIEM w formie pisemnej oraz ustnej do protokołu pod ww. adresami lub w formie elektronicznej na adres e-mail: a.ziarek@melioracja.lubuskie.pl w dniach roboczych w okresie od 14 sierpnia 2017 r. do 28 sierpnia 2017 r. (włącznie).

Instytucją właściwą do rozpatrzenia uwag i wniosków jest Lubuski Zarząd Melioracji i Urządzeń Wodnych w Zielonej Górze (osoba kontaktowa: Andrzej Ziarek, tel. (68) 452 76 00 – łączy sekretariat).

Po ww. 10-dniowym okresie udostępnienia dokumentu do wglądu, w dniu 29 sierpnia 2017 r. o godzinie 17:00 w siedzibie Starostwa Powiatowego w Krośnie Odrzańskim, ul. Piastów 10B, 66-600 Krosno Odrzańskie, w sali narad, odbędzie się spotkanie otwarte dla wszystkich zainteresowanych, na którym przedstawione będą informacje o PROJEKCIE PLANU ZARZĄDZANIA ŚRODOWISKIEM oraz odbędzie się publiczna dyskusja dotycząca tego dokumentu a także uwag i wniosków złożonych do niego wcześniej lub w trakcie tego spotkania.

Obwieszczenie to zostało podane do wiadomości poprzez ogłoszenie w lokalnej prasie (Gazeta Wyborcza – dodatek Zielonogórski, Gazeta Tygodniowa – wydanie Gubińsko-Krośnieńskie), wywieszenie na tablicach ogłoszeń w LZMiUW w Zielonej Górze, w Starostwie Powiatowym w Krośnie Odrzańskim oraz w miejscowościach Chlebowo i Czarnowo, jak również na stronach internetowych instytucji wskazanych powyżej.

Figure 4. Announcement on public hearings for the draft EMP submitted to local press and published on the web sites and on the bulletin boards.

Figure 5. Announcement on public hearings for the draft EMP published at the web site of the LZMiUW in Zielona Góra.

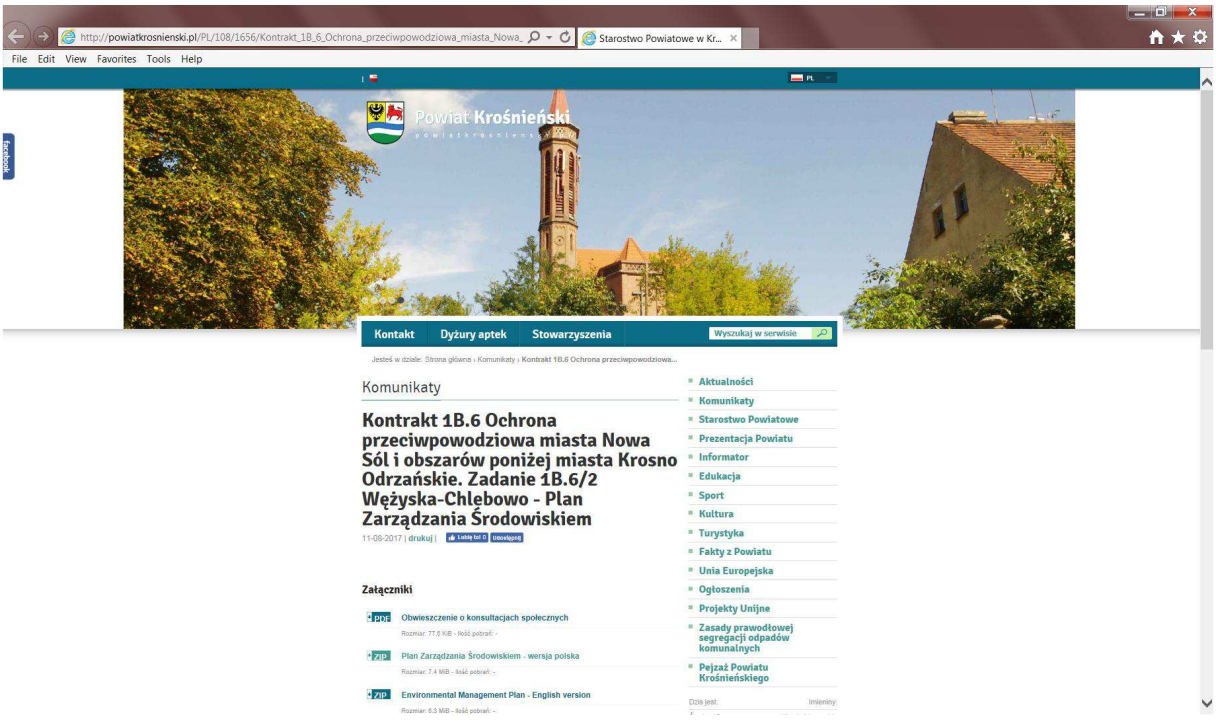

Figure 6. Announcement on public hearings for the draft EMP published at the web site of the District Starosty in Krośno Odrzańskie.

Powrót Vaculika

W niedzielę o godz. 19 w Zielonej Górze jadą żużlowe lubuskie derby. Czy Stal Gorzów zobaczymy w pełnym składzie?

IRENEUSZ KLIMCZAK

BOGDAN STUPKA

Czy Słowak Martin Vaculik pojedzie w Zielonej Górze?

Po czterech porażkach stalowców z rzędu wydawało się, że w czołowej czwórce PGE Ekstraligi wszystko jest już jasne.

Zielona Góra jedzie półfinały play-off z Lesznem, a gorzowianie mogą myśleć o niedzieli 3 września i meczu we Wrocławiu (jest zastrzeżenie, że Sparta, bez względu na miejsce w tabeli, pierwsze spotkanie w play-off jedzie u siebie).

Obrońcy mistrzostwa Polski postanowili jednak porządnie zamieszać w żużlowym kotle, swoim występem w Lesznie wprawili wszystkich w osłupienie. Bez kontuzjowanego Martina Vaculika gładko pokonali faworyzowaną Unię 49:41. Jeszcze chwilę temu lubuskie derby w półfinale wydawały się czymś nierealnym, dziś znów wszystko jest możliwe.

Co uratowało Stal? Zdecydowanie spokój. Gorzowscy żużlowcy przecież pokazali już w tym sezonie moc, gdy długo z nikim nie przegrywali i przewodzili w tabeli. Najważniejszy był awans do fazy play-off, a tam w tym sezonie pojedzie tak znakomita czwórka, że podział par i wybór gospodarza na pierwsze starcie mają małe znaczenie. We wrześniu trzeba być wielkim i tyle.

Falubaz na niedzielę wystawia wszystkie armaty, pojadą Jason Doyle, Patryk Dudek, Piotr Protasiewicz czy Jarosław Hampel.

A czy do Stali wróci Vaculik? Znalazł się w awizowanym składzie gości na derby, trafił pod dwójkę. Z jego dłonią jest lepiej, Słowak w tygodniu trenował na swoim domowym torze w Żarnowicy, w sobotę chce pojechać w kolejnym turnieju Grand Prix w Szwecji.

- Na pewno nie zaryzykujemy jego zdrowiem, bo to nie ma sensu - powtarza trener Stanisław Chomski. - Z drugiej strony jeśli Martin będzie gotowy, to pojedzie z Falubazem. Wiem, że Linus Sundstrom świetnie pojechał w Lesznie i bardzo się cieszę, że kogoś takiego mam w drużynie. On jednak również zdaje sobie sprawę, jak funkcjonuje gorzowski zespół i jaką aktualnie w nim pełni rolę. Postawiliśmy na piątkę seniorów i mam do nich zaufanie. Także do Vaculika, który na pewno zrobi wszystko, aby w derbowym, wyjątkowym spotkaniu, pokazać się z jak najlepszej strony. Czy to są ostatnie derby w tym sezonie? To się okaże, po naszej wygranej z Unią znowu półfinałowe pary nie są znane. Tym bardziej, że wciąż nie wiemy, jakie będą decyzje w sprawie Grigorija Łaguty i meczów Rybnika.

Australijka kontuzjowana. Za Bunton jest Swords

Nie wypalił transfer Alex Bunton do gorzowskiej drużyny koszykarek, bo Australijka doznała kontuzji. Za nią w AZS AJP zagra Amerykanka Carolyn Swords.

IRENEUSZ KLIMCZAK

Przedstawiając Australijkę, nazywaliśmy ten kontrakt ryzykownym. Dla gorzowskiego klubu podwójnie, bo w całkowicie zmienionym, zagranicznym zaciągu, Alexandra Bunton miała odgrywać kluczową rolę, choć kłopoty zdrowotne to u niej niestety norma.

Po udanych występach w lidze rosyjskiej, Bunton próbowała dostać się do kadry Australii na Asia Cup. Nie udało się, koszykarka wcześniej opuściła zgrupowanie. - Historia znów się powtarza, jestem tym po prostu zdruzgotana - mówiła Alex dla australijskich mediów. - Uważam, że podjęłam właściwą decyzję, gdy odezwały się bóle, musiałam być ostrożna. Akurat ten uraz kolana nie jest poważny, liczę na dobrą rehabilitację.

Szybko pojawiła się poważna następczyni Buntona, w Gorzowie ma ją zastąpić 28-letnia Carolyn Swords. Amerykanka, która dobrze zna polskie realia.

28-latka mierzy aż 198 cm, w poprzednim sezonie w barwach Basketu 90 Gdynia zdobywała średnio 16,8 pkt (trzeci wynik w BLK), miała 8,9 zbiórki (piąty wynik) oraz efektywność gry na poziomie 21,1 (trzeci wynik). W każdej z tych kategorii lepsza od Swords była nasza była zawodniczka podkoszowa - Courtney Hurt.

Obecnie Amerykanka walczy w WNBA z drużyną Seattle Storm o awans do fazy play-off, na razie jej ekipa jest tuż za ośmioma premiowanymi zespołami. Rywalizacja o mistrzostwo w lidze zawodowej w USA rozpocznie się 6 września, a sezon zasadniczy skończy się trzy dni wcześniej.

Swords w 22 meczach tego sezonu występowała średnio 8,5 minuty, zdobywała 2 pkt, do tego dokładała 1,5 zbiórki. Łącznie Swords ma rozegranych w WNBA 165 spotkań.

- Agent, z którym współpracujemy od wielu lat nie miał już gracza, który spełniałby nasze oczekiwania, więc uruchomiliśmy wszystkich pozostałych - powiedział Dariusz Maciejewski, trener akademiczek. - Carolyn chciała zagrać kolejny sezon w Polsce. Znała klub i po omówieniu szczegółów doszliśmy do porozumienia. Myślę, że znaleźliśmy zawodniczkę o podobnych parametrach i umiejętnościach co Alex.

W BLK w sezonie 2017/18 zagra ostatecznie 13 drużyn, a rozgrywki rozpoczną się 23 września. Na inaugurację AZS AJP zmierzy się na wyjeździe z Ostrovią Ostrów.

Figure 7. Announcement on public consultation for the draft EMP published in a local supplement to *Gazeta Wyborcza*.

TYGODNIOWA GUBIN • KROSNO ODRZAŃSKIE
www.tygodniowa.pl
czwartek 10 sierpnia 2017
OGŁOSZENIA 29

OBWIESZCZENIE

Zgodnie z wymaganiami Banku Światowego (polityka operacyjna OP 4.12), instytucji współfinansującej realizację Projektu ochrony przeciwpowodziowej w dorzeczu Odry i Wisły,

Lubuski Zarząd Melioracji i Urządzeń Wodnych w Zielonej Górze (LZMiUW) udostępnił do wglądu wszystkim zainteresowanym osobom i instytucjom PROJEKT PLANU POZYSKANIA NIERUCHOMOŚCI I PRZESIEDLEŃ dla Kontraktu 1B.6 Ochrona przeciwpowodziowa miasta Nowa Sól i obszarów poniżej miasta Krosno Odrzańskie (nazywany dalej PROJEKTEM PLANU POZYSKANIA NIERUCHOMOŚCI I PRZESIEDLEŃ)

Każdy zainteresowany może:
A) w okresie od dnia 14 sierpnia 2017 r. do dnia 04 września 2017 r. zapoznać się z PROJEKTEM PLANU POZYSKANIA NIERUCHOMOŚCI I PRZESIEDLEŃ w siedzibie:
Lubuskiego Zarządu Melioracji i Urządzeń Wodnych w Zielonej Górze, ul. Ptasia 2B, 65-514 Zielona Góra w dniach roboczych od godziny 8:30 do 14:30,
Starostwa Powiatowego w Krośnie Odrzańskim, ul. Piastów 10 B, 66-600 Krosno Odrzańskie, w dniach roboczych od godziny 8:30 do 14:30,
Urzędu Miasta w Nowej Soli, ul. Marsz. Józefa Piłsudskiego 12, 67-100 Nowa Sól, w dniach roboczych od godziny 8:30 do 14:30,
lub poprzez stronę internetową:
LZMiUW pod adresem - melioracja.lubuskie.pl,
Starostwa Powiatowego w Krośnie Odrzańskim pod adresem - http://www.powiatkrosnienski.pl/
Urzędu Miasta w Nowej Soli pod adresem - http://www.nowasol.pl/
Biura Koordynacji Projektu pod adresem – www.odrapcu.pl,

B) składać uwagi i wnioski odnośnie PROJEKTU PLANU POZYSKANIA NIERUCHOMOŚCI I PRZESIEDLEŃ w formie pisemnej oraz ustnej do protokołu pod w/w adresami lub w formie elektronicznej na adres e-mail a.ziarek@melioracja.lubuskie.pl w dniach od 14.08.2017 do 04.09.2017 (włącznie). Instytucją właściwą do rozpatrzenia uwag i wniosków jest Lubuski Zarząd Melioracji i Urządzeń Wodnych w Zielonej Górze.

Osobą kontaktową w LZMiUW jest:
Andrzej Ziarek
Lubuski Zarząd Melioracji i Urządzeń Wodnych w Zielonej Górze,
ul. Ptasia 2B, 65-514 Zielona Góra w dniach roboczych od godziny 8:30 do 14:30,
tel. 68 45 27 600 (łączy sekretariat)
Po 21-dniowym okresie udostępnienia do wglądu dokumentu (od 14.08.2017 r. do 04.09.2017 r.), w dniach:
7.09.2017 r. o godzinie 17:00 w siedzibie Starostwa Powiatowego w Krośnie Odrzańskim, ul. Piastów 10 B, 66-600 Krosno Odrzańskie w sali narad, pokój 306, III p., 8.09.2017 r. o godzinie 17:00 w sali konferencyjnej Centrum Kształcenia Zawodowego i Ustawicznego „Elektryk" w Nowej Soli ul. Piłsudskiego 65, 67-100 Nowa Sól, odbędą się spotkania otwarte dla wszystkich zainteresowanych, na którym przedstawione będą informacje o PROJEKCIE PLANU POZYSKANIA NIERUCHOMOŚCI I PRZESIEDLEŃ oraz odbędzie się publiczna dyskusja dotycząca tego dokumentu i nad złożonymi do niego wcześniej lub w trakcie tego spotkania wnioskami i uwagami.
Obwieszczenie to zostało podane do wiadomości poprzez ogłoszenie w lokalnej prasie (Gazeta Wyborcza – dodatek lubuski, Gazeta Tygodniowa, Tygodnik Krąg), wywieszenie na tablicach ogłoszeń w LZMiUW w Zielonej Górze oraz Starostwie Powiatowym w Krośnie Odrzańskim i Urzędzie Miasta w Nowej Soli, jak również na stronach internetowych instytucji wskazanych powyżej oraz na stronach internetowych Starostwa Nowosolskiego, gminy Maszewo, Otyń, Gubin, Krosno Odrzańskie, Cybinka, a także na gminnych tablicach ogłoszeń w miejscowościach.

OBWIESZCZENIE

Zgodnie z wymaganiami Banku Światowego (polityka operacyjna OP 4.01), instytucji współfinansującej realizację Projektu ochrony przeciwpowodziowej w dorzeczu Odry i Wisły,

podaje się do publicznej wiadomości, co następuje:

Lubuski Zarząd Melioracji i Urządzeń Wodnych w Zielonej Górze (LZMiUW) udostępnił do wglądu wszystkim zainteresowanym osobom i instytucjom PROJEKT PLANU ZARZĄDZANIA ŚRODOWISKIEM dla Komponentu 1 – Ochrona przed powodzią Środkowej i Dolnej Odry, Podkomponent 1B – Ochrona przed powodzią na Środkowej i Dolnej Odrze, Kontrakt 1B.6 – Ochrona przeciwpowodziowa miasta Nowa Sól i obszarów poniżej miasta Krosno Odrzańskie , Zadanie 1B.6/2 – Wężyska-Chlebowo (nazywany dalej PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM).

Każdy zainteresowany może:
A) zapoznać się z PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM od dnia 14 sierpnia 2017 r. do dnia 28 sierpnia 2017 r włącznie (10 dni roboczych, z wyłączeniem dnia 15 sierpnia 2017 r.), w siedzibie:

Lubuskiego Zarządu Melioracji i Urządzeń Wodnych w Zielonej Górze, ul. Ptasia 2B, 65514 Zielona Góra, w dniach roboczych od godziny 8:30 do 14:30;

Starostwa Powiatowego w Krośnie Odrzańskim, ul. Piastów 10B, 66-600 Krosno Odrzańskie, w dniach roboczych od godziny 8:30 do 14:30.
lub poprzez stronę internetową:
Lubuskiego Zarządu Melioracji i Urządzeń Wodnych w Zielonej Górze pod adresem: melioracja.lubuskie.pl (w zakładce Inwestycje)
Starostwa Powiatowego w Krośnie Odrzańskim, pod adresem: www.powiatkrosnienski.pl

Biura Koordynacji Projektu, pod adresem: www.odrapcu.pl

B) składać uwagi i wnioski odnośnie PROJEKTU PLANU ZARZĄDZANIA ŚRODOWISKIEM w formie pisemnej oraz ustnej do protokołu pod ww. adresami lub w formie elektronicznej na adres e-mail: a.ziarek@melioracja.lubuskie.pl w dniach roboczych w okresie od 14 sierpnia 2017 r. do 28 sierpnia 2017 r. (włącznie).

Instytucją właściwą do rozpatrzenia uwag i wniosków jest Lubuski Zarząd Melioracji i Urządzeń Wodnych w Zielonej Górze (osoba kontaktowa: Andrzej Ziarek, tel. (68) 452 76 00 – łączy sekretariat).

Po ww. 10-dniowym okresie udostępnienia dokumentu do wglądu, w dniu 29 sierpnia 2017 r. o godzinie 17:00 w siedzibie Starostwa Powiatowego w Krośnie Odrzańskim, ul. Piastów 10B, 66600 Krosno Odrzańskie, w sali narad, odbędzie się spotkanie otwarte dla wszystkich zainteresowanych, na którym przedstawione będą informacje o PROJEKCIE PLANU ZARZĄDZANIA ŚRODOWISKIEM oraz odbędzie się publiczna dyskusja dotycząca tego dokumentu a także uwag i wniosków złożonych do niego wcześniej lub w trakcie tego spotkania.

Obwieszczenie to zostało podane do wiadomości poprzez ogłoszenie w lokalnej prasie (Gazeta Wyborcza – dodatek Zielonogórski, Gazeta Tygodniowa – wydanie Gubińsko-Krośnieńskie), wywieszenie na tablicach ogłoszeń w LZMiUW w Zielonej Górze, w Starostwie Powiatowym w Krośnie Odrzańskim oraz w miejscowościach Chlebowo i Czarnowo, jak również na stronach internetowych instytucji wskazanych powyżej.

Figure 8. Announcement on public consultation for the draft EMP published in a local supplement to *Gazeta Tygodniowa*.

Figure 9. Public hearings for the draft EMP held in the District Starosty in Krosno Odrzańskie, on the 29th of August 2017.

Figure 10. Public hearings for the draft EMP held in the District Starosty in Krosno Odrzańskie, on the 29th of August 2017.

9. ORGANIZATIONAL STRUCTURE OF EMP IMPLEMENTATION

The Task being the subject of this EMP is implemented within the Odra-Vistula Flood Management Project (see chapter 1.1), co-financed using the World Bank's funds. Therefore, the EMP implementation supervision structure has to comply with both the provisions of Polish law and the requirements of the World Bank.

9.1. ODRA-VISTULA FLOOD MANAGEMENT PROJECT COORDINATION UNIT (OVFM PCU)

The entity responsible for overall coordination of implementing the individual parts of the EMP within the OVFM Project is the Project Coordination Unit (PCU), which is currently a state budgetary unit responsible to the minister relevant for water management.

OVFM PCU tasks include i.a.:

- cooperation with the relevant ministers, State Water Holding Polish Waters and other government and local government administration bodies related to OVFM Project implementation;
- coordination of activities of individual Project Implementation Units and supporting those units in the scope of EMP implementation;
- monitoring and assessment of EMP implementation progress;
- cooperation with the World Bank on a running basis, including development of quarterly reports on OVFM Project implementation.

9.2. PROJECT IMPLEMENTATION UNIT (PIU) AND PROJECT IMPLEMENTATION OFFICE (PIO)

The entity directly responsible for implementing the EMP for the Task and monitoring EMP implementation progress is the Project Implementation Unit (PIU), i.e. State Water Holding Polish Waters, Regional Water Management Authority in Wrocław.

In relation to OVFM Project implementation, the Project Implementation Office (PIO) was established as a separate organizational unit, supervised by the President of State Water Holding Polish Waters. Such a structure is transparent and its decision-making level is situated very high, which increases Project implementation efficiency.

As part of EMP implementation supervision, the PIO performs the following tasks:

- monitoring of EMP implementation progress;
- financial management and account management;
- preparation of the necessary reports for the purposes of EMP implementation monitoring and for the purposes of coordination of EMP implementation by all the involved services.

The scope of duties of PIO employees related to EMP implementation supervision is as follows:

- management and coordination of as well as supervision over EMP monitoring implemented by the Consultant/Engineer and the Contractor;
- direct supervision over correct Task implementation;
- cooperation with the PIU;
- administrative and legal supervision over EMP implementation;

- verification of EMP implementation reports and accounts prepared by the Consultant/Engineer and the Contractor;
- financial supervision over EMP implementation;
- supervision over the correctness of applying formal procedures concerning EMP implementation which stem i.a. from the requirements of the Contract for works, *the Construction Law*, *the Environmental Protection Law* and other documents.

9.4. CONSULTANT/ENGINEER

The role of the Consultant/Engineer is supporting the PIU (PGWWP, RZGW in Wrocław) in effective implementation of the entire investment process, from undertaking preparation to its settlement.

The Consultant/Engineer shall be selected using the QCBS (Quality- and Cost-Based Selection) method, in accordance with *Guidelines: Selection and Employment of Consultants by World Bank Borrowers*. The Consultant/Engineer shall be obliged to supervise EMP implementation, in accordance with the scope defined in the Consultant/Engineer's contract, which shall include i.a.:

- monitoring of EMP implementation by the Contractor;
- monitoring the Contractor's actions;
- checking the quality of the construction works performed and the construction products used to build by the Contractor, in particular preventing the use of construction products which are defective or are not allowed for use in civil engineering;
- representing of the Investor on the construction site by controlling the compliance of construction implementation with the project, the building permit, the provisions in the scope of environmental protection and the principles of technical knowledge;
- supervising all issues related to environmental protection by experienced specialists in the scope of environmental protection and by the Engineer's remaining staff;
- constant monitoring of the correctness of implementing the measures mitigating the negative environmental impact;
- performance of additional examinations if it becomes necessary to verify the Contractor's accounts;
- identification of problems stemming from the adverse environmental impact of construction works implementation and submitting proposed solutions to those problems;
- checking and accepting the construction works to be covered up and temporary construction works, participation in tests and technical acceptance of technical devices and systems as well as preparation of and participation in acceptance activities of ready structures and commissioning them;
- confirmation of actually performed works and removed defects as well as, on the Investor's request, inspection of construction settlement.

9.5. CONTRACTOR

A Contractor shall be selected to implement the construction works. The Contractor shall be responsible i.a. for EMP implementation. The Contractor's duties in this scope include:

- performance of construction works in accordance with the rules defined in the EMP, Contract conditions, design documentation, binding provisions of law and requirements of administrative decisions issued for the Task;
- implementation of the Engineer's recommendations (including those of the environmental supervision specialists and the Investor's supervision inspector) concerning EMP implementation;
- ensuring the preparation of i.a. the following documents before construction commencement: a safety and health protection plan, a waste management plan, a quality assurance plan, a construction site flood management plan for the works implementation period and a construction site organization design;
- maintenance of construction documentation;
- preparation of monthly accounts and reports on inspections;
- preparation of accounts concerning environmental protection;
- applying to the Investor for changes in design solutions if this is justified by the necessity of increasing the implementation safety of construction works or streamlining the construction process in the scope concerning EMP implementation.

10. EMP IMPLEMENTATION SCHEDULE AND REPORTING PROCEDURES

EMP implementation enables the parties involved in the preparation, implementation and supervision of the Contract for works to do the following:

- identify various environmental aspects which significantly influence the environment status so that they can be controlled, corrected and reduced but, consequently, produce economic effects;
- correct unfavorable consequences of conducted works during their implementation, which is beneficial to the environment and the financial results;
- define the objectives and tasks implemented within the adopted environmental policy, which are included in the EMP, require outlays and yield measurable effects;
- identify and eliminate potential hazards and breakdowns as well as prevent and remove environmental effects which may be related to them and cause losses disproportionate to prevention costs;
- use natural goods rationally with minimal environmental losses and optimal generation of costs.

Moreover, implementation of the recommendations and measures stemming from the EMP may reduce or even eliminate contractual risks, in particular:

- the risk of the Contractor skipping the environmental protection issues in the task implementation process;
- the risk of escalation of protests by the local community as a result of the Contractor's failure to observe the works implementation technologies and the environmental procedures approved by the Engineer;
- the risk of additional environmental penalties;
- the risk of bearing additional environmental losses.

Bearing in mind the significance of the issues determining the environmental and social conditions, the following EMP implementation procedures are anticipated:

a) before selecting the Contractor of works, the Employer shall submit the draft of this EMP to the World Bank in order to receive an opinion;

b) after receiving a positive opinion from the Bank, the EMP shall undergo public consultations;

c) after conducting the public consultations (and supplementing the document with consultation results), the EMP shall be supplemented and its final version shall be submitted to the World Bank for approval;

d) after EMP approval by the World Bank, the final document shall be included in the bidding documents concerning Contractor selection;

e) all actions of the Contractor of works shall be reported regularly (once a month) in terms of the obligations stemming from the EMP and other contract documents. They shall be reported in Polish and English, both in a printed version and in an electronic version. Those reports shall require the Engineer's and the Employer's approval.

Moreover, appropriate units involved in Task implementation are obliged to meet additional obligations in the scope of monitoring and reporting the issues related to environmental pro-

tection, which are defined in the administrative decisions issued for the Task in question (see chapter 3.5) and presented in Appendix 1 and Appendix 2 to the EMP.

It is planned that the Contractor shall prepare collective reports on environmental monitoring at the works implementation stage. The reports shall be confirmed by environmental supervision specialists from the Contractor's team, approved by the Engineer's nature supervision staff and submitted to the RDOŚ via the PIU. A detailed scope of the report shall be determined by the Engineer (the commencement report, the periodic (monthly) report, the quarterly report, the ad hoc report, the closure report). The Engineer shall also define their preparation deadlines.

The OVFM Project reporting system shall be based on monthly reports submitted by Contractors to the PIO via the Engineer and on the Engineer's monthly reports. Monthly reports on EMP implementation shall also be prepared (by the Contractor and the Engineer) – as part of the monthly reports or as separate documents. Collective quarterly reports shall also be developed on this basis.

The PIU shall submit quarterly reports concerning its implemented tasks to the PCU. They shall contain the required set of information and descriptions enabling the PCU to prepare the OVFM Project quarterly report. Moreover, especially in the case of problems with implementation of the Contract for works, the PCU shall expect the PIO to submit information sets and data every month.

The following reporting procedures were defined:

1) Reporting:
   a) reports (the commencement, monthly, quarterly and final ones) prepared by the Contractor of works;
   b) report overview by the Engineer;
   c) submitting the report to the Employer (for information purposes);
   d) submitting the report to the RDOŚ (only in the scope stemming from the issued administrative decisions);
   e) submission of a quarterly report by the PIU to the PCU.
2) Archiving:
   a) Contractor: 1 copy of each report in the electronic version, for 5 years after the Contract completion date;
   b) Engineer: 1 copy of each report in the electronic version, for 5 years after Contract completion;
   c) Employer: 1 copy of each report in the electronic version, for 5 years after the Contract completion date.
3) Evaluation:
   a) assessment (on a running basis) of implementation results of the planned actions stemming from the EMP;
   b) analysis (on a running basis) of documentation (the Contractor's reports) by the Engineer;
   c) submission of reliable information on the course of the construction process to the Employer, with special consideration for the implementation of the measures limiting

the negative environmental impact and the recommendations stemming from the environmental decisions;

d) preparation and submission of quarterly reports by the PCU to the World Bank.

The following are planned:

- *ex-ante* evaluation: a report before commencing Contract implementation (the Engineer's report);
- evaluation on a running basis: the Engineer's quarterly reports;
- *ex-post* evaluation:
  - a report after completing Contract implementation (final reports on EMP implementation prepared by the Contractor and the Engineer);
  - a report on EMP implementation after the Defect Notification Period, prepared by the Engineer.

11. LIST OF SOURCE MATERIALS

1) *Project Operations Manual (POM) for the Odra-Vistula Flood Management Project.* OVFM Project Coordination Unit. Wrocław, October 2015.

2) *Environmental and Social Management Framework for the Odra-Vistula Flood Management Project – a final document.* RZGW in Szczecin, RZGW in Wrocław, RZGW in Kraków, ZMiUW of the Lubuskie Province in Zielona Góra, West-Pomeranian ZMiUW in Szczecin, ZMiUW of the Świętokrzyskie Province in Kielce, Lower-Silesian ZMiUW in Wrocław, ZMiUW of the Małopolskie Province in Kraków, ZMiUW of the Podkarpackie Province in Rzeszów, IMGW – National Research Institute. April 2015.

3) *The environmental impact report for the undertaking entitled: "Węzyska – Chlebowo – the construction of a left-bank flood embankment of the Odra river between km 528.6 ÷ 532.0, municipalities: Maszewo, Gubin and Krosno Odrzańskie."*. Geobud Zielona Góra, EKOPROJEKT Zielona Góra. 2010.

4) *Project Information Card entitled: "Węzyska – Chlebowo – the construction of a left-bank flood embankment of the Odra river, municipalities: Maszewo, Gubin and Krosno Odrzańskie."*. EKOPROJEKT Zielona Góra. 2014.

5) *Expertise within the scope of impact of the undertaking on the water protection purposes within the meaning of Article 4.1. in connection with Article 4.7 of the Framework Water Directive for the undertaking entitled: "Węzyska – Chlebowo – the construction of a left-bank flood embankment of the Odra river, municipalities: Maszewo, Gubin, Krosno Odrzańskie"*. AECOM, Wrocław. 2017.

12. LIST OF APPENDICES

Appendix 1. Plan of mitigation measures

Appendix 2. Plan of monitoring measures

Appendix 3. List of national legal acts related to environmental protection

Appendix 4. Copies of administrative decisions in the scope of environmental protection issued for the Task:

a. Decision of the Regional Director for Environmental Protection in Gorzów Wielkopolski of February 3rd, 2015 on the environmental conditions for the investment entitled: "Wężyska – Chlebowo – construction of left-bank flood embankment of the Odra river, municipalities: Maszewo, Gubin, Krosno Odrzańskie" (ref. No.: WOOŚ-II.4233.11.2014.NC)

b. The letter of the Regional Director for Environmental Protection in Gorzów Wielkopolski of November 18th, 2015 informing about lack of objection to implementation of the undertaking entitled: "Wężyska – Chlebowo – construction of left-bank flood embankment of the Odra river, municipalities: Maszewo, Gubin, Krosno Odrzańskie" (ref. No.: WPN-I.670.327.2015.KH)

c. Decision of the Regional Director for Environmental Protection in Gorzów Wielkopolski of October 11th, 2017 on the environmental conditions for the investment entitled: "Wężyska – Chlebowo – construction of left-bank flood embankment of the Odra river, municipalities: Maszewo, Gubin, Krosno Odrzańskie" (ref. No.: WZŚ-4233.2.2017.KS), refusing to overrule the previous environmental decision of February 3rd, 2015.

Appendix 5. Tables presenting the information about the resources of protected species of plants, fungi and animals in the surroundings of the Task

Appendix 6. Map presenting the location of main elements of the Task

Appendix 7. Map presenting Task location in relation to protected areas

Appendix 8. Map presenting the location of natural habitats in the area of Task