State Water Holding Polish Waters
Regional Water Management Board in Szczecin

Environmental Management Plan

ODRA - VISTULA FLOOD MANAGEMENT PROJECT – 8524 PL

Environmental category B – pursuant to the OP 4.01 WB

Component 1:

Flood Protection of the Middle and Lower Odra

Subcomponent 1B:

Flood Protection on the Middle and Lower Odra

Contract 1B.3/2

Stage II - *The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation*

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Subcomponent: ***1B- Flood Protection on the Middle and Lower Odra***

Contract: ***1B.3/2 - Stage II - The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation.***

Project Implementing Unit:
State Water Holding Polish Waters
Regional Water Management Board in Szczecin

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List of basic definitions and abbreviations used in the EMP

Name	Description
IBRD / WB	International Bank for Construction and Development / World Bank
PCU / PCU OVFMP	Project Coordination Unit / Coordination Unit for the Odra-Vistula Flood Management Project
BP	World Bank Procedure (*Bank Procedure*)[1]
Species decision	Decision allowing for derogations from the prohibitions applicable to specimens of plants and animals subject to species conservation
Environmental decision / decision on environmental conditions	Decision determining the environmental conditions for the implementation of the project, referred to in the EIA Act in Chapter 3 of Section V "*Environmental impact assessment and Natura 2000 assessment*"
Epidemic	The occurrence of infections or infectious disease cases in a given area in a number clearly higher than previously, or the occurrence of infections or infectious diseases that have not occurred before.
ESMF	Environmental and Social Management Framework for the OVFMP[2]
ES	**The Environmental and Social World Bank Policy - ES**, concerning environmental and social issues (i.e. environmental protection, occupational and community health and safety, gender, equality, child protection, vulnerable people (including those with disabilities), sexual harassment, gender-based violence, Sexual Exploitation and Abuse (SEA), HIV/AIDS awareness and prevention).
Investor / Employer / PIU	State Water Holding Polish Waters in Warsaw represented by the Director of the Regional Water Management Board in Szczecin / Project Implementing Unit for the Odra - Vistula Flood Management Project
SWB	Surface Water Body
GWB	Groundwater Body
PIO	Project Implementation Office for the Odra - Vistula Flood Management Project within the State Water Holding Polish Waters Regional Water Management Board (PGW WP RZGW) in Szczecin

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

[2] The document is available on the website of the PCU for the OVFMP: *http://odrapcu2019.odrapcu.pl/popdow_dokumenty/* and on the World Bank's website: *http://documents.worldbank.org/curated/en/717671468333613779/Poland-Odra-Vistula-Flood-Management-Project-environmental-and-social-management-framework*

Name	Description
Consultant / Engineer / Contract Engineer	A company or a legal entity providing technical support services for the State Water Holding Polish Waters Regional Water Management Board in Szczecin within the framework of the Odra - Vistula Flood Management Project.
Contract / / Task	Contract / Task 1B.3/2 - Stage II -The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation.
EIA	Environmental Impact Assessment
OP	World Bank's Operational Policy (*Operational Policy*)[1]
PAD	Project Appraisal Document[2] for the OVFMP
PGW WP	State Water Holding Polish Waters
BIOZ Plan	Health and Safety Plan
OP Infrastructure and Environment	Operational Programme Infrastructure and Environment
POM	Project Operations Manual [3] for the OVFMP
OVFMP Project	Odra - Vistula Flood Management Project
EMP	Environmental Management Plan
RDOŚ (RDFEP)	Regional Directorate for Environmental Protection
RZGW (RWMB) in Szczecin	Regional Water Management Board in Szczecin
State of epidemic	A legal situation introduced in a given area in connection with an outbreak of an epidemic in order to undertake anti-epidemic and preventive measures to minimise the effects of the epidemic specified in the Act of 5 December 2008 *on preventing and combating infections and infectious diseases in humans* (consolidated text: Journal of Laws of 2019, item 1239 as amended).
State of epidemiological threat	A legal situation introduced in an area in connection with the threat of an outbreak of an epidemic in order to take preventive measures laid down in the Act of 5 December 2008 *on preventing and combating infections and infectious diseases in humans* (Journal of Laws of 2019, item 1239, as amended).

[1] See footnote for BP (World Bank Procedure).

[2] The document is available on the website of the World Bank: *http://documents.worldbank.org/curated/en/320251467986305800/Poland-Odra-Vistula-Flood-Management-Project*

[3] The document is available on the website of the PCU for the OVFMP: *http://odrapcu2019.odrapcu.pl/popdow_dokumenty/*

Name	Description
EU	European Union
Contractor / Contractor for Task / Contractor for Part of Contract	Company or legal entity implementing the Contract / Task 1B.3/2 - Stage II - The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation
EHS Guidelines	World Bank Guidelines on Environment, Health and Safety (EHS), The Environmental, Health, and Safety (EHS) Guidelines , General EHS Guidelines[1].
Road Operator	An organisational unit executing the duty of managing public roads pursuant to the *Public Roads Act* or the duty of managing non-public roads

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

List of abbreviated names of legal acts used in EMP

The names of legal acts cited in this EMP are provided in a shortened version. Full names of various acts are given in the list below.

Name used in the text	Full name (including publication address)
Birds Directive/BD	Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (Journal of Laws BP L 288 of 06.11.2007, as amended).
Habitats Directive/HD	Directive 92/43/EEC of the Council of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. (Journal of Laws EU L 206 of 22.07.1992, as amended)
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 (Journal of Laws L 327 of 22.12.2000, as amended).
EIA Regulation	Regulation of the Council of Ministers of 9 November 2010 *on projects likely to have a significant impact on the environment* (Journal of Laws of 2016, item 71) This above Regulation has been repealed by the Regulation of the Council of Ministers of 10 September 2019 *on projects, which may significantly affect the environment* (Journal of Laws of 2019, item 1839). However, the provisions in force prior to the entry into force of the repealing Regulation were applicable to the Task in question.
EIA Act	Act of 3 October 2008 on making available information on the environment and its protection, public participation in environmental protection and environmental impact assessments (Consolidated text: Journal of Laws of 2020, item 283)
Nature Conservation Act	Act of 16 April 2004 on nature conservation (Consolidated text: Journal of Laws of 2020, item 55)
Waste Act	Act of 14 December 2012 on waste (Consolidated text: Journal of Laws of 2019, item 701, as amended)
Construction Law Act	Act of 7 July 1994 Construction Law (Consolidated text: Journal of Laws of 2019, item 1186, as amended)
Environment Protection Law Act	Act of 27 April 2001, Environment Protection Law (Consolidated text: Journal of Laws of 2019, item 1396, as amended)
Water Law Act	Act of 20 July 2017 Water Law (Consolidated text: Journal of Laws of 2020, item 310, as amended)
Act on the Protection and Care of Monuments	Act of 23 July 2003 on the protection and care of historical monuments (Consolidated text: Journal of Laws of 2020, item 282)

Name used in the text	Full name (including publication address)
Inland Waterway Transport Act	Act of 21 December 2000 on Inland Waterways Transport (Consolidated text: Journal of Laws of 2019, item 1568, as amended)
Regulation on shipping regulations	Regulation of the Minister of Infrastructure of 28 April 2003 on shipping regulations on inland waterways (Journal of Laws No 202, item 2072).
Ordinance on local law regulations on waterways	Ordinance of the Director of the Inland Navigation Office in Szczecin of 7 June 2004 on local law regulations on waterways

SUMMARY

This Environmental Management Plan (EMP) refers to the *Task 1B.3/2 - Stage II - The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation*, which constitutes a part of the Odra - Vistula Flood Management Project (OVFMP) and is implemented as the *Contract: 1B.3/2*.

This EMP provides, inter alia, the following information:

- a brief description of the OVFMP Project and its Component 1, which includes the Task in question (Section 1.1 and 1.2);
- description of the Task being the subject of this EMP (Section 2);
- description of the institutional, legal and administrative conditions for the implementation of the Task, including the current status of the EIA procedures for the Task (Section 3);
- description of particular elements of the environment in the vicinity of the Task (Section 4);
- summary of the environmental impact assessment of the Task (Section 5);
- description of mitigation measures to eliminate or reduce the potential negative impact of the Project on the environment (Section 6), together with a tabular summary of these measures (Attachment 1);
- description of the environmental monitoring activities applicable to the Task (Section 7), together with a tabular summary of these activities (Attachment 2);
- description of the course of social consultations conducted at particular stages of preparation of environmental documentation for the Task (Section 8);
- description of the organisational structure of the implementation of the EMP (Section 9);
- time schedule of implementation of the EMP and description of reporting procedures (Section 10);
- list of source materials cited in the EMP (Section 11);
- list of annexes to EMP (Section 12);
- copies of administrative decisions on environmental and nature protection issued for the Task (Attachments 4 and 5).

Task characteristics

The task concerns the construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation. The Project Implementing Unit (PIU) for the Task is the State Water Holding Polish Waters Regional Water Management Board in Szczecin.

Task Scope

The whole Task 1B.3/2 - Stage II - The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation concerns the construction of berthing and mooring infrastructure for icebreakers (in the form of dolphins – pile moorings, located outside the limits of the shipping route) in 7 locations on the Odra River section from the mouth of the Nysa Łużycka River to Szczecin and the introduction of a new marking of the shipping lane. This task is carried out in the framework

of the Odra - Vistula Flood Management Project (OVFMP) in order to enable effective and safe icebreaking action.

The berthing and mooring places planned for implementation under the Task 1B.3/2 - Stage II are:

1. Szczecin – Western Odra River km 34.8
2. Zatoń Dolna – Odra River km 688.0
3. Osinów Dolny – Odra River km 663.1
4. Ługi Górzyckie – Odra River km 607.5
5. Pławidło – Odra River km 595.3
6. Kunice – Odra River km 572.0
7. Biała Góra – Odra River km 548.4

The berthing and mooring places are generally designed parallel to the river axis, in the form of dolphins (pile moorings) with the spacing of 10 to 30 m and the total length of 90 - 185 m. The berthing and mooring places are to be equipped with a permanent footbridge connecting the mooring line with the bank.

The designed technical depth at the mooring line should not be less than 1.80 m at the multiannual mean low water level.

The works will be carried out mainly from the water side. Only in places of the existing developed bank, i.e. the presence of a paved road running near the Task along the bank, it is allowed to carry out some works and deliver materials from the bank - Zatoń Dolna, commune of Chojna and Kunice, commune of Słubice. The method of transporting the materials and carrying out the works will be decided by the Contractor in agreement with the Contract Engineer. Within the scope of the Task, the location of the land-based construction facilities is not envisaged.

The designed berthing and mooring places should be marked upstream and downstream of the facility with appropriate signs used on inland waterways. The detailed location of the signs will be adapted to the navigational aids present on the waterway.

As part of the designed works, the Contractor will be responsible to perform possible dredging / bottom correction works for the positions in: Osinów Dolny, Ługi Górzyckie, Pławidło, Kunice and Biała Góra. These works will be aimed at deepening the access and the area directly at the dolphins in order to allow access to a given mooring line from the fairway on the Odra River. The Contractor, after completing the main works, will prepare a bottom survey for each of the berthing and mooring places and based on the conditions existing at the time of the works, select locations and carry out the necessary dredging / bottom correction works, if necessary.

Institutional, legal and administrative conditions

Pursuant to national regulations contained in the *Regulation of the Council of Ministers of 9 November 2010 on projects likely to have a significant impact on the environment*

(*Journal of Laws of 2016, item 71)*[1] **the construction of a berthing space for icebreakers is a project that may potentially have a significant impact on the environment** - and requires obtaining an environmental decision (decision on environmental conditions).

The task, with regard to its characteristics, anticipated potential environmental impacts and location in relation to protected areas, is carried out in accordance with the relevant national environmental protection regulations in this respect.

With reference to the environmental screening described in the Environmental and Social Management Framework Plan for the OVFMP Project, the proposed works are included in the item **"ID 3_393_O" in the List No. 1** in the Attachment No. 2 to the Master Plan for the Odra River Basin (2014) *"Investments that do not adversely affect the achievement of good water status or do not deteriorate the water status".*

Status of administrative procedures for EIA

The task concerns the construction of 7 berthing and mooring places in the area of 6 communes. Therefore, for the Task in question, in accordance with the requirements of the national legislation (the Environment Protection Act), the following environmental decisions were obtained:

- Environmental decision of the Mayor of Cedynia of 13.05.2019, Ref. No. PIOS.6220.6.2018.AP.
- Environmental decision of the Mayor of Słubice of 06.05.2019, Ref. No. WI.6220.24.2018.AK.
- Environmental decision of the Head of the Górzyca Commune of 05.04.2019, Ref. No. GWOŚ.6220.12.10.2018.
- Environmental decision of the Mayor of the City of Szczecin of 16.05.2019, Ref. No. WOŚr-II.6220.1.22.2019.DMł.
- Environmental decision of the Mayor of Cybinka of 03.05.2019, Ref. No. RGN-IV.6220.05.2018
- Environmental decision of the Mayor of the Chojna Commune of 10.06.2019, Ref. No. BPI.6220.4.2018.MK

Copies of environmental decisions is given in Appendix 4. In the framework of the administrative proceedings leading to the issue of the abovementioned decisions, the competent authorities did not find it necessary to carry out an environmental impact

[1] This Regulation has been repealed by the Regulation of the Council of Ministers of 10 September 2019 on projects, which may significantly affect the environment (Journal of Laws of 2019, item 1839). However, the provisions in force prior to the entry into force of the repealing Regulation were applicable to the Task in question.

assessment. The decisions set out the conditions for the implementation of the Task, which have been taken into account in this EMP.

Condition of the environment elements in the Task surrounding

As the result of works connected with identification of the natural and cultural environment values, it was stated that the area of the Task implementation and its surroundings are characterised, inter alia, by the following environmental conditions. These conditions are described for each location of the mooring place separately in individual regions.

Szczecin

- the planned works are located within the boundaries of the Surface Water Body (SWB): *Odra from Warta to the Western Odra* PLRW60002119199 and on the border of two Groundwater Bodies (GWB): PLGW60003 and PLGW60004,
- the work execution area is not located within the boundaries of the forms of nature protection or in their immediate vicinity. The closest (at the of distance of approx. 0.7 km) protected objects are nature monuments on the Tobrucki Square in Szczecin.
- a new mooring line will be constructed in the area of the existing mooring line, intended for liquidation.

Zatoń Dolna and Osinów Dolny

- the planned works are located within the boundaries of the SWB *Odra from Warta to the Western Odra* PLRW60002119199 and within GWB PLGW600023:
- the work execution area is located in the areas of the Natura 2000 “Lower Odra Valley” PLB20003 and “Lower Odra” PLH320037.
- the work execution area is located at the border of the Cedynia Landscape Park,
- in the area of work execution and its immediate surroundings there are no objects of cultural value covered by protection or objects of material goods nature.

Ługi Górzyckie

- the planned works are located within the boundaries of the SWB: *Odra from Nysa Łużycka to Warta* PLRW60002117999 and within GWB PLGW600040,
- the work execution area is located within the Natura 2000 area Warta Mouth PLC080001,
- in the area of the work execution and its immediate surroundings there are no objects of cultural value covered by protection or objects of material goods nature.

Kunice

- the planned works are located within the boundaries of the SWB: *Odra from Nysa Łużycka to Warta* PLRW60002117999 and within GWB PLGW600058,
- the work execution area is located within the Natura 2000 areas Pliszki Valley PLH080011 and Middle Oder Valley PLB080004,

- the work execution area is located in the "Słubicka Odra Valley" Protected Landscape Area,
- the work execution area is located within the boundaries of the Lubuskie Land ecological corridor – the north,
- in the area of work execution and its immediate surroundings there are no objects of cultural value covered by protection or objects of material goods nature.

Pławidło

- the planned works are located within the boundaries of the SWB: *Odra from Nysa Łużycka to Warta* PLRW60002117999 and within GWB PLGW600040
- the work execution area is not located within the Natura 2000 areas,
- the work execution is located in the " Słubicka Odra Valley " Protected Landscape Area,
- in the area of work execution and its immediate surroundings there are no objects of cultural value covered by protection or objects of material goods nature.

Biała Góra

- the planned works are located within the boundaries of the SWB: *Odra from Nysa Łużycka to Warta* PLRW60002117999 and within GWB PLGW600058,
- the work execution area is located within the Natura 2000 areas Krosno Odra Valley PLH080028 and Middle Odra Valley PLB080004,
- the work execution area is located in the Krzesiński Landscape Park,
- in the area of work execution and its immediate surroundings there are no objects of cultural value covered by protection or objects of material goods nature.

Summary of the Environmental Impact Assessment

Land surface and landscape

The Task implementation has no significant impact on the condition of the land surface and landscape values.

Climate

The Task has no impact on the condition of the climate.

Atmospheric air

The impact of the Task implementation on the sanitary condition of the air is limited in time to the stage of works and is not significant.

Soil and land

The implementation of the planned Task will not affect the soils and lands occurring in the Task implementation area. The area where the Task will be carried out is mainly the Odra riverbed. No significant activities are expected to take place, including soils and land outside the Odra riverbed.

Surface water

The task during the execution phase may result in periodical negative impacts on surface water quality due to works in the riverbed, during which suspended solids concentration in the water may increase. However, due to the relatively small spatial scale of the Task, especially in relation to the whole area of the three SWBs where the Task is located, the scope of the negative impact will not be significant if the mitigation measures are applied. These impacts will be of short-term duration, local and reversible.

Groundwater

The implementation of the planned project will not affect the groundwater and there will be no potential sources of pollution of these waters.

Acoustic climate

The impact of the implementation of the Task on the acoustic climate of the surrounding areas will be limited in time to the stage of works and will not be significant.

Wildlife

The task involves a point-based intervention in the natural environment in 7 locations. The main impacts of the Task implementation will occur due to works in the riverbed, during which there may be an increase in suspended solids concentration in the water, which may adversely affect the fish fauna. Additionally, the execution of the works, especially the emission of noise, may cause scaring off animals. As part of the preparation of the Task, a natural inventory was carried out as the result of which the necessary mitigation measures were developed. Their implementation, in particular the application of the work schedule excluding the execution of certain types of works in periods of particular animal sensitivity, will effectively minimise the impact on the wildlife.

Cultural monuments and material goods

The executed works will not interfere directly with the buildings and other structures entered in the record of monuments or/and the register of monuments, therefore there will be no negative impact on this type of structures during the execution and operation of the Task.

Human health and safety

The implementation of the Task does not generate any significant hazards to the health and safety of people. They may occur in the event of accidents, catastrophes and other random events (e.g. pollution leakage, fire, finding unexploded ordnance, flood or collision with vessels). The EMP defines appropriate conditions aimed at preventing the occurrence of events threatening the human health and safety and mitigating their possible consequences.

Mitigation and monitoring measures

Sections 6 and 7 and Attachments 1 and 2 of the EMP describe and present in tabular form a set of mitigation and monitoring measures to eliminate or reduce the negative impacts of the Task implementation on the environment and to ensure effective implementation of the EMP conditions. These activities include the conditions specified in the environmental and species decisions and the conditions formulated during the stage of works on the EMP.

Public consultations

Section 8 of the EMP presents a report from the public consultations conducted within the procedures related to the environmental impact assessment of the planned Task, including:

- public consultation on the document entitled *Environmental and Social Management Framework Plan* (ESMF) for the OVFMP Project (2015);
- public consultation on this Environmental Management Plan - the final version of the text of the EMP will be supplemented with this description, after the procedure of publicising the draft EMP and after its public consultation has been completed.

1. INTRODUCTION

This Environmental Management Plan (EMP) refers to the *Task 1B.3/2 - Stage II - The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation*, which constitutes a part of the Subcomponent 1B within the framework of the Odra - Vistula Flood Management Project (OVFMP) and implemented as the *Contract*: ***1B.3/2***.

1.1. ODRA - VISTULA FLOOD MANAGEMENT PROJECT (OVFMP)

The objective of the Odra - Vistula Flood Management Project (OVFMP) is the increasing the level of flood protection for the population living in the selected areas of the Odra River and upper Vistula River basins and institutional strengthening of the government administration in terms of providing more effective protection against summer and winter floods and violent floods.

The project consists of five components (including three investment components and two institutional and organisational components):

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

Subcomponent 1A - Flood Protection of areas in Zachodniopomorskie Province;

Subcomponent 1B – Flood Protection on the Middle and Lower Odra;

Subcomponent 1C – Flood Protection of Słubice City.

Component 2 – Component 3 – Flood Protection of Nysa Klodzka Valley, including:

Subcomponent 2A – Active protection;

Subcomponent 2B – Passive protection.

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

Subcomponent 3A – Flood Protection of Upper Vistula Towns and Cracow

Subcomponent 3B – Flood Protection of Sandomierz and Tarnobrzeg.

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

Subcomponent 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 OVFMP Project are available on the website of the Project Coordination Unit for the Odra – Vistula Flood Management Project (*http://odrapcu2019.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 OVFMP)

Component 1 OVFMP "*Flood Protection of the Middle and Lower Odra*" aims at flood protection by strengthening protection against summer and winter floods in localities along the Odra River.

Under the Component 1, three Subcomponents are implemented:

Subcomponent 1A – Flood Protection of areas in Zachodniopomorskie Province;

Subcomponent 1B – Flood Protection on the Middle and Lower Odra;

Subcomponent 1C – Flood Protection of Słubice City.

Sub-Component 1B consists of the following tasks:

- 1B.1/1 (a). Reconstruction of the Odra River control infrastructure - adjusting to the III class of waterway, on the section from the village of Ścinawa to the estuary of the Nysa Łużycka River – Stage II.
- 1B.1/1 (b). Reconstruction of the road bridge in Krosno Odrzańskie with access roads.
- 1B.2. Modernization works on boundary sections of Odra River to provide Good Condition for Ice – breaking.
- 1 B.3/1 Stage I - Construction of a mooring base for icebreakers,
- 1B.3/2 Stage II - The construction of docking - mooring infrastructure on the Lower Odra River and on boundary sections of Odra River as well as new aids to navigation.
- 1B.4/1. Improving flood water -flow during winter from Dąbie Lake.
- 1B.4/2. Dredging of the Klucz-Ustowo ditch.
- 1B.5/1. Reconstruction of bridge to ensure a minimum clearance - Railway bridge km 733.7 Regalica River in Szczecin.
- 1B.5/2. Reconstruction of bridge to ensure a minimum clearance - Road bridge km 2.45 Warta River, Kostrzyn nad Odrą.
- 1B.5/3. Reconstruction of bridge to ensure a minimum clearance - Railway bridge at km 615.1 of the Odra River in Kostrzyn nad Odrą.
- 1B.6. Flood protection of Nowa Sól and Below Krosno Odrzańskie:
  - 1B.6/1. Nowa Sól stages I and II,
  - 1B.6/2. Wężyska - Chlebowo.
- 1B.7. WFS Widawa – the rebuilding of the flood management system of the communes and municipalities Czernica, Długołeka, Wisznia Mała and Wrocław.

2. TASK DESCRIPTION 1B.3/2 - STAGE II

The task being the subject of this EMP concerns the construction of berthing and mooring infrastructure on the Lower and Border Odra River and new navigation aids of the waterway. The Project Implementing Unit (PIU) for the Task is the State Water Holding Polish Waters Regional Water Management Board in Szczecin.

With reference to the environmental screening described in the Environmental and Social Management Framework Plan for the OVFMP Project, the proposed works are included in the item "**ID 3_393_O" in the List No. 1** in the Attachment No. 2 to the Master Plan for the Odra River Basin (2014) *"Investments that do not adversely affect the achievement of good water status or do not deteriorate the water status"*.

2.1. TASK LOCATION

The investment planned for implementation is located along the Odra River and the Western Odra River in 7 sections:

- Szczecin – Western Odra River km 34.8,
- Zatoń Dolna – Odra River km 688.0,
- Osinów Dolny – Odra River km 663.1,
- Ługi Górzyckie – Odra River km 607.5,
- Pławidło – Odra River km 595.3,
- Kunice – Odra River km 572.0,
- Biała Góra – Odra River km 548.4.

The owner of the land under the surface waters is the State Treasury (permanent manager is the State Water Holding Polish Waters Regional Water Management Board in Szczecin).

With the exception of the Szczecin section, the berthing and mooring infrastructure is planned outside the built-up areas.

The task is located in the area of the Surface Water Bodies:

- Odra from Nysa Łużycka to Warta with the code of PLRW60002117999,
- Odra from Warta to Western Odra with the code of PLRW60002119199,
- Odra from Parnica to the estuary with the code of PLRW6000211999.

The Odra River and its valley areas are located within a number of protected areas under the Nature Conservation Act. Section 4.7. presents information on the location of individual berthing and mooring places in spatial relation to the boundaries of protected areas.

The location of berthing and mooring places is shown below (Fig. 1).

Fig. 1. Location of berthing and mooring infrastructure

2.2. TASK CHARACTERISTICS

The whole Task 1B.3/2 - Stage II - "The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation" concerns the construction of berthing and mooring infrastructure for icebreakers (in the form of dolphins – pile moorings, located outside the boundary of the inland waterway navigation channel) in 7 locations on the Odra section from the mouth of the Nysa Łużycka River to Szczecin and the introduction of a new marking of the waterway.

The selected locations of berthing and mooring places within the Project are the result of consultations with a wide range of stakeholders conducted by State Water Holding Polish Waters Regional Water Management Board in Szczecin.

From the environmental point of view, the location of berthing and mooring places on practically any section of the Odra River is connected with a very similar range of impacts. The places selected during the consultations and constituting the whole system of berthing and mooring infrastructure for icebreakers form a coherent, well thought-out system allowing for safe and effective execution of icebreaking action.

Dolphins in a three-pile system with two bracing elements have been assumed. Pipe prefabricates (open steel pipe piles) will be used for the construction of the piles, which will be placed by means of the vibration technology. Dolphins were designed to take into account the pressure of the ice cover, but the mooring line was additionally complemented by an ice-apron in the form of an additional dolphin with a structure for crushing the ice cover.

Footbridge will be built at all locations, except Szczecin, leading to the bank, supported by separate piles. The footbridge will be made of steel gratings on a steel supporting structure of sections. The exit to the land will be made in the form of concrete steps or steel structure. The mooring places will not act as a marina, they will only be used as temporary mooring sites for icebreakers during icebreaking operations. The bridge connecting the dolphins with the bank will only serve as an emergency exit to the bank, the mooring place will not have a permanent connection or an access road connecting the exit with public roads.

Temporary and permanent land acquisition in connection with the Task are carried out on the principles set out in the Real Estate Acquisition and Resettlement Action Plan (LA&RAP). When acquiring a property, the Contractor will be obliged to apply the World Bank Policy expressed in the Project of the Odra-Vistula Flood Management Project Operational Manual (POM) and apply the LA&RAP. The negotiations and agreements between the Contractor and an owner of the property regarding temporary occupation will be supervised by the Consultant to ensure the integrity of the agreement and its beneficial nature for the land owner.

- **Szczecin – the Western Odra at 34.8 km**
  The planned berthing line is located in close proximity to the existing left-bank berthing line, consisting of eight dolphins at a distance from one another of ~ 28 m to ~ 34.5 m with a total length of ~ 217 m. Demolition of existing dolphins is planned as part of the task, by means of cutting the structures even with the riverbed.

  The new berthing line will consist of 10 three-pile dolphins made of DZ 508mm piles and an additional ice apron from the upstream side.

The construction of the planned dolphins will be conducted from pontoons, with the use of an arm pile driver. Once the piles are driven, the remaining elements of the structure will be welded in place. After the new berthing line is completed, the existing dolphin piles will be cut down at the bottom and recycled.

Elastomer or polyurethane fenders will be mounted on the dolphins for protection. The dolphins will form a line.

The structure will not be used as a marina. It will serve as a temporary berthing place for icebreakers during icebreaking actions. The designed berthing line will not be connected with the bank – the structure maintenance will be performed exclusively from water.

The planned structures – 10 three-pile ice apron with an upstream groyne will cover the total area of ~ 17.4 m^2.

The location of the elements of the berthing line is shown on the figure in Annex 7 a to EMP. Annex 6b shows the location of the mooring base in relation to protected sites.

- **Zatoń Dolna – the Odra at 688.0 km**

The new berthing line will consist of 7 three-pile dolphins made of DN 500mm piles and an additional ice apron from the upstream side.

The construction of the planned dolphins will be conducted from pontoons, with the use of an arm pile driver. Once the piles are driven, the remaining elements of the structure will be welded in place.

Elastomer or polyurethane fenders will be mounted on the dolphins for protection. The dolphins will form a line.

The structure will not be used as a marina. It will serve as a temporary berthing place for icebreakers during icebreaking actions. The designed berthing line will not be connected with the bank. Construction of a steel footbridge on piles is planned. The footbridge will be approximately 14.2 m long and 1.2m wide. In order to connect the deck with the bank, a reinforced concrete platform was designed that enables the last span of the footbridge to rest on the bank. Only authorised persons will have access to the footbridge. Relevant warning signs will be installed by the entrance.

Once the task is completed, the planned elements will cover the following areas:

- 7 three-pile dolphins – 12.6 m^2;
- Ice apron – 1.8 m^2;
- Communication deck and its elements – 34 $m^{2.}$.

The location of the elements of the berthing line is shown on the figure in Annex 7 b to EMP. Annex 6b shows the location of the mooring base in relation to protected sites.

- **Osinów Dolny – the Odra at 663.1 km**

The new berthing line will consist of 7 three-pile dolphins made of DN 500mm piles and an additional ice apron from the upstream side. The planned dolphin berthing line

is located between the existing control structures of the Odra, i.e. groynes. The construction of the berthing line does not interfere with the groynes.

The construction of the planned dolphins will be conducted from pontoons, with the use of an arm pile driver. Once the piles are driven, the remaining elements of the structure will be welded in place.

Elastomer or polyurethane fenders will be mounted on the dolphins for protection. The dolphins will form a line.

The structure will not be used as a marina. It will serve as a temporary berthing place for icebreakers during icebreaking actions. The designed berthing line will not be connected with the bank – the structure maintenance will be performed exclusively from water. Construction of a steel footbridge on piles is planned. The footbridge will be approximately 22.5 m long and 1.2m wide. In order to connect the deck with the bank, a reinforced concrete platform was designed that enables the last span of the footbridge to rest on the "bank". Only authorised persons will have access to the footbridge. Relevant warning signs will be installed by the entrance.

Once the task is completed, the planned elements will cover the following areas:

- 7 three-pile dolphins – 14.7 m^2;
- Ice apron – 1.8 m^2;
- Communication deck and its elements – 49 m^2;

The location of the elements of the berthing line is shown on the figure in Annex 7 c to EMP. Annex 6c shows the location of the mooring base in relation to protected sites.

- **Ługi Górzyckie – the Odra at 607.5 km**

  The new berthing line will consist of 6 three-pile dolphins made of DN 500mm piles and an additional ice apron from the upstream side. The planned dolphin berthing line is located between the existing control structures of the Odra, i.e. groynes. The construction of the berthing line does not interfere with the groynes.

  The construction of the planned dolphins will be conducted from pontoons, with the use of an arm pile driver. Once the piles are driven, the remaining elements of the structure will be welded in place.

  Elastomer or polyurethane fenders will be mounted on the dolphins for protection. The dolphins will form a line.

  The structure will not be used as a marina. It will serve as a temporary berthing place for icebreakers during icebreaking actions. The designed berthing line will not be connected with the bank. Construction of a steel footbridge on piles is planned. The footbridge will be approximately 57.8 m long and 1.2m wide. It will be connected with the bank by a gangway with the same structure as the load-bearing part of the footbridge. The gangway will be resting on a reinforced-concrete foundation. Only authorised persons will have access to the footbridge. Relevant warning signs will be installed by the entrance.

Once the task is completed, the planned elements will cover the following areas:

- 6 three-pile dolphins – 10.8 m^2;
- Frontal ice apron – 1.8 m^2;
- Communication deck and its elements – 106 m^2.

The location of the elements of the berthing line is shown on the figure in Annex 7 d to EMP. Annex 6d shows the location of the mooring base in relation to protected sites.

- **Pławidło – the Odra at 595.3 km**

  The new berthing line will consist of 6 three-pile dolphins made of DN 500mm piles and an additional ice apron from the upstream side. The planned dolphin berthing line is located between the existing control structures of the Odra, i.e. groynes. The construction of the berthing line does not interfere with the groynes.

  The construction of the planned dolphins will be conducted from pontoons, with the use of an arm pile driver. Once the piles are driven, the remaining elements of the structure will be welded in place.

  Elastomer or polyurethane fenders will be mounted on the dolphins for protection. The dolphins will form a line.

  The structure will not be used as a marina. It will serve as a temporary berthing place for icebreakers during icebreaking actions. The designed berthing line will not be connected with the bank. Construction of a steel footbridge on piles is planned. The footbridge will be approximately 120.5 m long and 1.2m wide. It will be connected with the bank by a gangway with the same structure as the load-bearing part of the footbridge. The gangway will be resting on a reinforced-concrete foundation. Only authorised persons will have access to the footbridge. Relevant warning signs will be installed by the entrance.

  Once the task is completed, the planned elements will cover the following areas:

  - 6 three-pile dolphins – 10.8 m^2;
  - Frontal ice apron – 1.8 m^2;
  - Communication deck and its elements – 200 m^2.

  The location of the elements of the berthing line is shown on the figure in Annex 7 e to EMP. Annex 6e shows the location of the mooring base in relation to protected sites.

- **Kunice – the Odra at 572.0 km**

  The new berthing line will consist of 7 three-pile dolphins made of DN 500mm piles and an additional ice apron from the upstream side. The planned dolphin berthing line is located between the existing control structures of the Odra, i.e. groynes. The construction of the berthing line does not interfere with the groynes.

  The construction of the planned dolphins will be conducted from pontoons, with the use of an arm pile driver. Once the piles are driven, the remaining elements of the structure will be welded in place.

Elastomer or polyurethane fenders will be mounted on the dolphins for protection. The dolphins will form a line.

The structure will not be used as a marina. It will serve as a temporary berthing place for icebreakers during icebreaking actions. The designed berthing line will not be connected with the bank. Construction of a steel footbridge on piles is planned. The footbridge will be approximately 34.8 m long and 1.2m wide. It will be connected with the bank by a gangway with the same structure as the load-bearing part of the footbridge. The gangway will be resting on a reinforced-concrete foundation. Only authorised persons will have access to the footbridge. Relevant warning signs will be installed by the entrance.

Once the task is completed, the planned elements will cover the following areas:

- 6 three-pile dolphins– 10.5 m^2;
- Frontal ice apron – 1.8 m^2;
- Communication deck and its elements – 60.7 m^2.

The location of the elements of the berthing line is shown on the figure in Annex 7 f to EMP. Annex 6e shows the location of the mooring base in relation to protected sites.

- **Biała Góra – the Odra at 548.4 km**

The new berthing line will consist of 6 three-pile dolphins made of DN 500mm piles and an additional ice apron from the upstream side. The planned dolphin berthing line is located between the existing control structures of the Odra, i.e. groynes. The construction of the berthing line does not interfere with the groynes.

The construction of the planned dolphins will be conducted from pontoons, with the use of an arm pile driver. Once the piles are driven, the remaining elements of the structure will be welded in place.

Elastomer or polyurethane fenders will be mounted on the dolphins for protection. The dolphins will form a line.

The structure will not be used as a marina. It will serve as a temporary berthing place for icebreakers during icebreaking actions. The designed berthing line will not be connected with the bank. Construction of a steel footbridge on piles is planned. The footbridge will be approximately 63.5 m long and 1.2m wide. It will be connected with the bank by a gangway with the same structure as the load-bearing part of the footbridge. The gangway will be resting on a reinforced-concrete foundation. Only authorised persons will have access to the footbridge. Relevant warning signs will be installed by the entrance.

Once the task is completed, the planned elements will cover the following areas:

- 6 three-pile dolphins – 10.8 m^2;
- Frontal ice apron – 1.8 m^2;
- Communication deck and its elements – 115.0 m^2.

The location of the elements of the berthing line is shown on the figure in Annex 7 g to EMP. Annex 6f shows the location of the mooring base in relation to protected sites.

After the construction works have been carried out, the Contractor shall inspect the bottom at the place of newly constructed dolphins for deposition of any elements that may cause navigational obstacles of anthropogenic and natural origin. As a part of the works, it shall remove tree branches, fragments of steel and fibre ropes and other found elements from the bottom.

As part of the designed works, the Contractor will also be responsible to perform possible dredging / bottom correction works for the positions in: Osinów Dolny, Ługi Górzyckie, Pławidło, Kunice and Biała Góra. These works will be aimed at deepening the access and the area directly at the dolphins in order to allow access for icebreakers to a given mooring line from the fairway on the Odra River. Due to the fact that along the entire length of the Oder there is very high variability of bottom conditions, it is impossible at the design stage to select specific dredging locations. Therefore, the Contractor, after completing the main works, will prepare a bottom survey for each of the berthing and mooring places and based on the conditions existing at the time of the works, select locations and carry out the necessary dredging / bottom correction works, if necessary.

The final dredging method and the method of sediment management will depend on the implementation technology adopted by the Contractor and will be subject to the Engineer's approval as part of the approval of the Dredging Work Plan and the spoil management plan.

The treatment of sediment extracted from the riverbed must be compliant with the guidelines for dealing with sediment extracted from the riverbed contained in the World Bank EHS guidelines, Environmental, Health, and Safety Guidelines for Ports, Harbors, and Terminals[1] The contractor will carry out sediment quality tests and draw up a dredging works plan and a spoil management plan (see Chapter 6.14), which will specify the method of conducting dredging works and the rules for dealing with dredged material extracted from the bottom of the river during dredging works. During the works at the bottom of the river, the Contractor will also monitor the concentration of suspensions and dissolved oxygen, in accordance with the detailed conditions set out in item 97 of Annex 2 to the EMP and will suspend work when the defined levels of suspension and dissolved oxygen are reached (see item 37 of Annex 1 to the EMP).

Within the area of 5 berthing and mooring places where the dredging works may be needed (Osinów Dolny, Pławidło, Biała Góra, Ługi Górzyckie, Kunice) in the period of 02-03.2019 the samples of sediment were taken and then tested in an accredited laboratory. According to

[1] https://www.ifc.org/wps/wcm/connect/ddfac751-6220-48e1-9f1b-465654445c18/20170201-FINAL_EHS+Guidelines+for+Ports+Harbors+and+Terminals.pdf?MOD=AJPERES&CVID=lD.CzO9

the results of the tests, the tested bottom sediments do not contain components in concentrations exceeding the limit parameters specified in the Annex 1 to the Regulation of the Council of Ministers *on the recovery of waste outside installations and equipment* (Journal of Laws of 2015, item 996).

Presented below are the results of tests carried out by the National Feed Laboratory of the National Research Institute of Animal Production in Szczecin (Report from the testing of samples of spoil to be extracted as part of dredging work under the task "Construction of mooring infrastructure on the lower and border Odra - marinas for icebreakers", Szczecin, April 2019).

Numbers of samples of spoil to be extracted:

- Osinów Dolny: 290/19/S, 291/19/S, 292/19/S, 292/19/S;
- Pławidło: 294/19/S, 295/19/S, 296/19/S, 297/19/S;
- Biała Góra: 298/19/S, 299/19/S, 300/19/S, 301/19/S;
- Ługi Górzyckie: 302/19/S, 303/19/S, 304/19/S, 305/19/S;
- Kunice: 306/19/S, 307/19/S, 308/19/S, 309/19/S;

PAH and PCB polycyclic aromatic hydrocarbons

	Benzo(a)antracen	Benzo(b)fluoranten	Benzo(k)fluoranten	Benzo(g,h,i)perylen	Benzo(a)piren	Dibenzo(a,h)antracen	Indeno(1,2,3-cd)piren	PCB(7)
Standard	<1,5	<1,5	<1,5	<1,0	<1,0	<1,0	<1,0	<0,3
290/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
291/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
292/19/S	0,04	0,03	0,02	0,02	0,01	<0,01	0,02	<0,01
293/19/S	0,04	0,02	0,01	0,01	<0,01	<0,01	0,01	<0,01
294/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
295/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
296/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
297/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
298/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
299/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
300/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
301/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
302/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
303/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
304/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
305/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
306/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
307/19/S	0,01	0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
308/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
309/19/S	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01

Heavy metals

	Arsenic	General chrome	Zinc	Cadmium	Copper	Nickel	Lead	Mercury
Standard	**<30**	**<200**	**<1000**	**<7,5**	**<150**	**<75**	**<200**	**<1,0**
290/19/S	<7,0	<3,3	28,22	<0,5	<5,0	<6,3	<9,37	0,02
291/19/S	<7,0	<3,3	25,39	<0,5	<5,0	<6,3	<9,37	0,02
292/19/S	<7,0	<3,3	10,74	<0,5	<5,0	<6,3	<9,37	0,03
293/19/S	<7,0	<3,3	<10,0	<0,5	<5,0	<6,3	<9,37	0,02
294/19/S	<7,0	<3,3	10,50	<0,5	<5,0	<6,3	<9,37	0,02
295/19/S	<7,0	7,69	14,85	<0,5	<5,0	<6,3	<9,37	0,03
296/19/S	<7,0	3,30	<10,0	<0,5	<5,0	<6,3	<9,37	0,02
297/19/S	<7,0	<3,3	<10,0	<0,5	<5,0	<6,3	<9,37	0,02
298/19/S	<7,0	<3,3	37,42	<0,5	<5,0	<6,3	<9,37	0,01
299/19/S	<7,0	<3,3	27,03	<0,5	<5,0	<6,3	<9,37	0,01
300/19/S	<7,0	<3,3	23,26	<0,5	<5,0	<6,3	<9,37	0,01
301/19/S	<7,0	<3,3	38,41	<0,5	<5,0	<6,3	<9,37	0,01
302/19/S	<7,0	<3,3	34,44	<0,5	<5,0	<6,3	<9,37	0,01
303/19/S	<7,0	3,35	<10,0	<0,5	<5,0	<6,3	<9,37	0,02
304/19/S	<7,0	<3,3	36,70	<0,5	<5,0	<6,3	<9,37	0,01
305/19/S	<7,0	<3,3	17,57	<0,5	<5,0	<6,3	<9,37	0,01
306/19/S	<7,0	<3,3	40,60	<0,5	<5,0	<6,3	<9,37	0,01
307/19/S	<7,0	<3,3	43,99	<0,5	<5,0	<6,3	<9,37	0,02
308/19/S	<7,0	<3,3	15,63	<0,5	<5,0	<6,3	<9,37	0,01
309/19/S	<7,0	<3,3	17,22	<0,5	<5,0	<6,3	<9,37	0,01

Test results in comparison with the permissible values in accordance with Annex 1 to the Regulation of the Council of Ministers regarding waste recovery other than installations and devices (Journal of Laws of 2015, item 996). The list of values [mg/kg d.m.] is presented below.

Source: Report from the testing of samples of spoil to be extracted as part of dredging work under the task "Construction of mooring infrastructure on the lower and border Odra – marinas for icebreakers", the National Feed Laboratory of the National Research Institute of Animal Production in Szczecin, April 2019

Task works schedule:

- Start of works – January 2021
- Completion of works – December 2021.

The general schedule for the implementation of the Task takes into account the restrictions resulting from the EP and EMP. These restrictions will also be included in the Contractor's detailed schedule.

Note: The above characteristics of the Task is for illustrative purposes only and does not replace the project documentation for the Task.

All works shall be carried out in accordance with the Technical Specifications for Execution and Acceptance of Works applicable to particular industries.

3. INSTITUTIONAL, LEGAL AND ADMINISTRATIVE CONDITIONS

3.1. INSTITUTIONS INVOLVED IN THE IMPLEMENTATION OF THE TASK

The Investor for the Task is the State Water Holding Polish Waters in Warsaw represented by the Director of the Regional Water Management Board in Szczecin, acting on behalf and for the benefit of the State Treasury. For the ongoing coordination of the Project implementation by the PIU, an organisational unit, the Project Coordination Unit for the Odra – Vistula Flood Management Project, has been established. Additionally, the Task may require the involvement of public administration bodies in connection with the issuance of administrative decisions in the field of environmental protection, nature protection, construction law and water law, or arrangements for the use of waterways and other.

3.2. ACTS OF NATIONAL LAW IN FORCE IN THE FIELD OF THE ENVIRONMENT

According to the national regulations contained in the EIA Regulation, the construction a berthing and mooring place (of pile moorings) within the waterway for icebreakers is a project that may potentially have a significant impact on the environment.

In connection with the above qualification, the construction of a berthing and mooring place for icebreakers required obtaining an environmental decision.

According to the Polish law, the investment process in the scope of the environmental protection is regulated by several acts and regulations. A list of selected basic legal acts related to the above mentioned thematic scope and in force during the period of works on the EMP is presented in Attachment 3 of the EMP. The number and content of legal acts specified therein may change, along with changes in national environmental protection regulations. In any case, the Contractor shall be obliged to comply with all current legal regulations in force in Poland during the term of the Contract.

3.3. EIA PROCEDURE IN POLAND

The description of the environmental impact assessment procedure applicable in the Polish legislation is included in the *Environmental and Social Management Framework Plan* (ESMF), published, *inter alia*, on the websites of the Project Coordination Unit for the Odra - Vistula Flood Management Project[1] and the World Bank[2].

[1] On website: *http://odrapcu2019.odrapcu.pl/popdow_dokumenty/*

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

3.4. WORLD BANK GUIDELINES

This Task is co-financed, inter alia, from the International Bank for Reconstruction and Development, and the conditions for its implementation in the field of environmental protection are consistent with the *Operational Policies* and the *Bank Procedures* in the field of environmental protection, including, *inter alia*, the policies and procedures of *OP/BP 4.01* (concerning environmental impact assessment), *OP/BP 4.04* (concerning natural habitats) and *OP/BP 4.11* (concerning cultural resources) and OP/BP 4.12 (concerning involuntary resettlement).

In accordance with the above Operational Policies the herein EMP has been prepared for the Task, and all temporary and permanent land acquisition in connection with the Task are carried out on the principles set out in the Real Estate Acquisition and Resettlement Action Plan (LA&RAP) prepared for the Task.

Source texts of the above mentioned policies and procedures can be found in the document *The World Bank Operational Manual*[1], and their descriptions are presented, inter alia, in the *Environmental and Social Management Framework Plan* (ESMF).

3.5. CURRENT STATUS OF THE EIA PROCEDURES FOR THE TASK

The Task concerns the construction of 7 berthing and mooring places in 6 communes. Therefore, for the Task in question, in accordance with the requirements of the national legislation (the EIA Act), 6 environmental decisions were required.

For the Task in question, the following decisions on environmental conditions were obtained for the implementation of all the berthing and mooring places:

- Environmental decision of the Mayor of Cedynia of 13.05.2019, Ref. No. PIOS.6220.6.2018.AP, for a berthing and mooring place at km 663.1 of the Odra River (Osinów Dolny);
- Environmental decision of the Mayor of Słubice of 06.05.2019, Ref. No. WI.6220.24.2018.AK, for a berthing and mooring place at km 595.3 and 572.0 of the Odra River (Pławidło and Kunice);
- Environmental decision of the Head of the Górzyca Commune of 05.04.2019, Ref. No. GWOŚ.6220.12.10.2018, for a berthing and mooring place at km 607.5 of the Odra River (Ługi Górzyckie);
- Environmental decision of the Mayor of the City of Szczecin of 16.05.2019, Ref. No. WOŚr-II.6220.1.22.2019.DMł, for a berthing and mooring place at km 34.8 of the Western Odra River (Szczecin);

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

- Environmental decision of the Mayor of Cybinka of 03.05.2019, Ref. No. RGN-IV.6220.05.2018, for a berthing and mooring place at km 548.4 (Biała Góra).
- Environmental decision of the Mayor of the Chojna Commune of 10.05.2019, Ref. No. BPI.6220.4.2018.MK, for a berthing and mooring place at km 688.0 (Zatoń).

As a part of the administrative proceedings leading to the issue of the above mentioned decisions, the competent authorities did not find it necessary to carry out an environmental impact assessment. The decisions set out the conditions for the implementation of the Task, which have been taken into account in this EMP.

Irrespective of the above, the Contractor shall be obliged to obtain all further administrative decisions and permits necessary at the stage of the work execution, if such a necessity arises during the performance of the Task.

3.6. GRIEVANCE REDRESS MECHANISMS

All project affected persons (PAPs) will have access to adequate and accessible grievance redress mechanisms. Everyone has the right to file a complaint or motion. Filing complaints or motions is not subject to fees. Furthermore, in accordance with the regulations, the person filing a complaint or request may not be exposed to any damage or allegation on account of such submission.

More information on Grievance redress mechanisms employed for projects co-financed from World Bank funds can be found in the Odra-Vistula Flood Management Project Operations Manual (POM) available on the website of the Project Coordination Unit at http://odrapcu2019.odrapcu.pl/doc/POM_ENG.pdf.

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

4.1. LAND SURFACE AND LANDSCAPE

SZCZECIN – KM 34.8 OF THE WESTERN ODRA RIVER

The planned berthing and mooring place is located in the Lower Odra Valley mesoregion, very close to the border with the Szczecin Hills mesoregion. The berthing and mooring place will be located in the Western Odra riverbed (western arm of the Odra River). The planned berthing place is located within the city of Szczecin, in a built-up area, where the natural surroundings of the Odra riverbed have been transformed by human (embankments are made, on which building development is located).

ZATOŃ DOLNA – KM 688.0 OF THE ODRA RIVER

The planned berthing and mooring place is located in the village of Zatoń Dolna in the Odra riverbed at km 688.0. In this section the bank of the Odra River is level and allows to build a mooring line parallel to the bank. Along the eastern bank (from the Polish side) there is a paved road, and the whole direct area bordering the planned berthing place is covered with forest from the east (up to 500 m from the bank line). West and north-west of the planned berthing place (on the German side), the area is wet, covered with meadows and cut through by numerous canals. During the flood it is a floodplain area.

In the place of the planned investment there has been no berthing - mooring line so far.

OSINÓW DOLNY – KM 663.1 OF THE ODRA RIVER

The planned berthing and mooring place is located in the Lower Odra Valley mesoregion. In the region of the village Osinów Dolny, the Valley of the Lower Odra River borders on a steep slope with the mesoregion Mysliborskie Lake District. A berthing and mooring place is planned in the section of the Odra River from Osinów Dolny to Widuchowa, where the river flows through one bed. Less than 4 km to the north there is the mouth of the Oder-Havel canal.

In the analysed area in the vicinity of the planned investment there are also anthropogenic forms. To the south of Osinów Dolny there is a sand gravel mine. Small clay pits (currently closed) are also in Stary Kostrzynek. In addition, a flood embankment is built along the Odra riverbed. In the Odra riverbed itself, there are groynes in the vicinity of the planned berthing and mooring place.

On the right bank of the Odra River there are mainly meadows, and in the southern part there is a small forest, while on the left bank (on the German side) there are meadows and arable land. In the vicinity of the proposed berthing and mooring place there are buildings - on the right bank of the Odra River there is Osinów Dolny, and on the left bank of the Odra River – there is Hohenwutzen. The *Polenmarkt Hohenwutzen* marketplace is located in the area of the former cellulose factory closest to the berthing and mooring place.

The planned berthing and mooring place is to be located in the place where berthing of vessels at anchor is currently allowed.

ŁUGI GÓRZYCKIE – KM 607.5 OF THE ODRA RIVER

The planned berthing and mooring place is to be located in the Odra riverbed in km 607.5-607.6, above the estuary of the Warta River to the Odra River, near the place of Ługi Górzyckie.

The berthing and mooring place will be located about 2.6 km from Ługi Górzyckie (located north-east of the berthing place), about 3.9 km from the village of Górzyca (located south-east of the berthing place). Whereas, the town of Kostrzyn nad Odrą is located about 7.3 km north of the planned berthing place. On the floodplain there are single trees and meadow vegetation, while the areas around the lagoon is mainly the riparian forest. On the flood embankment, there is a dirt road. Among the anthropogenic elements in the landscape of the surroundings of the planned berthing place, one should mention numerous groynes in the riverbed and a flood embankment.

PŁAWIDŁO – KM 595.3 OF THE ODRA RIVER

The planned berthing and mooring place is to be located within the Lubuskie Odra River Gorge Mesoregion. It is a small mesoregion between the Łagów Lake District in Poland and the Barnim Lake District in Germany. The Odra River Valley within the boundaries of the Lubuskie Odra River Gorge is 25 km long and about 2-5 km wide.

In the Odra River valley, near the planned berthing and mooring place, there are anthropogenic forms such as flood embankments, groynes in the riverbed, canals draining the floodplain and sandpits and gravel mines located on the edge of the valley. At the distance of several dozen metres from the bank there is a flood embankment, on which a dirt road is running. Approximately 2.2 km east of the berthing and mooring place there are the buildings of the village of Pławidło, and approximately 1.7 km to the south-west (on the left bank of the Odra River, on the German side) – town of Lebus.

On the floodplain there are meadows, single trees and afforestation as well as arable lands and grasslands.

KUNICE – KM 572.0 OF THE ODRA RIVER

The planned berthing and mooring place is to be located in the Odra valley, between the Ilanka mouth and the Pliszka mouth to the Odra River. There is a flood embankment in the valley and groynes in the Odra riverbed. Approximately 500 m north of the berthing and mooring place there is a mining area of the sand and gravel mine "Rybocice - Kunice". On the floodplain there are single trees, the edge of the terrace above the floodplain is forested, and on its surface, there is meadow vegetation.

About 1.7 km north of the planned berthing place there is the village of Rybocice (about 200 inhabitants), and about 1.2 km to the east there is the village of Kunice (about 70 inhabitants).

BIAŁA GÓRA – KM 548.4 OF THE ODRA RIVER

The planned berthing and mooring place is to be located in the Odra riverbed in km 548.35 - 548.65. On the floodplain several dozen metres from the planned berthing and mooring place

(on the right bank) there is a flood embankment, on the top of which there is a road made of concrete road slabs. In the zone between the embankments there are used up dirt roads. The terrain between the embankments is of meadow nature, and further on, on the terraces above the floodplain there are mainly arable lands and forests. On both sides of the Odra riverbed there are flood embankments and dykes up to 5 m high. In addition, groynes have been built in the Odra riverbed on both banks.

Approximately 2.5 km east of the planned berthing and mooring place is the village of Rąpice (approximately 500 inhabitants), approximately 3 km to the south-west (on the German side) the village of Neuzelle (approximately 2000 inhabitants) and approximately 3.8 km to the north-west there is the town of Eisenhüttenstadt (approximately 27 200 inhabitants) .

4.2. CLIMATE

The climate of the Task area is shaped by the interaction of oceanic air masses by polar-maritime and polar-continental masses. The influence of the sea, the location of the land, large water reservoirs and forest complexes shapes the climate of the Task area, which manifests itself in the form of mild winters and cool, humid summers.

4.3. SANITARY CONDITION OF THE ATMOSPHERIC AIR

According to the report "Annual assessment of air quality in the West Pomeranian Voivodeship for 2017" prepared by the Voivodeship Inspectorate for Environmental Protection, exceeding the binding air quality standards concerned one pollutant - benzo(a)pyrene contained in PM10 dust. Therefore, in the assessment for 2017, two zones of the West Pomeranian Voivodeship - the Szczecin agglomeration and the West Pomeranian Voivodeship zone - were classified as Class C because of excessive concentrations of benzo(a)pyrene.

According to the report "Annual assessment of air quality in the Lubuskie Voivodeship on the basis of immissions carried out in 2017" prepared by the Voivodeship Inspectorate for Environmental Protection in Zielona Góra, the measurements of immissions showed, as in the previous years, that high concentrations of PM10 particulate matter and benzo(a)pyrene contained therein exceeding the permissible and target levels specified in the regulations are the main problem with respect to air pollution in the Lubuskie Voivodeship. In 2017, the target level for arsenic contained in PM10 suspended particulate matter in the Lubuskie zone was also exceeded.

As the result of the assessment, all zones in the Lubuskie Voivodship are classified as Class C.

Moreover, in 2017 the level of the long-term objective of the ozone content in the air was exceeded due to the protection of human and plant health, the deadline for which is set for 2020.

4.4. SOIL AND LAND

SZCZECIN – KM 34.8 OF THE WESTERN ODRA RIVER

The planned berthing and mooring places will be located in the Western Odra riverbed, where sands and water-glacial gravels occur (Dobracki, 1980). West of the planned berthing place, on the left bank of the Western Odra and on Kępa Parnicka there are mainly anthropogenic soils - strongly transformed by human. On the other hand, on the Zielona Island, apart from anthropogenic soils, there are low moor peats, on which organic peat soils could have developed.

ZATOŃ DOLNA – KM 688.0 OF THE ODRA RIVER

The planned berthing and mooring place will be located in the Odra riverbed. On the left bank of the Odra River there are river alluvial soils and organic (peat) soils. On the right bank on the floodplain there are also river alluvial soils, and on the till clays, light and medium podzolic soils have developed, and in places with sand, loose podzolic soils (Musierowicz, 1961).

OSINÓW DOLNY – KM 663.1 OF THE ODRA RIVER

On the left bank of the Odra River there are river alluvial soils and organic (peat) soils. On the right bank there are alluvial soils, and poorly clayey and loose soils formed from sands. In a short distance, light and medium podzolic soils developed from till clays (Musierowicz, 1961).

In the immediate vicinity of the planned berthing and mooring place on the right bank of the Odra River there are cohesive, solid, semi-solid and low-plasticity soils as well as loose, medium-compacted and compacted soils, on which there are no geodynamic phenomena. Groundwater depth exceeds 2 m. Whereas, the edge of the upland is made of low-bearing soils, i.e. organic soils, cohesive plastic and soft-plastic soils and loose soils. These are areas predisposed to the occurrence of mass movements with slopes above 12% (Piotrowski, 1991).

ŁUGI GÓRZYCKIE – KM 607.5 OF THE ODRA RIVER

The planned berthing and mooring place will be located in the Odra riverbed and the bridge on the floodplain. The soils on the flood plain are relatively young. Their parent rocks are Holocene formations of fluvial (river) and organic genesis. Light, medium and heavy alluvial soils have developed here, followed by peat soils formed from peats of fens. On the border of the valley and the upland, loose podzolic soils formed from sands have developed, and on the upland, light (podzolic) and medium soils formed from till clays (Musierowicz, 1961).

PŁAWIDŁO – KM 595.3 OF THE ODRA RIVER

The planned berthing and mooring place will be located in the Odra riverbed. In its immediate vicinity, in the Odra valley, the soil cover is relatively young. The parent rocks of the soils are Pleistocene rocks of glacial and fluvioglacial genesis and Holocene rocks of fluvial and organic genesis. In the Odra valley, the soils associated with fluvial and organic accumulation, i.e. alluvial soils and peat soils, dominate. These soils are used as arable lands and grasslands. The alluvial soils are highly productive, belong to the 2nd and 3rd class of soil

valuation and are very important for agriculture, although they are difficult to cultivate. In the Odra valley there are also moor soils, which are used mainly for grasslands (Sikorska-Maykowska et al., 2014).

KUNICE – KM 572.0 OF THE ODRA RIVER

In the immediate vicinity of the Kunice berthing and mooring place there are soils with geological-engineering conditions hindering the construction. These are areas of low-bearing soils (organic soils, cohesive soft-plastic soils and loose soils) and at the same time areas of shallow groundwater occurrence (0-2 m). At the distance of about 370 m from the berthing place at the level 4, there are geological-engineering conditions favourable for the construction. These are cohesive, solid, semi-solid and low-plasticity soils and loose, medium-compacted soils, where geodynamic phenomena do not occur and the depth of groundwater exceeds 2 m (Skompski, 1988).

BIAŁA GÓRA – KM 548.4 OF THE ODRA RIVER

In the immediate vicinity of the berthing and mooring place, in the place where the permanent bridge is to be built, there are areas with geological-engineering conditions hindering the construction as it is an area flooded during the flood. Such conditions connected with shallow groundwater occurrence (0-2 m) also prevail a bit further. It is only east of Rąpice that cohesive, solid, semi-solid and low-plasticity soils and loose, medium-compacted and compacted soils occur, on which geodynamic phenomena do not occur and the depth of the groundwater exceeds 2 m. These are regions with favourable geological and engineering conditions for the construction (Jeziorski, 1987).

4.5. SURFACE WATER

The task is located within the boundaries of the Surface Water Bodies (SWB):

- Odra River from Nysa Łużycka River to Warta River with the code of PLRW60002117999. It is a SWB of type 21 (Great Plain River), with the status of a Heavily Modified Water Body, 76.26 km long and with the catchment area of 42.28 km^2. According to the update of the River Basin Management Plan (RBMP), the SWB is in a bad condition and the achievement of the environmental objectives is at risk. The deviation from the achievement of good water condition was justified by the lack of technical possibilities. The SWB catchment area is under pressure: low emissions. The RBMP action programme provides for a review of the environmental protection programmes for the communes to identify and, as the result, reduce this pressure so that indicators consistent with the values for a good condition can be achieved. However, in view of the time necessary to implement this measure, then specific remedial measures, and the time necessary for the implemented measures to yield measurable effects, a good condition may be achieved by 2027.
- Odra River from the Warta River to the Western Odra River with the code of PLRW60002119199. It is a SWB of type 21 (Great Plain River), with the status of a Heavily Modified Water Body, 87.13 km long and the catchment area of 211.41 km^2. According to the RBMP, the SWB is in a poor condition and the

achievement of the environmental objectives is at risk. The deviation from the achievement of good water status was justified by the lack of technical possibilities. In the SWB catchment area, no pressure was identified that could be a reason for exceeding the quality indicators. It is necessary to carry out a detailed analysis of the causes in order to properly plan remedial actions. Identification of the causes of failure to achieve good status will be ensured by the implementation of measures at the national level: establishment of a national database of hydromorphological changes, in-depth analysis of pressure in terms of hydromorphological changes, development of good practices in the field of hydrotechnical and maintenance works along with establishment of rules for their implementation and development of a national programme of surface water renaturalisation. Good status as planned in the RBMP to be achieved by 2021.

- Odra River from Parnica River to the estuary with the code of PLRW6000211999. It is a SWB of type 21 (Great Plain River), with the status of a Heavily Modified Water Body, 41.77 km long and the catchment area of 185.86 km^2. According to the RBMP, the status of the SWB is bad and the achievement of the environmental objectives is at risk. The deviation from the achievement of good water status was justified by the lack of technical possibilities. The SWB catchment area is under industrial pressure. The RBMP action programme provides for a review of water law permits for wastewater discharge to water or ground by users in the SWB catchment area due to the risk to the achievement of environmental objectives, in accordance with the Water Law Act, the aim of which is to identify in detail and, as the result, reduce this pressure so that indicators consistent with the values of a good status can be achieved. However, in view of the time necessary to implement this measure, then the specific remedial measures, and the time necessary for the implemented measures to yield measurable results, a good status may be achieved by 2027.

The results of surface water quality tests by the state environmental monitoring with regard to the basic biological physicochemical parameters are presented in Table 1 below.

Table 1 Summary of data for the classification of ecological status of rivers in the JCWP covered by diagnostic and operational monitoring – assessment for 2017 and 2018 – basic physical-chemical parameters

Parameter	JCWP Odra from Nysa Łużycka to Warta PLRW60002117999 (Odra – Kostrzyn)		JCWP Odra from Warta to Western Odra PLRW60002119199 (Odra – above the mouth of Rurzyca (Krajnik Dolny))		JCWP Odra from Parnica to the mouth RW6000211999 (Western Odra – UMS base (Szczecin))	
	Value*	Class**	Value *	Class**	Value *	Class**
suspension., mg/l	16.0 (16.8)	**>II**	18.1 (20.0))	**>II**	-	
dissolved oxygen, mg O_2/l	11.3 (11.1)		11.5 (11.7)		7.9	

Parameter	JCWP Odra from Nysa Łużycka to Warta PLRW60002117999 (Odra – Kostrzyn)		JCWP Odra from Warta to Western Odra PLRW60002119199 (Odra – above the mouth of Rurzyca (Krajnik Dolny))		JCWP Odra from Parnica to the mouth RW6000211999 (Western Odra – UMS base (Szczecin))	
	Value*	Class**	Value *	Class**	Value *	Class**
BOD_5, mg O_2/l	3.1 (3.4)		2.9		2.6	**>II**
nitrogen., mg N/l	2.8 (2.6)		3.8 (2.9)		3.6	
phosphorus. mg P/l	0.14 (014)		0.17 90.16)		0.14	

Explanation:

* - average annual values are given in the column, values for 2018 are provided in parentheses

** - the total assessment of the class of the physical-chemical elements

\- - no measurement

Source: Own study on the basis of the data of WIOŚ in Zielona Góra and WIOŚ in Szczecin

4.6. GROUND WATER

The location of the Task in relation to the of Groundwater Bodies (GWB) is presented in the Table 2 Locations of individual berthing and mooring places in relation to the .

Table 2 Locations of individual berthing and mooring places in relation to the of Groundwater Bodies

Location	GWB code	Condition
Szczecin	PLGW60003	good SDC
	PLGW60004	good SDC
	GZWP No. 122 Szczecin Fossil Valley	
Zatoń Dolna	PLGW600023	good
Osinów Dolny	PLGW600023	good
Ługi Górzyckie	PLGW600040	good SDC
Pławidło	PLGW600040	good SDC
Kunice	GZWP No. 144 Wielkopolska Fossil Valley	
Kunice	PLGW600058	good SDC
Biała Góra	PLGW600058	good SDC

SDC - with a sufficient degree of credibility

Source: own studies based on RBMP and a report on the status of groundwater bodies in river basins - as of 2016 (prepared by the Polish Geological Institute on behalf of the Chief Inspectorate for Environmental Protection as part of the project entitled "Monitoring of chemical status and assessment of the status of groundwater bodies (GWB) in the river basins in 2015–2018 ".

According to the data presented in the RBMP and the data of the National Environmental Monitoring GWB, within which berthing and mooring places will be built, are characterized by good quantitative status and good chemical status.

4.7. PROTECTED AREAS

SZCZECIN – KM 34.8 OF THE WESTERN ODRA RIVER

The planned berthing and mooring place will not be located within the nature protection areas or in their immediate vicinity. The closest (within the distance of approx. 0.7 km) forms of nature protection are the nature monuments at Tobrucki Square in Szczecin.

ZATOŃ DOLNA – KM 688.0 OF THE ODRA RIVER

The activities will be carried out on the Lower and Border Odra River and on the shipping lane in km 688.0 of the Odra River. The planned berthing and mooring place is located in the following Natura 2000 areas and national protected areas:

- Lower Odra Valley PLB320003
- Lower Odra PLH320037
- on the border of the Cedynia Landscape Park, i.e. about 10-15 m from the river bank
- approximately 1 km from the ecological ground of "Skarpa w Zatoni" *["Slope in Zatoń"]*

The Natura 2000 area of the Lower Odra River Valley PLB320003 covers the area of 616.48 km² and includes the Odra River valley between Kostrzyn and the Szczecin Lagoon (length of approx. 150 km) together with the Lake Dabie. The area is a bird sanctuary of European importance.

The Lower Odra PLH320037 Natura 2000 area covers the area of 304.58 km² and includes the Odra Valley (with two main canals: the Eastern Odra and the Western Odra), extending over the area of approximately 90 km. The area is a mosaic of wetlands with peat bogs and meadows flooded in spring, alder and riparian forests, oxbow lakes, numerous river branches and islands. The area's borders contain well-preserved protected habitats.

OSINÓW DOLNY – KM 663.1 OF THE ODRA RIVER

The activities will be carried out on the Lower and Border Odra and on the waterway in km 663.1 of the river. The investment is located within the boundaries of the same nature protection forms as the Zatoń Dolna section.

ŁUGI GÓRZYCKIE – KM 607.5 OF THE ODRA RIVER

The planned berthing and mooring place will be located within the boundaries of the Natura 2000 area the Warta Mouth PLC080001 and within the boundaries of the Warta Mouth Landscape Park and the Warta Mouth National Park buffer zone.

The Natura 2000 area Warta Mouth PLC080001 areas, which within its boundaries also includes the Warta Mouth National Park buffer zone and the Warta Mouth Landscape Park, is

ecosystemically connected with the Warta River valley in its lower part and with the Odra River valley, to which the Warta River flows.

However, the main value of these areas is determined by the avifauna. In the area there are at least 35 bird species from the Annex I of Council Directive 79/409/EEC, including 5 species from the Polish Red Book (PCK).

Within the boundaries of the Warta Mouth Natura 2000 area (PLC080001), 11 natural habitat types listed in the Annex I of the Habitats Directive have been identified. The sanctuary is of key importance (overall grade A) for the European conservation of the oxbow lakes and natural eutrophic water reservoirs with *Nympheion* and *Potamion* (natural habitat code: 3150) and flooded silty river banks (natural habitat code: 3270). Significant areas, over 832 ha, are occupied by willow, poplar, alder and ash riparian forests (91E0) and alluvial meadows of the *Cnidion dubii* complex (natural habitat code: 6440; area: 432 ha). High value of the area is also associated with the occurrence of mountain tall herb communes *Adenostylion alliariae* and riverside tall herb communes *Convolvuletalia sepium* (code: 6430; area: 66.59 ha), sand calcareous grassland plants (habitat code: 6120) and xerothermic grasslands (habitat code: 6210), oak-hornbeam forests (natural habitat code: 9170) and extensively used fresh meadows (natural habitat code: 6510).

PŁAWIDŁO – KM 595.3 OF THE ODRA RIVER

The planned berthing and mooring place will be located in the "Słubicka Dolina Odry" *[Słubicka Odra Valley]* Protected Landscape Area. The characteristic features of this protected area are large forest complexes, riparian forests, which are subject to regular flooding, and extensive pastures and meadows.

KUNICE – KM 572.0 OF THE ODRA RIVER

The planned berthing and mooring place will be located in the area of the following forms of the nature protection:

- Natura 2000 area, i.e. the Pliszka Valley PLH080011 (at the border of the area) – the area of Community importance,
- Natura 2000 area, i.e. a special bird protection area called the Middle Odra Valley PLB080004,
- "Słubicka Dolina Odry" *[Słubicka Odra Valley]* Protected Landscape Area,
- Lubuskie Land ecological corridor – the north.

The Pliszka Valley Natura 2000 area (PLH080011) includes a small river valley that runs through extensive outwash plain fields. The Pliszki outwash plain is separated by its high edges from the higher outwash plain levels and the end moraine hills. The area is particularly important for the protection of forest natural habitats of riparian forests type (91E0) as well as peatland habitats (7140, 7220, 7230) and rare invertebrate species of narrow-mouthed whorl snail and Desmoulin's whorl snail (1014, 1016).

The special bird protection area of the Middle Odra Valley (PLB080004), with the area of 33 677.8 ha, covers a fragment of the Odra Valley from km 408 to km 592 (length of approximately 184 km, width ranging from nearly 5 km to only a few hundred metres). In the area there are non-forest ecosystems, which are crucial for bird conservation, in a

mosaic with perfectly preserved riparian forests and water ecosystems. The area is important in particular for the conservation of the breeding and migratory population of 14 bird species, including 8 species listed in the Annex I of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

BIAŁA GÓRA – KM 548.4 OF THE ODRA RIVER

The activities will be carried out on the Lower and Border Odra. The planned berthing and mooring place will be located in the area of the following forms of nature protection:

- Natura 2000 area, i.e. the Krosno Odra Valley PLH080028 area of Community importance,
- Natura 2000 area, i.e. a special bird protection area called the Middle Odra Valley PLB080004,
- Krzesiński Landscape Park.

The Krosno Odra Valley (PLH080028), with the area of 19202.47 ha, covers a fragment of the Odra Valley from Cigacice to the Polish-German border. The place owes its special natural values to well-preserved oxbow lakes, riparian forests, large complexes of foxtail meadows and Cnidion dubii alluvial meadows. The refuge includes the final section of the Bóbr River flowing to the Odra River (from the dam weir in Raduszec Stary to the mouth): it is a regionally important spawning ground for reophilous fish (including asp) and river lamprey.

The special bird protection area of the Middle Odra Valley (PLB080004), with the area of 33 677.8 ha, covers a fragment of the Odra Valley from km 408 to km 592 (length of approximately 184 km, width ranging from nearly 5 km to only a few hundred metres). In the area there are non-forest ecosystems, which are crucial for bird conservation, in a mosaic with perfectly preserved riparian forests and water ecosystems. The area is important in particular for the conservation of the breeding and migratory population of 14 bird species, including 8 species listed in the Annex I of Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

Special elements of the Krzesiński Landscape Park include: the most valuable and best preserved semi-natural phytocenoses and biocenoses of natural or semi-natural character of the estuary section of the Nysa Łużycka River and the proglacial stream valley of the Odra River; mid-field, roadside and waterside trees; floodplain meadows, in particular the area of the Krzesińsko-Bytomiecki Polder and oxbow lakes; a white stork colony in Kłopot.

4.8. CULTURAL MONUMENTS

In the vicinity of the planned berthing and mooring place within the boundaries of the city of Szczecin (Western Odra River, km 34.8) there are objects listed in the register of monuments, but they are located outside the direct place of the planned activities. The execution of the berthing space will not cause any negative impact on the monuments, the list of which is presented in the table below.

Table 3 Monuments in the vicinity of the planned berthing and mooring place in Szczecin

Pos.	Monument	Location	Historical period
1	Tenement house	Szczecin, ul. K. Kolumba 61	1885
2	Yeast factory	Szczecin, ul. K. Kolumba	1905
3	The former spirit and yeast factory complex F. Crepin	Szczecin, 60a K. Kolumba street	1888 – 1905
4	Boiler house	Szczecin, K. Kolumba street	Date unknown
5	Distillery	Szczecin, 60b K. Kolumba street	1895
6	Production and warehouse building II	Szczecin, 81 K. Kolumba street	turn of 19th/20th centuries
7	Boiler house	Szczecin, 81 K. Kolumba street	turn of 19th/20th centuries
8	Production building, former stable and coach house	Szczecin, 81 K. Kolumba street	turn of 19th/20th centuries
9	The complex of the former spirit, liqueur and yeast factory O. Lefevre	Szczecin, 81 K. Kolumba street	1899 – 1905
10	Cellar	Szczecin, 81 K. Kolumba street	turn of 19th/20th centuries
11	Production and warehouse building I	Szczecin, 81 K. Kolumba street	turn of 19th/20th centuries
12	The complex of the former tram depot	Szczecin, K. Kolumba street	1885
13	Bridge	Szczecin, Bridge to Jaskółcza Island	1920 – 1930
14	Engine room building	Szczecin, Jaskółcza Island	1920 – 1930

Source: https://mapy.zabytek.gov.pl/nid/

In the vicinity of other planned berthing and mooring places there are no objects listed in the register of monuments.

4.9. POPULATION AND MATERIAL GOODS

The Task is mostly located outside the immediate vicinity of built-up areas. The works will be carried out in the water area within the green areas. Only the berthing and mooring place in Szczecin is located within the city, but due to its port character the Task will not adversely affect the population and property.

5. SUMMARY OF THE ENVIRONMENTAL IMPACT

5.1. LAND SURFACE AND LANDSCAPE

SZCZECIN – KM 34.8 OF THE WESTERN ODRA RIVER

In the place of the planned berthing and mooring place there is currently a berthing mooring line. Therefore, no change in the use of this area is planned. It should be indicated that the berthing space is planned within the city of Szczecin, i.e. an urbanised area, anthropogenically transformed, in the vicinity of the urban development.

ZATOŃ DOLNA – KM 688.0 OF THE ODRA RIVER

The planned investment will be made in a place where no vessels have been stationed so far. The construction of a mooring line with a berthing function on the length of approx. 110 m will cause changes in the landscape. However, these elements will not be high, so the changes will not be significant. Moreover, the range of changes will be local, limited to the range of the investment itself (footbridge and mooring line). The new elements will not be dominant in the landscape.

OSINÓW DOLNY – KM 663.1 OF THE ODRA RIVER

At present, at the planned investment site berthing is allowed for vessels at anchor. Therefore, the construction of the berthing and mooring place with the length of approx. 110 m together with the footbridge with the length of approx. 22.5 m will not significantly change the function of this area. The change, which will take place as the result of the investment, will concern the foundation of dolphins in the riverbed and the construction of a permanent footbridge. The new elements will not be dominant in the landscape.

ŁUGI GÓRZYCKIE – KM 607.5 OF THE ODRA RIVER

The planned investment will be made in a place where no vessels have been stationed so far. The construction of a mooring line with a berthing function on the length of approx. 90 m will cause changes in the landscape. However, these elements will not be high, so the changes will not be significant. Moreover, the range of changes will be local, limited to the range of the investment itself (footbridge and mooring line). The new elements will not be dominant in the landscape.

PŁAWIDŁO – KM 595.3 OF THE ODRA RIVER

It is planned to create a mooring line with the length of approx. 90 m and to build a permanent footbridge connecting the dolphins with the bank. There will be new elements - dolphins in the riverbed and a footbridge, which will have a negative impact on the local landscape, but it should be stressed that these elements will be low, so the changes will not be significant. Moreover, the range of changes will be local, limited to the range of the investment itself (footbridge and mooring line). The new elements will not be dominant in the landscape.

KUNICE – KM 572.0 OF THE ODRA RIVER

A mooring line already exists at this location and will be decommissioned, and the new dolphins will be constructed approximately 5.0 m closer to the river axis. Thus, the land surface and landscape at the site of the planned investment will not change significantly. The main change will consist in the construction of a footbridge. The new elements will not be dominant in the landscape.

BIAŁA GÓRA – KM 548.4 OF THE ODRA RIVER

Berthing is currently allowed in the place of the planned investment, therefore no major change in the function of this area is planned. There are plans to build a mooring line only for the berthing function. New elements will appear - dolphins in the riverbed and a footbridge that will negatively affect the local landscape, but it should be emphasized that these elements will be of low height, so these changes will not be significant. In addition, the scope of the changes will be local, limited to the scope of the investment itself (footbridge and mooring line). The new elements will not dominate the landscape.

To sum up, it should be stated that as the result of the implementation of the Task new elements (dolphins, footbridges) will appear, which will be visible in the landscape, but they will not be high elements. In particular, the new elements will not be dominant in the landscape. Construction works for all sections will be carried out in such a way as to minimise their impact on the environment. In particular, it is not planned to remove trees growing on the river bank.

5.2. CLIMATE AND AIR QUALITY

The short-term nature of the emissions will also not affect the climate of the area where the berthing and mooring places are located. After the completion of the Task, the operation of the berthing and mooring places will not involve any significant emission of pollutants into the air. It should be noted, however, that both now and after the completion of the Task, during the ice-breaking operation, there will be emission of pollutants as the result of fuel combustion in engines of working ice-breakers. Also, due to the fact that the Odra River serves as a waterway, the emitters of pollutants into the air are and will in the future be engines of vessels operating within the framework of the inland navigation.

This emission will not have a significant impact on the air quality and climate in the area of the Western Odra and the Border Odra.

5.3. GEOLOGY

The location of new dolphins will involve direct intervention works in the bottom of the Odra riverbed. Holocene deposits will be disturbed and, depending on the foundation depth of new dolphins, Pleistocene deposits will be also disturbed. In addition, for off-lane berthing and mooring places, dredging may be required to ensure the depth within the mooring line equal to the transit depth of 1.8 m. Such a necessity has been assumed for the berthing spaces in Osinów Dolny, Pławidło, Biała Góra, Ługi Górzyckie, Kunice.

In addition, except for the berthing and mooring place in Szczecin, the construction of a permanent footbridge connecting the mooring line with the bank is planned. Therefore, there will be slight changes in the sediments on the bank related to the construction of the footbridge.

No changes to the sediments are expected during operation unless the bottom in the place of icebreakers' berthing will need to be deepened.

5.4. SOIL AND LAND

The implementation of the berthing and mooring places will not affect the soil and land adjacent to the Odra River since the dolphins will be founded in the Odra riverbed and the works will be carried out from the water. At the stage of execution of the investment, the soil will be disturbed only in connection with the construction of permanent footbridges connecting the mooring line with the bank and possibly on access roads. The construction of the footbridges is connected with direct soil disturbance in the riverbank at the footbridge construction site. The risk of soil contamination is also possible during construction works due to the operation of construction equipment.

Within 5 berthing and mooring places, it is assumed that dredging works may be needed within the mooring line in order to ensure a depth equal to the transit waterway depth. The manner of managing the dredging spoil will be determined by the Contractor in accordance with relevant provisions in the field of waste management and the results of laboratory tests specifying the degree of spoil contamination. At the sites of planned dredging works in 2019, sediment samples were collected, which were then tested in an accredited laboratory. According to the test results, the bottom sediments tested do not contain components in concentrations exceeding the limit parameters set out in Annex 1 to the Regulation of the Council of Ministers *on the recovery of waste outside installations and devices* (Journal of Laws of 2015, item 996).

At the stage of operation, no changes are expected in the soils and lands of the immediate surroundings of the investment.

5.5. SURFACE WATER

The implementation of the Task will result in potential adverse impacts on the abiotic components. The impacts that will occur during the project implementation phase are redistribution of bottom sediments as the result of construction works carried out in the riverbed, in particular dredging and elimination of riverbed forms (micro-habitats) present at the dolphin foundations and in the places of dredging works.

The installation of the dolphins will take place directly in the Odra riverbed, which will lead to the uplifting of sediments from the bottom and a slight increase in the suspended solids present in the surface water. A more significant increase in the suspended solids concentration present in surface water will be due to execution of dredging works to ensure the depth of 1.8 m within the mooring line equal to the transit depth.

The investment will not significantly change the width and profile of the riverbed, the only intervention in this respect is related to accompanying dredging within the selected mooring lines in order to obtain sufficient depth for icebreakers.

The Task will be implemented within three SWB. Due to the relatively small spatial scale of the project, in relation to the SWB, the scope of negative impact, using the designed minimizing measures, will not be significant.

It should be noted that all potential impacts associated with the implementation phase are temporary, of short-term duration and fully reversible.

5.6. GROUNDWATER

Both implementation and operation of the Task will not result in the inflow of pollutants to the groundwater, which will not deteriorate the chemical condition of the body of groundwater bodies. The planned investment will also have no negative impact on the environmental objectives concerning the quantitative status of the groundwater.

5.7. WILDLIFE

5.7.1. TERRESTRIAL ENTOMOFAUNA AND MALACOFAUNA

The scope of the inventory of entomophofauna and malacofauna included site investigation, identification of the species composition and number of animals. The site investigation began in June and was completed in October 2017. Four field inspections were carried out: 28.06, 19.07, 17.08, 05.09.

Table 4 List of protected insect and terrestrial snail species recorded in the area of the Task

Location	Species name	Number of individuals recorded
Szczecin	Buff-tailed bumblebee *Bombus terrestris*	2
Zatoń Dolna	Buff-tailed bumblebee *Bombus terrestris*	12
	Red-tailed bumblebee *Bombus lapidarius*	5
	Early bumblebee *Bombus pratorum*	9
	Common carder bee *Bombus pascuorum*	12
	White-tailed bumblebee *Bombus lucorum*	2
	Green snaketail *Ophiogomphus cecilia*	5
Osinów Dolny	Buff-tailed bumblebee *Bombus terrestris*	8
	Red-tailed bumblebee *Bombus lapidarius*	2
	Early bumblebee *Bombus pratorum*	9
	Common carder bee *Bombus pascuorum*	9
	White-tailed bumblebee *Bombus lucorum*	1
	Green snaketail *Ophiogomphus cecilia*	1
	Leather beetle *Carabus coriaceus*	1

Location	Species name	Number of individuals recorded
Ługi Górzyckie	Buff-tailed bumblebee *Bombus terrestris*	5
	Red-tailed bumblebee *Bombus lapidarius*	5
	Early bumblebee *Bombus pratorum*	8
	Common carder bee *Bombus pascuorum*	12
	Green snaketail *Ophiogomphus cecilia*	3
Pławidło	Buff-tailed bumblebee *Bombus terrestris*	12
	White-tailed bumblebee *Bombus lucorum*	1
	Tree bumblebee *Bombus hypnorum*	1
	Early bumblebee *Bombus pratorum*	10
	Red-tailed bumblebee *Bombus lapidarius*	3
	Garden bumblebee *Bombus hortorum*	2
	Common carder bee *Bombus pascuorum*	12
	Red-shanked carder bee *Bombus ruderarius*	1
	Shrill carder bee *Bombus sylvarum*	1
	Green snaketail *Ophiogomphus cecilia*	6
	Leather beetle *Carabus coriaceus*	2
Kunice	Buff-tailed bumblebee *Bombus terrestris*	10
	Red-tailed bumblebee *Bombus lapidarius*	5
	Tree bumblebee *Bombus hypnorum*	1
	White-tailed bumblebee *Bombus lucorum*	1
	Leather beetle *Carabus coriaceus*	1
	Green snaketail *Ophiogomphus cecilia*	7
Biała Góra	Buff-tailed bumblebee *Bombus terrestris*	7
	Red-tailed bumblebee *Bombus lapidarius*	3
	Leather beetle *Carabus coriaceus*	2

The basic mitigation measures for entomophofauna and malacofauna should be the sustaining of feeding and nesting bases with the least possible impact of the construction on the land areas and the protection of open areas along the banks, or the sustaining of reproductive water areas in an unchanged condition (e.g. for the green snaketail *Ophiogomphus cecilia*).

In case of construction of berthing and mooring places within the riverbed there is no fear of depletion of insect habitats and feeding grounds. The works will be carried out from the water side. The only local and minor intervention in the riverbank is the foundation of footbridges on land. Such local bank transformation will have no impact on the depletion of insect habitats and thus on the status of the insect population.

5.7.2. AQUATIC MALACOFAUNA AND MACROBENTHOS

The study of macrobenthos and malacofauna of the Border Odra was conducted in 2017 at 16 research stations. Two monitoring periods were planned for May-June (10 research stations) and September-October (16 research stations), i.e. the period of the greatest taxonomic diversity of macrobenthos. At each of the research stations, sampling points were determined in accordance with the method "Methodology of taking multi-habitat samples of benthic macro invertebrates (RIVECOmacro) in large and difficult-to-reach rivers for ecological monitoring, in accordance with the assumptions of the Water Framework Directive"[12]. In the case of malacofauna sampling, samples were collected once from 17 stations, in June from 10 stations, whereas in September from the remaining 7 stations. Samples were collected by a diver from places of a mass presence of *Unionidae* species.

No protected and rare taxa were found in the examined macro-benthos. The benthos of the border Odra River was characterised by a high proportion of taxa foreign for our native fauna, 15 species were recorded in the group of molluscs and crustaceans. Foreign species were often characterised by high densities, especially in the case of crustaceans.

During hydrotechnical works in the Odra River, it is important to protect and preserve marginal lake habitats in the vicinity of groynes. The stagnant water zone next to the groyne wall is particularly valuable. It is inhabited by *Unionidae* species, which are particularly important in the river ecosystem. Whereas for benthos, it is dangerous if the sediment persists for a long period of time when the sediment is raised during the works.

Taking into account the nature of the Project and the scope of work, it is not expected that the stagnant water zones will be destroyed, which could have an impact on the Malacofauna of the Odra River. Expect for the construction of supports for footbridges, works will be carried out outside of zones between groynes. Disturbance to the river bottom within the stagnant water zones will therefore be very limited in space, point and local.

Dredging works carried out at the mooring line from the waterway side will cause an occasional increase in the concentration of suspended solids in surface water. However, due to the completion of the planned berth, no long-term retention of raised sediments is expected, and works will be carried out efficiently for approximately 3 months to reduce the negative impact on invertebrate fauna.

[12] Bis B., Mikulec A. (ed.) 2013 A guide to the assessment of the ecological condition of rivers on the basis of benthic macro invertebrates. Library of Environmental Monitoring, Warsaw, 61-68.

5.7.3. PHYTOBENTHOS

The diatomaceous phytobenthos samples were collected from the border Odra River on 12-15 September 2017 in the Kunice - Gozdowice section and on 18 September 2017 in the Gozdowice - Ognica section.

During the diatomaceous analysis, 163 species of diatoma belonging to 48 genera were identified in total for the purpose of determining the ecological condition of particular research sections using the diatomaceous index.

During the works, it is important to protect and preserve rare species and their habitats recorded occasionally, in order to enable the restoration of lost species populations. After the analyses it was found that the diatomaceous flora occurring at the examined points did not differ from the previously recorded diatomaceous communities in habitats of the type of large lowland river.

5.7.4. FISH FAUNA

Examination of the species composition of fish fauna was carried out in the field under vital conditions by using the electrofishing method.

The inventory was carried out on 16-29 September 2017. As the result of the inventory, 24 taxa of fish were found, these were mainly widespread species. Among the identified species there were those covered by the Habitats Directive - Annex II: Animal species of Community interest, conservation of which requires the designation of Special Protection Areas (without birds). Fish species listed in the Annex II of the Habitats Directive were found in the examined sites: asp *(Aspius aspius),* spined loach *(Cobitis taenia)*, white-finned gudgeon (*Romanogobio albipinnatus*), European weatherfish (*Misgurnus fossilis*) and European bitterling (*Rhodeus amarus).*

Taking into account the nature of the Task and the scope of works, it is not expected that the execution of the investment could significantly affect the fish population, their habitat or spawning. The execution of the dolphins includes the vibrating of an open-bottomed steel tube into the ground, with a soil cork inside and sand filling in the rest of the space. There will be short-term scaring of fish during the execution of construction works, but this will be a period of approximately 3 months, after which any impacts will cease. The dolphins themselves will be constructed away from the bank or the walls of the groynes, which will not be disturbed, despite planned minor dredging. The dredging to be carried out at selected locations will be carried out outside the inter-groyne fields, within the founded dolphins and further towards the main current with a relatively little biodiversity. However, the works will be carried out under the supervision of an environmental specialist to avoid disturbance of fish spawning, migration of fish and other aquatic organisms in case of inappropriate timing of work.

5.7.5. HERPETOFAUNA

Checks on herpetofauna were carried out in March and April 2018. At each location (except for the location in Szczecin) at least two daily inspections were carried out per month and additionally at least one inspection in a month, in the evening and at night hours, in order to carry out listening watch to and check the activity of nightlife amphibian species.

The basic activity aimed at limiting the negative impact of the Task on the herpetofauna will be the execution of works aimed at disturbing the bank in the period between September and April, when the activity of amphibians is minimal.

It should not be expected that with such scope of the investment it would have a significant impact on the herpetofauna, especially as the intervention in the bank will be limited to the area occupied for the foundation of the footbridge and the rest of the works related to the construction of dolphins will be carried out at a certain distance from the bank.

For both reptiles and amphibians, the effects of the works at the Odra River bank should not be adverse during the post-investment period.

Table 5 List of protected taxa of amphibians and reptiles recorded in the Task implementation area

Location	Species name
Szczecin	No inspections carried out
Zatoń Dolna	Viviparous lizard (*Zootoca vivipara*)
	Slow-worm (*Anguis fragilis*)
	Grass snake (*Natrix natrix*)
	Group of green frogs (*Pelophylax esculentus complex*)
Osinów Dolny	Sand lizard (*Lacerta agilis*)
	Grass snake (*Natrix natrix*)
	European fire-bellied toad (*Bombina bombina*)
	Common toad (*Bufo bufo*)
	Grass frog (*Rana temporaria*)
	Marsh frog (*Pelophylax ridibundus*)
	Smooth newt (*Lissotriton vulgaris*)
Ługi Górzyckie	Pool frog (*Pelophylax lessonae*)
	Group of green frogs (*Pelophylax esculentus complex*)
Pławidło and Kunice	European fire-bellied toad (*Bombina bombina*)
	Common toad (*Bufo bufo*)
	Marsh frog (*Pelophylax ridibundus*)
Biała Góra	Common toad (*Bufo bufo*)
	Group of green frogs (*Pelophylax esculentus complex*)

5.7.6. BAT FAUNA

The inventory covered all bat species which, according to the Regulation of the Minister of the Environment of 16 December 2016 *on the protection of animal species* (Journal of Laws 2016, item 2183), are subject to strict protection. Particular attention was paid to species included in the Annex II of the Habitats Directive of the European Union (Council Directive 92/43/EEC, 1992), i.e. requiring designation of special areas of protection.

The site investigation took place in September 2017 and May 2018 and the Task area was reviewed for relevance to particular bat species.

The bat fauna examination of the Odra River showed the presence of 6 bat taxa:

- Nathusius' pipistrelle (*Pipistrellus nathusii*)
- Common pipistrelle (*Pipistrellus pipistrellus s.s.*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)
- Common noctule (*Nyctalus noctula*)
- Serotine bat (*Eptesicus serotinus*)
- Unclassified mouse-eared bat (*Myotis sp*.)

All the taxa mentioned above are subject to strict protection in Poland under the Regulation of the Minister of the Environment of 16 December 2016 *on the protection of animal species* (Journal of Laws 2016, item 2183) and require active protection. On the basis of the data obtained, it can be concluded that the Odra River is an important feeding ground for bats.

Potential bat hiding places occur only in the vicinity of the planned investment site, the water surface being the place of direct execution of works is only a small part of the feeding ground, i.e. the water surface of the Odra River. During the implementation of the works, occasional impacts are expected which will be related in particular to noise emissions. The removal of trees is not planned in connection with the investment, therefore no permanent destruction of shelters of bats is expected. Therefore, no significant impacts are expected when mitigation measures are applied.

5.7.7. MAMMALIAN FAUNA

In order to examine the species composition of mammalian fauna, an assessment of potential habitats of occurrence and a search for traces of small mammals (hills, nests and dead animals) were carried out.

In order to investigate mammalian fauna, transects from water and land were carried out in the area of planned berthing and mooring places. The investigated section was checked in the whole area. In addition, a drone was used to explore the area.

During the inspection, the signs of presence of mammals were searched for, inter alia, traces, excrements, burrows, hills, paths, hiding places, bites, beaver lodges. In the case of the otter and beaver, the search for species was consistent with the methodological guidelines included in the Part 4 of the Methodological Guide of the Chief Inspectorate for Environmental Protection.

Table 6 List of protected species of mammals recorded in the Task implementation area

Location	Species name
Szczecin	During the inventory period, no protected mammal species were found in the examination area
Zatoń Dolna	Hedgehog *(Erinaceus sp.)*
	European water vole *(Arvicola amphibius)*
	Eurasian otter *(Lutra lutra)*
	European beaver *(Castor fiber)*
Osinów Dolny	Eurasian otter *(Lutra lutra)*
	Least weasel (*Mustela nivalis)*
Ługi Górzyckie	Common shrew *(Sorex araneus)*
	Eurasian harvest mouse (*Micromys minutus)*
	European beaver (*Castor fiber)*
Pławidło and Kunice	Eurasian otter *(Lutra lutra)*
	European beaver (*Castor fiber)*
Biała Góra	Eurasian otter *(Lutra lutra)*

A beaver family was found on the banks of the Odra River in the investigated area in the vicinity of berthing and mooring place in the location of Zatoń Dolna, where active burrows of the species as well as fresh and old feeding traces were found. The overlapping of the investment borders with the occurrence of two entrances to burrows could cause a negative impact of the investment on the beaver family living there. Additional traces of burrow entrances or ventilation openings were found near the boundaries of the investment (maximum 150 m from the boundaries of the planned berthing and mooring place). In order to avoid a possible collision of the planned footbridge with the burrow sites, as well as to minimise the impact in this respect, the berthing and mooring place was finally moved upstream by approx. 40 m, thus shifting the foundation site of the footbridge. Therefore, during the implementation phase, the natural supervision of a mammalian fauna specialist will be provided in order to avoid damage to the burrow, who will assess the impact of the investment on the beaver family living there after the completion of the project and will implement possible remedial measures to minimise the impact of icebreakers mooring.

5.7.8. BIRD FAUNA

The first inspections of the bird fauna were carried out in mid-April 2017 and continued until July 2017 (inventory I). Further follow-up inspections were carried out in March and April 2018 (inventory II).

During inventory I day and night inspections were carried out. Flight and wintering birds inspections were carried out from September 2017 to March 2018. The monitoring covered the species of birds listed in the Annex I of the Directive (2009/147/EC) of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds. Particular attention was also paid to species being objects of protection in Natura 2000 areas covering the studied area. The inspections carried out were based on a spotting aid method,

supported by bird fauna specialist with optical equipment in the form of binoculars and telescopes. Since in the vast majority of cases precise nest location is not possible, those birds that were seen (heard) more than once during the breeding season were considered the breeding species and when territorial voices of males were heard.

During the inventory II, all bird species were monitored, observations were carried out at the site of the planned investment and in the buffer areas, approx. 300 m down and up the river. Birds were counted and mapped along the banks of the river. In addition, a 10-minute counting from the point was carried out at the investment site, recording all individuals seen within a 100-meter radius.

No bird fauna inventory was carried out for the location of the berthing and mooring place in Szczecin.

Table 7 List of bird species recorded in the Zatoń Dolna area

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
1	White-tailed eagle *(Haliaeetus albicilla)*	NO	-
2	White stork *(Ciconia ciconia)*	NO	-
3	Black woodpecker *(Dryocopus martius)*	YES	N
4	Great spotted woodpecker *(Dendrocopos major)*	YES	-
5	Lesser spotted woodpecker *(Dryobates minor)*	YES	-
6	Common goldeneye *(Bucephala clangula)*	NO	-
7	Great cormorant *(Phalacrocorax carbo)*	NO	N
8	Mallard *(Anas platyrhynchos)*	NO	H
9	Goosander *(Mergus merganser)*	NO	H
10	Great crested grebe *(Podiceps cristatus)*	NO	-
11	Thrush nightingale *(Luscinia luscinia)*	YES	-
12	Common kingfisher *(Alcedo atthis)*	YES	-
13	Grey heron *(Ardea cinerea)*	-	N
14	Red kite *(Milvus milvus)*	-	F
15	Common sandpiper *(Actitis hypoleucos)*	-	N
16	Common wood pigeon *(Columba palumbus)*	-	H
17	Barn swallow *(Hirundo rustica)*	-	H
18	Common house martin *(Delichon urbicum)*	-	H
19	Common redstart *(Phoenicurus phoenicurus)*	-	H
20	Eurasian blackcap *(Sylvia atricapilla)*	-	H
21	Willow warbler *(Phylloscopus trochilus)*	-	H
22	Great tit *(Parus major)*	-	H
23	Eurasian jay *(Garrulus glandarius)*	-	N
24	Eurasian magpie *(Pica pica)*	-	H
25	Common starling *(Sturnus vulgaris)*	-	H
26	Eurasian tree sparrow *(Passer montanus)*	-	H

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
27	Common chaffinch *(Fringilla coelebs)*	-	H
28	Hawfinch *(Coccothraustes coccothraustes)*	-	N

*Status: H- hatching, N - non hatching (feeding, resting), F - flying (observed only in flight)

** YES – recorded hatching of analysed group of bird species, NO – no hatching of analysed group of bird species recorded

Table 8 List of bird species recorded in the Osinów Dolny section

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
1	Marsh harrier *(Circus aeruginosus)*	YES	-
2	Common goldeneye *(Bucephala clangula)*	NO	-
3	Red-backed shrike*(Lanius collurio)*	YES	H
4	Greylag goose *(Anser anser)*	NO	P
5	Warbler *(Curruca nisoria)*	YES	-
6	Great cormorant *(Phalacrocorax carbo)*	NO	-
7	Mallard *(Anas platyrhynchos)*	YES	H
8	Wood lark *(Lullula arborea)*	YES	-
9	Mute swan *(Cygnus olor)*	YES	F
10	Goosander *(Mergus merganser)*	NO	-
11	European bee-eater *(Merops apiaster)*	NO	-
12	Black kite *(Milvus migrans)*	-	F
13	Common kestrel *(Falco tinnunculus)*	-	F
14	Black-headed gull *(Chroicocephalus ridibundus)*	-	F
15	Caspian gull *(Larus cachinnans)*	-	F
16	Common tern *(Sterna hirundo)*	-	F
17	Common wood pigeon *(Columba palumbus)*	-	H
18	Barn swallow *(Hirundo rustica)*	-	F
19	Thrush nightingale *(Luscinia luscinia)*	-	H
20	European stonechat *(Saxicola rubicola)*	-	H
21	Common grasshopper warbler *(Locustella neavia)*	-	H
22	Reed warbler *(Acrocephalus scirpaceus)*	-	H
23	Great reed warbler *(Acrocephalus arundinaceus)*	-	H
24	Warbler *(Sylvia nisoria)*	-	H
25	Common whitethroat *(Sylvia communis)*	-	H
26	Eurasian blackcap *(Sylvia atricapilla)*	-	H
27	Common chiffchaff *(Phylloscopus collybita)*	-	H
28	Willow warbler *(Phylloscopus trochilus)*	-	H
29	Eurasian golden oriole *(Oriolus oriolus)*	-	H

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
30	Hooded crow *(Corvus cornix)*	-	N
31	Common starling *(Sturnus vulgaris)*	-	N
32	European greenfinch *(Carduelis chloris)*	-	N
33	Yellowhammer *(Emberiza citrinella)*	-	H
34	Common reed bunting *(Emberiza schoeniclus)*	-	H
35	Corn bunting *(Emberiza calandra)*	-	H

*Status: L- hatching, N - non hatching (feeding, resting), P - flying (observed only in flight)

** YES – recorded hatching of analysed group of bird species, NO – no hatching of analysed group of bird species recorded

Table 9 List of bird species recorded in the Ługi Górzyckie section

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
1	Montagu's harrier *(Circus pygargus)*	NO	-
2	European green woodpecker *(Picus viridis)*	YES	-
3	Red-backed shrike*(Lanius collurio)*	YES	-
4	Great cormorant *(Phalacrocorax carbo)*	NO	N
5	Mallard *(Anas platyrhynchos)*	NO	H
6	Osprey *(Pandion haliaetus)*	NO	-
7	Gadwall *(Anas strepera)*	-	F
8	Goosander *(Mergus merganser)*	-	H
9	Black kite *(Milvus migrans)*	-	N
10	Grey heron *(Ardea cinerea)*	-	N
11	Black-headed gull *(Chroicocephalus ridibundus)*	-	F
12	Common cuckoo *(Cuculus canorus)*	-	H
13	Tawny owl *(Strix aluco)*	-	H
14	Great spotted woodpecker *(Dendrocopos major)*	-	H
15	Black woodpecker *(Dryocopus martius)*	-	N
16	Eurasian wryneck *(Jynx torquilla)*	-	H
17	Barn swallow *(Hirundo rustica)*	-	F
18	Common house martin *(Delichon urbicum)*	-	F
19	Tree pipit *(Anthus trivialis)*	-	H
20	White wagtail *(Motacilla alba)*	-	H
21	Eurasian wren *(Troglodytes troglodytes)*	-	H
22	Common blackbird *(Turdus merula)*	-	H
23	Common grasshopper warbler *(Locustella naevia)*	-	H
24	Great reed warbler *(Acrocephalus arundinaceus)*	-	H
25	Common whitethroat *(Sylvia communis)*	-	H

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
26	Garden warbler *(Sylvia borin)*	-	H
27	Eurasian blackcap *(Sylvia atricapilla)*	-	H
28	Marsh tit *(Parus palustris)*	-	H
29	Great tit *(Parus major)*	-	H
30	Eurasian nuthatch *(Sitta europaea)*	-	H
31	Short-toed treecreeper *(Certhia brachydactyla)*	-	H
32	Eurasian golden oriole *(Oriolus oriolus)*	-	H
33	Hooded crow *(Corvus cornix)*	-	H
34	Common starling *(Sturnus vulgaris)*	-	H
35	Common chaffinch *(Fringilla coelebs)*	-	H
36	European goldfinch *(Carduelis carduelis)*	-	F
37	Common reed bunting *(Emberiza schoeniclus)*	-	H

*Status: H- hatching, N - non hatching (feeding, resting), F - flying (observed only in flight)
** YES – recorded hatching of analysed group of bird species, NO – no hatching of analysed group of bird species recorded

Table 10 List of bird species recorded in the Pławidło section

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
1	European green woodpecker *(Picus viridis)*	YES	H
2	Black kite *(Milvus migrans)*	NO	-
3	Great cormorant *(Phalacrocorax carbo)*	NO	N
4	Mallard *(Anas platyrhynchos)*	NO	H
5	Goosander *(Mergus merganser)*	NO	H
6	Thrush nightingale *(Luscinia luscinia)*	YES	-
7	Common grasshopper warbler *(Locustella naevia)*	YES	-
8	Greylag goose *(Anser anser)*	-	F
9	Grey heron *(Ardea cinerea)*	-	N
10	Osprey *(Pandion haliaetus)*	-	F
11	Black-headed gull *(Chroicocephalus ridibundus)*	-	F
12	Caspian gull *(Larus cachinnans)*	-	F
13	Common cuckoo *(Cuculus canorus)*	-	H
14	Great spotted woodpecker *(Dendrocopos major)*	-	H
15	Lesser spotted woodpecker *(Dendrocopos minor)*	-	H
16	Eurasian wryneck *(Jynx torquilla)*	-	H
17	Barn swallow *(Hirundo rustica)*	-	F
18	Bluethroat *(Luscinia svecica)*	-	H
19	Common blackbird *(Turdus merula)*	-	H

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
20	Sedge warbler *(Acrocephalus schoenobaenus)*	-	H
21	Reed warbler *(Acrocephalus scirpaceus)*	-	H
22	Great reed warbler *(Acrocephalus arundinaceus)*	-	H
23	Common whitethroat *(Sylvia communis)*	-	H
24	Garden warbler *(Sylvia borin)*	-	H
25	Eurasian blackcap *(Sylvia atricapilla)*	-	H
26	Common chiffchaff *(Phylloscopus collybita)*	-	H
27	Eurasian blue tit *(Cyanistes caeruleus)*	-	H
28	Great tit *(Parus major)*	-	H
29	Eurasian nuthatch *(Sitta europaea)*	-	H
30	Eurasian penduline tit *(Remiz pendulinus)*	-	H
31	Hooded crow *(Corvus cornix)*	-	H
32	Common starling *(Sturnus vulgaris)*	-	H
33	European goldfinch *(Carduelis carduelis)*	-	F
34	Common linnet *(Carduelis cannabina)*	-	F
35	Yellowhammer *(Emberiza citrinella)*	-	H
36	Common reed bunting *(Emberiza schoeniclus)*	-	H

*Status: L- hatching, N - non hatching (feeding, resting), P - flying (observed only in flight)
** YES – recorded hatching of analysed group of bird species, NO – no hatching of analysed group of bird species recorded

Table 11 List of bird species recorded in the Kunice section

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
1	Great cormorant *(Phalacrocorax carbo)*	NO	-
2	Mallard *(Anas platyrhynchos)*	NO	H
3	Goosander (*Mergus merganser)*	NO	-
4	Mute swan *(Cygnus olor)*	-	N
5	Greylag goose *(Anser anser)*	-	N
6	Black kite *(Milvus migrans)*	-	N
7	Red kite *(Milvus milvus)*	-	F
8	White-tailed eagle *(Haliaeetus albicilla)*	-	N
9	Little ringed plover *(Charadrius dubius)*	-	N
10	Common sandpiper *(Actitis hypoleucos)*	-	N
11	Black-headed gull *(Chroicocephalus ridibundus)*	-	F
12	Common tern *(Sterna hirundo)*	-	N
13	Common wood pigeon *(Columba palumbus)*	-	F
14	Common swift *(Apus apus)*	-	F

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
15	Black woodpecker *(Dryocopus martius)*	-	F
16	Wood lark *(Lullula arborea)*	-	H
17	Sand martin *(Riparia riparia)*	-	F
18	Barn swallow *(Hirundo rustica)*	-	F
19	White wagtail *(Motacilla alba)*	-	H
20	European stonechat *(Saxicola rubicola)*	-	H
21	Common grasshopper warbler *(Locustella naevia)*	-	H
22	Sedge warbler *(Acrocephalus schoenobaenus)*	-	H
23	Reed warbler *(Acrocephalus scirpaceus)*	-	H
24	Warbler *(Sylvia nisoria)*	-	H
25	Common whitethroat *(Sylvia communis)*	-	H
26	Eurasian golden oriole *(Oriolus oriolus)*	-	H
27	Red-backed shrike*(Lanius collurio)*	-	H
28	Common raven *(Corvus corax)*	-	F
29	European goldfinch *(Carduelis carduelis)*	-	F
30	Hawfinch *(Coccothraustes coccothraustes)*	-	F
31	Yellowhammer *(Emberiza citrinella)*	-	H
32	Common reed bunting *(Emberiza schoeniclus)*	-	H
33	Corn bunting *(Emberiza calandra)*	-	H

*Status: L- hatching, N - non hatching (feeding, resting), P - flying (observed only in flight)

** YES – recorded hatching of analysed group of bird species, NO – no hatching of analysed group of bird species recorded

Table 12 List of bird species recorded in the Biała Góra section

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
1	Marsh harrier *(Circus aeruginosus)*	YES	-
2	Common goldeneye *(Bucephala clangula)*	NO	-
3	Great cormorant *(Phalacrocorax carbo)*	NO	-
4	Mallard *(Anas platyrhynchos)*	NO	H
5	Mute swan *(Cygnus olor)*	YES	-
6	Goosander *(Mergus merganser)*	NO	-
7	Bluethroat *(Luscinia svecica)*	YES	-
8	Mute swan *(Cygnus olor)*	-	N
9	Greylag goose *(Anser anser)*	-	H
10	White stork *(Ciconia ciconia)*	-	N
11	Black kite *(Milvus migrans)*	-	F
12	Red kite *(Milvus milvus)*	-	F

Pos.	Species name	Inventory I 04-07.2017 Nesting in the buffer zone (500 m)**	Inventory II 03-04.2018 Status* (species found in the buffer zone of 300 m in spring period)
13	White-tailed eagle *(Haliaeetus albicilla)*	-	N
14	Osprey *(Pandion haliaetus)*	-	F
15	Northern lapwing *(Vanellus vanellus)*	-	H
16	Little ringed plover *(Charadrius dubius)*	-	H
17	Common tern *(Sterna hirundo)*	-	N
18	Common wood pigeon *(Columba palumbus)*	-	F
19	Common cuckoo *(Cuculus canorus)*	-	H
20	Common swift *(Apus apus)*	-	F
21	Eurasian hoopoe *(Upupa epops)*	-	N
22	Black woodpecker *(Dryocopus martius)*	-	F
23	Great spotted woodpecker *(Dendrocopos major)*	-	N
24	Barn swallow *(Hirundo rustica)*	-	F
25	Bluethroat *(Luscinia svecica)*	-	H
26	European stonechat *(Saxicola rubicola)*	-	H
27	Common grasshopper warbler *(Locustella naevia)*	-	H
28	Sedge warbler *(Acrocephalus schoenobaenus)*	-	H
29	Marsh warbler *(Acrocephalus palustris)*	-	H
30	Reed warbler *(Acrocephalus scirpaceus)*	-	H
31	Great reed warbler *(Acrocephalus arundinaceus)*	-	H
32	Common whitethroat *(Sylvia communis)*	-	H
33	Hooded crow *(Corvus cornix)*	-	N
34	Red-backed shrike *(Lanius colurio)*	-	H
35	Common raven *(Corvus corax)*	-	N
36	Common linnet *(Carduelis cannabina)*	-	F
37	Yellowhammer *(Emberiza citrinella)*	-	H
38	Common reed bunting *(Emberiza schoeniclus)*	-	H
39	Corn bunting *(Emberiza calandra)*	-	H

*Status: L- hatching, N - non hatching (feeding, resting), P - flying (observed only in flight)
** YES – recorded hatching of analysed group of bird species, NO – no hatching of analysed group of bird species recorded

Works must be carried out under the supervision of an bird fauna specialist to avoid damage to birds' nesting places. No removal of trees and shrubs is expected, which could adversely affect local bird populations.

5.7.9. FLORA AND NATURAL HABITATS

The inventory of flora and habitats was aimed at documenting the sites of rare, protected and endangered flora representatives and occurrence of natural habitats of Community interest present in the planned construction of moorings and berthing places. The studies were carried out on 30 October 2017 and 21 May 2018.

Table 13 Protected plant species recorded in the Investment area

Location	Species name
Zatoń Dolna	No protected species
Osinów Dolny	Marsh spurge *Euphorbia palustris*
Ługi Górzyckie	No protected species
Kunice	Dwarf everlast *Helichrysum arenarium*
Pławidło	Marsh spurge *Euphorbia palustris*
	Shining spurge *Euphorbia lucida*
Biała Góra	No protected species
Szczecin	No protected species

Additionally, in the area of the location of Zatoń Dolna, a natural habitat patch 91F0 has developed - oak, elm and ash riparian forest.

Considering the fact that the only intervention in the land part will be the foundation of the footbridge, which will not require intervention in the above mentioned natural habitat 91F0 and the sites of the species listed in the Table 7, and will not require removal of trees or shrubs, it should be concluded that the project will not affect their condition. However, at the stage of works it is necessary to secure the area of the above mentioned natural habitat and the sites of protected plant species, e.g. by marking them with a tape in order to eliminate accidental damage during the works.

During the Task implementation, within the Task implementation area other stands of protected species characteristic for habitats in the Odra valley can be identified (in particular during the one-time environmental inventory). Those stands will require protection against accidental destruction during the works.

It should be emphasized, however, that due to the negligible spatial extent of Tasks in the land area, there will be no significant impact on the populations of protected species and natural habitats.

5.8. PROTECTED AREAS

The following impacts of the Task on the forms of nature protection have been identified in relation to particular locations of berthing and mooring places:

Zatoń Dolna

- Lower Odra Natura 2000 area PLH320037: In the area of the planned berthing and mooring place, a natural habitat patch 91F0, an oak, elm and ash riparian forest (subject of protection of the Natura 2000 area) was found. No influence of the project on the condition of the above mentioned natural habitat 91F0 was found. The implementation of the task does not change the water conditions, on which the condition of this habitat depends. Due to the small scale of the investment, point and local intervention during the implementation stage, which at the stage of operation will not be associated with any impacts, in connection with the results of the inventory of particular groups of organisms, it was not found that the investment could significantly negatively affect the objects of protection of the Natura 2000 areas, as well as their integrity and cohesion.
- Lower Odra Valley Natura 2000 area PLB320003: The implementation of the investment will not significantly affect the populations of birds, which are subject to protection of the area, as well as the loss of their habitats.
- Cedynia Landscape Park: Taking into account the location of the investment, its scale and its character, it should be stated that its implementation will not affect in any way the objectives of protection of the above mentioned park.

Osinów Dolny

- Lower Odra Natura 2000 area PLH320037: No natural habitats of Community interest have developed in the location of the berthing and mooring place. Due to the small scale of the investment, point and local intervention during the implementation stage, which will not involve any impacts at the operation stage, in connection with the results of the inventory of particular groups of organisms, it was not found that the investment could have a significant negative impact on the objects of protection of the Natura 2000 areas, as well as their integrity and cohesion.
- Cedynia Landscape Park: Taking into account the location of the investment, its scale and its character, it should be stated that its implementation will not affect in any way the objectives of protection of the above mentioned park.

Ługi Górzyckie

- Warta River Mouth (*Ujście Warty*) PLC080001 Natura 2000 area, Warta River Mouth National Park buffer zone, Warta River Mouth Landscape: In the examined section of the Odra River no valuable elements of flora, biota of fungi and natural habitats of interest to the Country and the Community were found, therefore the impact of the investment in this respect is not expected, as well as the necessity to introduce measures to mitigate the impact of the investment in this area.

Pławidło

- Landscape Protection Area "Słubicka Dolina Odry" *[Odra Valley of Słubice Region]*: Taking into account the local character of the project, no significant impact on the protected landscape area is expected.

Kunice

- Pliszka River Valley PLH080011 Natura 2000 area, Middle Odra Valley PLB080004 Natura 2000 area: Due to the small scale of the investment, point and local intervention during the implementation phase, which will not involve any impacts during the operation phase, in connection with the results of the inventory of particular groups of organisms, it was not found that the investment could have a significant negative impact on the objects of protection of the Natura 2000 areas, as well as their integrity and cohesion.
- Landscape Protection Area "*Słubicka Dolina Odry "[Odra Valley of Słubice Region]:* Bearing in mind the location within the boundaries of the Landscape Protection Area "Odra Valley of Słubice Region" , the scale and nature of the investment, it should be stated that its implementation will not affect in any way the objectives of protection of the above-mentioned LPA or its natural values. The investment is a point investment with a local impact.
- Lubuskie Land ecological corridor - north: Taking into account the local character of the project, no significant impact on the ecological corridor is expected.

Biała Góra

- Middle Odra Valley PLB080004 Natura 2000 Area, Krosno Odra Valley PLH080028 Natura 2000 area, Krzesiński Landscape Park: The implementation of the investment will not significantly affect the species of animals being the subject of protection of the Natura 2000 areas, nor the populations of birds being the subject of protection, as well as the loss of their habitats. It will also not affect the protected elements related to the landscape park.

Szczecin:

- Lack of nature conservation forms within the range of possible impacts.

5.9. ACOUSTIC CLIMATE

During the implementation phase, typical impacts will occur due to minor construction and assembly works (foundation of dolphins, installation of a footbridge) and dredging works (emissions related to the operation of dredging equipment and means of water transport). The impacts on the acoustic climate anticipated in the Task will be of short-term duration and limited in space.

After the completion of the works, no impact on the acoustic climate is expected, in particular outside the Task area, i.e. on land.

5.10. CULTURAL MONUMENTS

The area of the Task is not entered into the register of monuments and is located outside the conservation zones. Due to the type and scope of works and lack of monuments located within the range of the object's impact, the impact of the project on the monuments is not expected, nor is it expected that there will be any hazard to them from the activities being carried out.

5.11. MATERIAL GOODS

In terms of the protection of material goods, the implementation of the Task will improve the ability to carry out effective icebreaking actions, and thus will influence the flood safety of the areas in the Odra valley. There are no buildings or other infrastructure facilities located in the vicinity of the Task area, except for the berthing and mooring place in Szczecin, which could be exposed to the impact of the activities carried out. In Szczecin the scope of the Task includes only works in the riverbed of the Western Odra River.

5.12. HUMAN HEALTH AND SAFETY

The Task area is located mainly outside the immediate vicinity of built-up areas outside the section located in Szczecin. The works will be carried out in the water area within the green areas. Therefore, the Task will not affect the population and material goods. Only the planned berthing and mooring infrastructure in the Szczecin section is located within the city, but the local impact will not affect human health and safety.

5.13. EXTRAORDINARY RISKS

An extraordinary risk to the construction of berthing and mooring infrastructure is the leakage of oil-derivative substances into water. In order to reduce the risk of environmental pollution, appropriate preventive measures will be implemented with respect to, inter alia, appropriate organisation and equipment, including the possession of flood barriers and ongoing control of the condition of equipment used to carry out the Task.

Another type of extraordinary risk to the environment, health and safety of people is the possibility of encountering unexploded ordnance. The risk of this type of threat will be minimized through the use of appropriate procedures and personnel. In particular, the Contractor is obliged to provide the sapper supervision (Contractor’s sapper supervision) consisting in sapper's reconnaissance before the commencement of works and the current checking and cleaning of the area from dangerous objects of military origin along with their disposal.

In the event of an epidemic, there may be risks to both the health and life of employees of the Contractor and the personnel of the Employer and Engineer, as well as to the construction process. By the Regulation of the Minister of Health of 20 March 2020 regarding the announcement of the state of epidemic in the Republic of Poland (Journal of Laws, item 491, as amended) in the period from 20 March 2020 until further notice, a state of epidemic was announced in the Republic of Poland due to SARS-CoV-2 virus infections.

5.14. CUMULATIVE AND CROSS-BORDER IMPACT

As part of the proceedings regarding the issue of environmental decisions, the competent authorities (in particular the environmental protection authorities such as Regional Director for Environmental Protection in Gorzów Wielkopolski and Szczecin, and the Minister of Inland Navigation and Water Management) analyzed the possibility of cumulative impacts of the Task with other projects, as well as the possibility of transboundary impacts.

The possibility of cumulative impacts may relate to the implementation period if other projects in the Task area, in particular within the Odra River bed, area implemented in the same or similar period. The issue of cumulative impacts was considered in particular with regard to the subject Task 1B.3/2 OVFMP, i.e. "*Stage II - The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation"*, and Task 1B.2 "*Modernization works on boundary sections of Odra River to provide Good Condition for Ice – breaking*". Due to the nature of individual berthing and mooring places (pile moorings), which do not significantly change the physical characteristics of the watercourse within the water body, the cumulative impacts were considered mainly in relation to the implementation phase. Planned berthing and mooring places are located at considerable distances from each other, therefore no direct cumulative impacts are expected that could be related to the predisposition of bottom sediments. Impacts related to the construction and operation of berthing and mooring places are of local scale and will not result in failure to achieve the environmental objectives set for water bodies related to the Task. In respect to possible cumulative impacts concerning the modernization of river control structures (river groins/spur dykes, longitudinal dams, riverbank strengthening) within the Task 1B.2., which will be implemented in the immediate vicinity of the location of planned berthing and mooring places, it can be forecasted that it will not lead to emission to the environment of substances or energy affecting the change of natural processes within the Oder river and its valley. Cumulative impacts will be of local nature. The works related to the construction of berthing and mooring places will be coordinated with the modernization works on the border Odra river. Modernization works on the border Odra river will constitute a separate project, which will be carried out in stages.

In the conducted administrative proceedings no possibility of cross-border impacts was identified. Despite the fact that the planned berthing and mooring places will be implemented in the immediate vicinity of the state border of the Republic of Poland with the Federal Republic of Germany, taking into account their nature, location and scale, the related impacts will not affect areas outside of Poland.

6. DESCRIPTION OF MITIGATION MEASURES

In order to reduce the negative environmental impacts of the planned Task, the Attachment 1 to the EMP provides a set of mitigation measures to be taken obligatorily by the Contractor. These measures were developed on the basis of the conditions contained in the current applicable administrative decisions on environmental protection issued for the Task and supplemented by additional conditions established at the stage of the EMP preparation.

The implementation of the mitigation measures should ensure that the Task is carried out taking into account World Bank guidelines (Environment, Health and Safety Guidelines: The Environmental, Health, and Safety (EHS) Guidelines). The requirements for the construction stage are set out in the General EHS Guildelines[13], in particular in the Section 4 ("*Construction and Decommissioning*" stage).

Temporary and permanent occupation of land in connection with the implementation of the Task takes place according to the rules specified in the Land Acquisition and Resettlement Action Plan (RAP).

A selection of characteristic mitigation measures is presented below, broken down into individual environmental components discussed in the Section 5 of the EMP.

6.1. LAND SURFACE AND LANDSCAPE

The Task implementation is related to the permanent occupation of the land on the riverbank in a very small area. The infrastructure, which will be created within the framework of the Task, will not create any dominant element of landscape. Therefore, in order to limit the negative impact of the Project on the land surface and landscape, standard mitigation measures have been provided for. Within the framework of solutions protecting the environment in terms of land surface and landscape, in case of berthing and mooring places, construction works should be carried out in such a way as to limit their negative impact on the surroundings. Transport related to the Task implementation will take place mainly by water. When land access roads to the Task implementation area to be used in a given mooring and berthing location, existing roads shall be used. Care should be taken when approaching the construction site, including avoiding damage to unpaved roads (when transporting parts of materials by road). The area of access roads and their surroundings should be restored to the condition from before the completion of the project. The work time should be limited to the minimum necessary to ensure that the negative impact on the landscape does not last long.

Due to the scope of the Task (minor extent of interference on land) and the execution of the works from the water side, no mitigation measures are required as defined in the EHS Guidelines for the *"Construction and Decommissioning"* stage in Section 4.1 Environment in the parts of *"Soil Erosion"* or *"Structural (slope) stability")*.

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

The basic mitigation measures in the scope of limiting the impact on the ground surface and landscape are in particular the following items in the table in the Attachment 1 to the EMP:

- items 3 - 14 (cat. B - Requirements for the transport service of the Task implementation area),
- item 18 (cat. C - Requirements for the location of construction site facilities).

6.2. CLIMATE AND AIR QUALITY

The Task has not been found to require mitigation measures to protect local climate conditions.

The following standard mitigation measures are recommended to reduce/eliminate the negative impact of the Task on air quality:

- not overloading the machinery, vehicles and vessels, avoiding and restricting the use of engines at maximum speed;
- reduction of empty transport operations, reduction in the time of operation of combustion engines;
- use only technically efficient vehicles, machines and equipment with exhaust emissions in accordance with the applicable regulations.

Due to the scope of the planned extent of construction works, which does not require activities that cause dust emissions (e.g. emissions resulting from the transport and storage of dusty substances or emissions during earthworks), the measures required relate to the reduction of emissions from combustion engines and include those indicated in the Section 1.1 "Air emissions and air quality", of the EHS Guidelines for sources of mobile emissions into the air.

The mitigation measures to reduce impacts on air quality status include in particular the following items in the table in the Attachment 1 to the EMP:

- items 51 - 53 (cat. G - Requirements for the prevention of environmental pollution (including the limitation of emissions into the environment)

6.3. SOIL AND LAND

During the execution of the Task no significant works outside the Odra River riverbed or temporary occupations of the land area for the needs of the construction facilities are foreseen. The intervention outside the Odra riverbed will be minor and will only apply to the installation of footbridges. The hazard to topsoil and land condition in the form of pollution, in particular by oil-derivative substances, may arise in the event of improper use of equipment and machinery, use of equipment and machinery in poor technical condition, lack of procedures and technical means in the event of emergency release of polluting substances into the environment.

Therefore, in accordance with, inter alia, the EHS Guidelines for the *"Construction and Decommissioning"* stage (Section 4.1 Environment, part of *"Hazardous Materials"*) - in particular, mitigation actions in the form of a requirement are planned:

- development of procedures by the Contractor to be followed in the event of spillage of petroleum-derivative substances;
- provision of means by the Contractor to remove pollutants from the land and water surface;
- operation by the Contractor of efficient equipment and vessels, which are subject to regular technical inspections.

The method of dredging spoil management will be determined in accordance with relevant provisions in the field of waste management, in accordance with the results of laboratory tests determining the degree of spoil contamination. These actions comply with the requirements in EHS guidelines "*Construction and Decommissioning*" (item 4.1 Environment, "*Contaminated land*").

In addition, the method of managing the dredged spoil will accounted for by the Contractor in the Dredging Works Plan and the spoil disposal plan (see item 6.14), which will be developed taking into account the guidelines of the World Bank Environmental, Health, and Safety Guidelines for Ports, Harbours, and Terminals[14].

Mitigation measures to reduce impacts on soils and land are in particular the following items in the table in the Attachment 1 to the EMP:

- item 18 (cat. C - Requirements for the location of construction site facilities);
- items 19 - 22 (cat. D – Requirements for dredging works and spoil management);
- items 44 - 49, (cat. G - Requirements for the prevention of environmental pollution (including the limitation of emissions into the environment);
- item 70 (cat. J - Requirements for exceptional environmental hazards).

6.4. SURFACE WATER

Measures for the protection of surface water are consistent with the measures for the protection against soil pollution.

In addition, for the implementation of the works, which will be carried out mainly in the riverbed only materials that are harmless or neutral to the environment should be used. In particular, in order to protect ichthyofauna, plans provide for monitoring of the concentration of suspensions and dissolved oxygen during the dredging works (monitoring measures in item 97 of Annex 2 to the EMP) and breaks in work depending on the concentrations of suspensions and dissolved oxygen (mitigation measures item 37 of Annex 1 to the EMP).

[14] https://www.ifc.org/wps/wcm/connect/ddfac751-6220-48e1-9f1b-465654445c18/20170201-FINAL_EHS+Guidelines+for+Ports+Harbors+and+Terminals.pdf?MOD=AJPERES&CVID=lD.CzO9

Thresholds for suspension, for which two-hour or 24-hour breaks will be introduced, are concentrations of 200 mg/L and 400 mg/L. Those values are found in literature[15] and are considered a high risk for fish (> 200 mg/l) or an unacceptable risk for fish (> 400 mg/l). The distance from the worksite to the measuring point will be 200 m downstream, to determine the conditions for ichthyofauna in the section of the river affected by the works, but outside the immediate worksite.

In addition, works interfering with the Odra riverbed will not be carried out during the period of increased fish sensitivity (i.e. they will be carried out outside the period of fish spawning and spawn incubation). The indicated activities have been identified taking into account the provisions of the EHS Guidelines for the *"Construction and Decommissioning"* stage (Section 4.1 Environment, *" Disturbance to water bodies"* part).

The mitigation measures to reduce impacts on the surface water are in particular the following items in the table in Attachment 1 to the EMP:

- items 19 - 22 (cat. D – Requirements for dredging works and spoil management);
- items 32, 34, 37 (cat. F - Requirements for the conservation of protected natural resources);
- items 44 - 49 (cat. G - Requirements for the prevention of environmental pollution (including the limitation of emissions into the environment);
- items 56 (cat. H - Requirements for waste and waste water management);
- item 70 (cat. J - Requirements for exceptional environmental hazards)).

6.5. GROUNDWATER

The task does not generate negative impacts on the groundwater status. In particular, the implementation of the Task is not connected with groundwater uptake or permanent or temporary lowering of the groundwater table. Standard mitigation measures are consistent with those defined for the protection of soil, land and surface water (see Sections 6.3 and 6.4).

6.6. ACOUSTIC CLIMATE

The implementation phase of the Task will involve short-term emission of noise during the use of machinery and equipment necessary for works related in particular to the foundation of dolphins. In view of the local and short-term nature of the emission, the impact during the implementation phase of the Task will not have a significant impact on the acoustic climate in the area of location of particular berthing and mooring places. However, the works will be

[15] WWF-UK, Review of UKTAG Proposed Standard For Suspended Solids, August 2007, APEM REF: 410242 WWF-UK, Final Report (https://www.deq.idaho.gov/media/903180-review-uktag-proposed-standard-suspended-solids-2007.pdf)

carried out during a day-time (6:00-22:00) and standard mitigation measures are expected to be implemented to reduce the intensity of impacts during the execution phase:

- construction equipment should be technically efficient, have low noise emissions, and the Contractor of construction works shall carry out works using technologies with low noise emissions, with the maximum time limitation of the works;
- the Contractor shall maintain good work organisation, proper operation of equipment and maintain it in good technical condition;
- not overloading machines and vehicles and avoiding and limiting the use of engines at the highest speeds.

In addition, time limits will be introduced for works carried out during animal reproduction (conducting works only during the day, i.e. from sunrise to sunset).

It should also be stressed that the transport related to the implementation of the Task will be carried out mainly by water, which will minimise the impact of noise and vibration in the area of public roads.

Noise protection measures are consistent with the requirements contained in the EHS Guidelines for the *"Construction and Decommissioning"* stage (Section 4.1. Environment, "*Noise and Vibration*" part).

Mitigation measures to minimise noise emissions include in particular the following items in the table in Attachment 1 to the EMP:

- items 38, 39 (cat. F- Requirements for the conservation of protected natural resources);
- items 50 - 53 (cat. G - Requirements for the prevention of environmental pollution (including the limitation of emissions into the environment).

6.7. WILDLIFE

A number of mitigation measures have been proposed for implementation during the construction phase to prevent and reduce negative impacts. The Contractor should ensure that the schedule of the works is such that the dates and location of the individual stages of the construction works are adjusted to the requirements of environmental decisions and the EMP and do not affect the individuals of protected species present in the Task area and its surroundings.

No substances, which could be lethal to animals occurring in the Task area and its surroundings shall be used to carry out the works.

The Contractor shall be obliged to provide a team of environmental supervision during the execution of the works. The Contractor's environmental supervision shall include specialists in such fields as: bird fauna, mammalian fauna, herpetology, botany/phytosociology and fish fauna. Prior to the commencement of works it is also necessary to carry out a one-time inventory of temporary and permanent occupation areas in order to determine the current location of the sites of plant species under protection and those included on the national and regional red lists of endangered plant species, as well as to determine the locations of potential occurrence of these species and to determine the areas of natural values. During the

construction works, vegetation outside the area covered by the Task must not be destroyed. The following recommendations, inter alia, should also be taken into account:

- works interfering with the Odra riverbed will be carried out outside the spawning season of fish and spawn incubation, which lasts from 1 March to 30 June. The works interfering with the riverbed will be carried out only within the designed icebreaker mooring places;
- noise generated by mechanical equipment will be minimised by carrying out the works only during the day in the animal reproduction period (in particular bats);
- works within the riverbank will be carried out when the activity of amphibians and reptiles is minimal;
- due to the hatching of birds of protected species in the vicinity of the investment, works related to the implementation of the Task will not be carried in breeding period.
- areas of presence of protected natural habitats and the sites of protected plant species (including inventoried during a one-time environmental inventory) located in the immediate vicinity of the works will be permanently marked during execution of works, e.g. with a contrasting tape to eliminate accidental damage during the works.

The mitigation measures in the field of wildlife protection implemented in accordance with the requirements of the competent environmental protection authorities are, in particular, the following items in the table in the Attachment 1 to the EMP:

- items 23 - 24 (cat. E - Requirements for the removal of rushes);
- items 25 - 43 (cat. F- Requirements for the conservation of protected natural resources);
- items 44 - 50 (cat. G - Requirements for the prevention of environmental pollution (including the limitation of emissions into the environment);
- items 79 - 81 (cat. L - Requirements for the Contractor's personnel involved in the implementation of the EMP);
- item 85 - 86 (cat. M - Reporting requirements for the reporting of the EMP implementation)

6.8. PROTECTED AREAS

The task concerns small fragments within the protected areas, mostly within the Odra riverbed. The activities mitigating the impact on the protected areas overlap with the activities specified for the protection of wildlife and listed in the Section 6.7. They include, in particular, activities related to the protection of habitats of species and sites of protected species and time limitations for the execution of works in the water and land part of the Task. These activities will protect habitats and sites of species against accidental destruction. Whereas, time limits will eliminate significant impacts during the period of particular sensitivity of individual animal species: hatching season of birds, reproduction season of bats, spawning season of fish and spawn incubation, increased activity of reptiles and amphibians.

6.9. CULTURAL MONUMENTS

The gathered knowledge and materials concerning the planned Task indicate that it does not cause any direct negative impact on monuments and cultural landscape. However, the Contractor is obliged to implement preventive measures in case of negative impacts that may appear at the stage of the execution of works (and are currently impossible to determine).

In accordance with the Act of 23 July 2003 on the Protection and Care of Historical Monuments anyone, who during the execution of construction works or earthworks, discovers an object, which is supposed to be a monument, is obliged to stop all works that may damage or destroy the discovered objects, secure this object and the place of discovery with the use of available means, immediately notify the Voivodship Conservator of Monuments and, if this is not possible, the territorially relevant head of municipality or town mayor. Regarding this, the Contractor shall also at the same time notify the Engineer. In order to implement the above provisions of the EMP related to the Protection of cultural heritage and monuments, the Contractor shall, if necessary, also obtain a permit from the Voivodship Conservator of Monuments (VCM) to carry out rescue archaeological research and carry out such research.

Mitigating measures in the scope of protection of the cultural landscape and monuments are included in the Attachment 1 of to the EMP in items 76 and 77 (cat. K - Requirements for the protection of cultural monuments).

6.10. MATERIAL GOODS

The works will be carried out from the water side and the transport related to the implementation of the Task will be carried out mainly by waterway. In order to eliminate, among other things, the risk of collision with other vessels during the execution of the works, including the transport of excavated material, equipment or materials and structural elements, the Contractor shall be responsible for compliance with the navigational regulations on inland waterways, in particular the following regulations concerning shipping regulations and rules concerning local law on waterways. This applies both to our own vessels and those of Subcontractors. Mitigation measures are therefore focused on ensuring safe navigation conditions on the waterway during the execution of works and preventing shipping accidents. In addition, in the case of use of land access roads, the Contractor shall be responsible for any damage to structures and buildings, roads, etc., caused by him or his Subcontractors during the execution of works. The Contractor shall immediately repair, at his own expense, any damage caused and, if necessary, carry out any other works ordered by the Engineer.

In particular, the Contractor will prepare a design of traffic organisation and securing the works for the time of the Task implementation, in accordance with the requirements of the road operators concerning the transport routes and the conditions of their use, and will ensure proper marking of all access routes to the Task implementation area - this action is consistent with the provisions of the EHS Guidelines in the area of *"Community Health and Safety"*. (Section 3.4. *"Traffic Safety"*).

Mitigation measures in the area of protection of material goods are in particular the following items in the table in the Attachment 1 to the EMP:

- items 3 - 17 (cat. B - Requirements for the transport service of the Task implementation area)
- item 18 (cat. C - Requirements for the location of construction site facilities)
- items 19 - 22 (cat. D - Requirements for dredging works and spoil management).

6.11. HUMAN HEALTH AND SAFETY

Activities related to the protection of human health and safety have been defined, relating to the appropriate organisation of work, technical measures, fire protection, construction site yards, the condition and use of vehicles and machines, and training on the scope of spreading diseases of HIV-AIDS type, including e.g. COVID 19.

In particular, the following guidelines should also be applied to water transport:

- means of transport (floating sets) must meet the requirements of relevant regulations in force on the territory of the Republic of Poland in the field of inland navigation.
- means of transport (floating sets) in terms of parameters must be adapted to the conditions resulting from the current waterway class.

The Contractor shall be responsible for proper marking of the Task area in accordance with the applicable law, including in particular the Regulation of the Minister of Infrastructure of 28 April 2003 *on shipping regulations on inland waterways* (Journal of Laws No. 212, item 2072) and the Regulation on local law on waterways.

In the course of the execution of works, the Contractor shall ensure sapper supervision of the works (executed by the sapper supervision team), which consists in sapper's reconnaissance before commencing work and ongoing checking and cleaning the Task area from dangerous objects of military origin together with their disposal.

The Contractor shall ensure the implementation of detailed guidelines regarding the occupational safety requirements, including the establishment and implementation of safety procedures when performing works and equipping employees with appropriate personal protective equipment. The Contractor is obliged to put special emphasis on safety issues related to works involving the use of floating equipment.

The proposed mitigation measures should ensure that the requirements of the EHS Guidelines for the *"Construction and Decommissioning"* stage are met (Section 4.2 *"Occupational Health and Safety"*) and the EHS Guidelines on the *"Community Health and Safety"* (Section 3.6 "Disease Prevention" in the *"Communicable Diseases"* part).

Mitigation measures in the area of the human health and safety protection are in particular the following items in the table in the Attachment 1 to the EMP:

- items 57 - 66 (cat. I - Requirements for the protection of human health and safety);
- items 67 - 69, 71 - 75 (cat. J - Requirements for exceptional environmental hazards)
- items 87 - 95 (cat. N - Specific requirements of the ES World Bank policies).

6.12. EXCEPTIONAL HAZARDS

Crisis situation

When a crisis situation arises, the competent services must be notified in the first instance:

Service	Telephone number
Emergency number from a mobile phone	112
Police	997
Fire Brigade	998
Emergency medical services	999
Municipal Police	986

The obligation to notify the competent services is included in item 68 in the Attachment 1 to the EMP (cat. J - Requirements for exceptional environmental hazards).

Flood

Prior to the commencement of works, the Contractor shall prepare an appropriate flood contingency plan (Flood Protection Plan for the duration of the works) and obtain the Engineer's approval for its contents. This document will describe, among other things, the procedures to be followed in the event of flood occurrence (see Section 6.14).

The obligation to develop the above mentioned plan is included in item 67 in the Attachment 1 to the EMP (cat. J - Requirements for exceptional environmental hazards).

Leakage of petroleum substances

Another type of extraordinary threat is the leakage of oil-derivative substances into water. In order to reduce the risk of environmental pollution, appropriate preventive measures will be implemented with respect to, among other things, appropriate organisation and equipment, including the possession of oil spill containment booms and ongoing control of the condition of used equipment and vessels.

In the event of a potential spillage of petroleum-derivative substances, actions must be taken to limit the spread of pollution and to remove it immediately. Moreover, before commencing the Task, the Contractor shall develop a spillage procedure concerning the procedures and steps to be taken in the event of a potential spillage of petroleum-derivative substances.

Mitigation actions, as defined in the Attachment 1 to the EMP for the protection of the aquatic environment, are included in particular in the items: 45 - 49 (cat. G - Requirements for the prevention of environmental pollution) and in item 70 (cat. J - Requirements for exceptional environmental hazards).

Finding unexploded ordnance and unexploded shells

In case of finding unexploded ordnance during construction works, such as: fuses, missiles, air bombs, artillery and rifle cartridges, armour plating, grenades, mines of all types,

explosives charges, etc., the Contractor shall immediately stop the work and evacuate the employees and notify the police, a licensed sapper unit, Engineer and PIU.

Under no circumstances may unexploded ordnance or unexploded shells be lifted, dug up, buried, moved or thrown into fire or into places such as rivers, canals, oxbow lakes, ditches, ditches, etc., which have been found. The Employer did not inspect the work site for the presence of unexploded ordnance.

The Contractor is obliged to provide the sapper supervision during the works (Contractor's sapper supervision) consisting in sapper's reconnaissance before the commencement of works and current checking and cleaning the area of hazardous items of military origin together with their disposal.

The conditions concerning the procedure in case of finding unexploded ordnance and ensuring sapper supervision are specified in the following items in the Attachment 1 to the EMP:

- item 61 (cat. I - Requirements for the protection of human health and safety);
- item 69 (cat. J - Requirements for exceptional environmental hazards);
- item 82 (cat. L - Requirements for the Contractor's personnel involved in the implementation of the EMP).

Navigational accident

The Contractor shall be responsible for proper marking of the Task area and signalling of vessels (vessels, floating equipment and objects) in accordance with the applicable law, including in particular the Regulation of the Minister of Infrastructure of 28 April 2003 *on shipping regulations on inland waterways* (Journal of Laws No. 212, item 2072) and the Regulation on local law on waterways. In case of a shipping accident, the territorially competent director of the inland navigation office shall be notified.

The relevant requirements are specified in the following items of Attachment 1 to the EMP:

- items 15 - 17 (cat. B - Requirements for the transport service of the Task implementation area);
- items 71 - 75 (cat. J - Requirements for exceptional environmental hazards).

Fire

The Contractor shall be responsible for fire protection within the Task area. A detailed procedure in the event of fire will be included in the BIOZ plan prepared by the Contractor (see Section 6.14.). The requirement for the Contractor to develop a BIOZ Plan and obtain the Engineer's approval for its contents is specified in item 57 (cat. I - Requirements for the protection of human health and safety) of the table in the Attachment 1 to the EMP.

Epidemiological threat

In the event of a state of epidemic or an epidemiological threat during the execution of works, the Contractor shall be obliged to comply with legal requirements, in particular the Act of 5 December 2008 on preventing and combating infections and infectious diseases in humans (consolidated text: Journal of Laws of 2019, item 1239, as amended), all obligations arising from the announcement of an epidemic or a state of epidemic, and the relevant guidelines of

the World Bank[16]. The Contractor's activities should reduce the risk of spreading infection both with respect to the Contractor's staff, as well as the Employer and Engineer and the local community. Guidelines on how to proceed in the event of a state of epidemic or an epidemiological threat are contained in item 96 (cat. O - Guidelines for proceeding in the event of a state of epidemic or epidemic threat during works) in Annex 1 to the EMP.

Notwithstanding the above, the Contractor will implement an awareness raising program on the spread of infectious diseases (e.g. COVID 19) in accordance with item 66 (cat. I - Requirements for the protection of human health and safety).

6.13. WASTE AND WASTE WATER

The implementation of the Task will involve the generation of waste, therefore it is necessary to minimise its amount during the works and reduce their negative impact on the environment. The principle of waste minimisation should be followed. The resulting waste should be properly segregated, and its successive collection should be ensured. Waste management should be conducted in accordance with the provisions of the Waste Act, the Inland Waterways Transport Act and the Waste Management Plan referred to in item 54 (cat. H - Requirements for waste and waste water management) of the Attachment 1 to the EMP.

Ship's waste containing oils or lubricants, cargo waste as well as sewage and municipal waste generated on ships and other vessels shall be collected within the vessels in a manner protecting against pollution penetration into the environment. Ship's waste shall be transferred to the reception points for ship's waste.

The construction site will be equipped with tight sanitary facilities for household waste water, and the waste water will be collected by authorised entities.

The method of spoil management will be determined in accordance with separate regulations in the field of waste management, in accordance with the results of laboratory tests determining the degree of spoil contamination. The method of spoil management will be included by the Contractor in the Dredging Works Plan and the spoil management plan (see item 6.14), which will be developed taking into account the World Bank Environmental, Health, and Safety Guidelines for Ports, Harbours, and Terminals.

The mitigation measures identified for the waste water management comply with the requirements contained in the EHS Guidelines for the *"Construction and Decommissioning"* stage (Section 4.1 Environment, *"Wastewater Discharges"* part). The waste management measures introduced in terms of planning and the methods of storage and handling are in line with the requirements contained in the the EHS Guidelines for construction and demolition

[16] Interim Guidance on COVID-19: ESF/safeguards interim note: COVID-19 considerations in construction/civil works projects, Version 1: April 7, 2020

"Construction and Decommissioning" (Section 4.1. Environment in the *"Solid Waste"* part) and the EHS Guidelines in terms of environmental protection (Section 1.6. *"Waste Management"*). With regards to the waste management, provisions on the planning of activities and the handling procedures in case of finding contaminated spoil have been introduced and are listed in the EHS Guidelines for the *"Construction and Decommissioning"* stage (Section 4.1 Environment, *"Contaminated Land"* part).

Mitigation measures in the scope of waste and waste water management are in particular the following items in the table in the Attachment 1 to the EMP:

- items 54 - 56 (cat. H- Requirements for waste and waste water management);
- items 19 - 22 (cat. D - Requirements for the management of spoil from dredging).

6.14. REQUIREMENTS FOR THE IMPLEMENTATION OF ACTION PLANS DURING THE CONSTRUCTION PHASE

The Contractor of works on the basis of the specified mitigation actions specified in this EMP should prepare and then obtain Engineer's approval for the following own documents necessary to carry out the works.

- ***Plan of the organization of works and management of the construction site,*** which should include, among other things, the following elements:
  - organization of execution of works, that shall include, in particular, information on:
    - vessels involved in execution of works
    - time limit for carrying out the works,
    - parameters of the work site together with the method of marking,
    - determination of the fairway capacity restrictions resulting from the planned works,
    - conditions for carrying out and locating vessel bunkering (refuelling) operations.

  - organization of construction site, that shall include, in particular, information on:
    - securing construction facilities,
    - supply of utilities,
    - providing sanitary facilities and living facilities,
    - ensuring access to construction sites,
    - environmental protection at the construction camp,
    - ensuring environmental protection means for the duration of the works,
    - transport service,
    - conditions of maintenance of machines, equipment and devices,
    - organization of communication on the construction site and construction camp,
    - use of port facilities.

- ***The Dredging works plan and the spoil management plan*** will include information on:

- determining the scope of works related to the extraction of sediments from riverbeds,
- technology and method for the planned extraction of sediments from riverbeds,
- equipment used in dredging works and the transport to the deposit site/final management site,
- description of environmental effects potentially related to the extraction of sediments and spoil management,
- determining the method of management of the extracted sediment in the work area, taking into account the minimisation of environmental impact,
- defining areas which cannot be designated as temporary spoil management sites – sites for loading, etc., due to environmental reasons (e.g. sites of protected species or habitats), and other key environmental requirements related to the extraction of sediments, e.g. the rise in suspension concentration,
- identification and assessment (including the use of risk analysis methods) of the options for spoil management,
- location of the site for spoil deposit and conditions for management on the site (including the issue of environment protection and the health and life of humans),
- choice of measures related to the minimisation of environmental impact (especially the increase of suspension supply),
- parameters of the front of works and the marking method,
- Safety and Health Plan (BIOZ) for dredging works
- defining the methodology of sediment surveys.

The Contractor prepares the *Dredging works plan and the spoil management plan* on the basis of: 1) results of the bathymetric tests defining the quantity of spoil to be extracted and the spatial range of dredging works and 2) results of the tests of the quality of the spoil to be extracted, as well as 3) the World Bank Environmental, Health, and Safety Guidelines for Ports, Harbours, and Terminals[17]

- ***Safe Shipping Project*** *(instruction on operating and movement of vessels during the works)*, which should include, inter alia:
  - indication of the boundaries of the water region occupied during the execution of works,

[17] https://www.ifc.org/wps/wcm/connect/ddfac751-6220-48e1-9f1b-465654445c18/20170201-FINAL_EHS+Guidelines+for+Ports+Harbors+and+Terminals.pdf?MOD=AJPERES&CVID=lD.CzO9

- data on the type of vessels authorised to carry out the works,
- information on the working time per day,
- data on the navigation lights and signs,
- temporary berthing places for vessels and mooring points,
- equipment berthing points after the end of work,
- data on employee qualifications and supervision of employees,
- radio communication data,
- information about the existing navigational marking and measuring instruments and the method of their protection.

The Safe Shipping Project (instruction on operating and movement of vessels during the works) shall ensure the safety of passing vessels and vessels operating on the worksite and contain the information required by the agreeing authorities, in particular the territorially relevant Director of the Inland Navigation Office.

- ***The Health and Safety Plan*** *(the BIOZ plan)* should include, inter alia, the following elements:
  - information on expected risks occurring during the works, specifying the scale and types of risks as well as the place and time of their occurrence,
  - information on separating and marking the place of execution of works, according to the type of risk,
  - information on the manner of instructing workers before commencing the execution of particularly dangerous works,
  - determining the manner of storing and moving hazardous materials, products, substances and preparations in the area of works,
  - indication of technical and organisational measures to prevent hazards arising from the execution of works in areas with particular health hazard zones or in their vicinity, including safe and efficient communication, enabling rapid evacuation in the event of fire, breakdown and other hazards,
  - indication of the place where the documentation of performed works and documents necessary for the proper operation of machines and other technical devices are stored.

The BIOZ Plan BIOZ will include information on combating problems related to epidemiological threads such as COVID-19, including measures provided in item 96 (cat. O - Guidelines on procedures in case of an epidemic hazard or state of epidemics in force during the execution of works) in the Attachment 1 to the EMP.

The Health and Safety plan will be prepared for the execution of the Task in accordance with the applicable law. When preparing the Health and Safety plan, the Contractor shall put particular emphasis on the safety issues related to the execution of works with the use of vessels, including the risk of drowning and evacuation of people and equipment in the event of emergencies. The works will also be carried out in atmospheric conditions typical for the autumn-winter period. When preparing the Health and Safety plan, it is therefore necessary to take into account the specific nature of the works covering the riverbed and the date of the

works, which is important, among other things, when determining the safety procedures for carrying out the works and equipping the workers with appropriate personal protective equipment.

- ***Quality assurance plans*** for particular categories of works and other types of activities of Contactor (as needed and if requested by the Engineer), which should include, inter alia, such elements as:
  - Organisation of the execution of works,
  - Organisation of traffic on the construction site together with marking of works,
  - Occupational health and safety and environmental protection,
  - List of working teams,
  - Duties of key personnel,
  - Quality Control,
  - Laboratory tests.

The contractor will also prepare the following:

- ***Waste Management Plan,*** which should include, inter alia, such elements as:
  - expected types and quantities of waste,
  - ways of preventing the negative impact of waste on the environment,
  - waste management method including waste collection, transport, recovery and disposal,
  - type of waste produced and the method of its storage with particular attention paid to hazardous waste.
- ***Flood protection plan for the duration of the works***, which should include such elements as
  - monitoring the hydrological and meteorological situation,
  - rules of work of the Contractor's team in the period of flood risk,
  - basic duties of key members of the Flood Team,
  - list of function personnel in the period of flood risk,
  - list of the equipment and means of transport needed to carry out the rescue operations.
- ***Spillage procedure***, which should include, inter alia, the elements concerning the procedure to be followed in the case of spillage of chemicals and petroleum derivatives, i.e.:
  - mode of equipping individual units with appropriate materials in relation to anticipated hazards and substances,
  - mode of alerting and notifying particular services,
  - course of action to limit spillage,
  - mode of handling sorbent materials.
- ***ES Code of Conduct for the Contractor's Personnel*** (Code of Conduct ensuring the implementation of measures to address environmental and social risks associated with the implementation of the Task, including the risk of sexual abuse, mistreatment for sexual exploitation and sexual harassment).

The Contractor shall submit the ES Code of Conduct containing provisions defining the obligations of the Contractor selected as the result of the contract award procedure, in particular resulting with respect to the environmental protection, social, health and safety issues, in accordance with the template, after it has been signed (on each page) together with the bid. Thus, it acknowledges the need to apply the requirements contained therein at each stage of the contract execution.

The Code of Conduct forms a part of the measures to address the environmental and social risks associated with the implementation of the Task, including the risks of sexual harassment and mobbing, as well as discrimination based on gender. It concerns all the Contractor's personnel, workers and other employees in the area of the Task implementation. It also refers to the staff of each Subcontractor and any other staff assisting the Contractor in the Task implementation.

The Contractor will also conduct training on the terms and conditions of implementation of the EMP for the Contractor's managerial and engineering staff, as well as regular training of Employees in occupational health and safety, raising awareness in the field of combating sexual harassment and mobbing.

The requirement to develop and obtain acceptance of the content of the above mentioned documents, to ensure compliance with the ES policy and the ES Code of Conduct, and to conduct training on the terms and conditions of the EMP, as well as training in occupational health and safety and raising awareness on combating sexual harassment and mobbing is indicated in particular in the table in the Attachment 1 to the EMP in the items:

- items 20 (cat. D - Requirements for the management of spoil from dredging);
- item 25 (cat. F - Requirements for the protection of protected natural resources);
- item 54 (cat. H - Requirements for waste and waste water management);
- items 57 - 60 (Cat. I - Requirements for the protection of human health and safety);
- item 67 (cat. J - Requirements for exceptional environmental hazards);
- item 78 (cat. L - Requirements for the Contractor's personnel involved in the implementation of the EMP);
- item 87 - 95 (cat. N – Specific requirements of the ES World Bank policies).

6.15. SPECIFIC REQUIREMENTS WITH RESPECT TO THE ES POLICIES OF THE WORLD BANK (ENVIRONMENTAL AND SOCIAL ASPECTS, INCLUDING THE RISK OF SEXUAL ABUSE, MISTREATMENT FOR SEXUAL EXPLOITATION AND SEXUAL HARASSMENT)

The task is connected with the need to meet a number of ES (environmental and social aspects, including the risk of sexual abuse, mistreatment for sexual exploitation and sexual harassment, which are regulated by national regulations governing environmental protection, health and safety at work and labour law. Their observance is supervised by state institutions and bodies. In particular, with respect to compliance with occupational health and safety regulations and labour law, the authorities of the state sanitary inspection and the state labour inspection are authorised to control the activities of entrepreneurs, including these on construction sites. However, due to the high importance attached by the World Bank to the ES requirements, the terms and conditions of the contracts financed by the World Bank loan

impose obligations to ensure the implementation of the applicable regulations. Particular attention is paid to issues such as:

- protection of juveniles employed in the implementation of the Contract;
- elimination of inappropriate forms of behaviour of persons employed in the implementation of the Contract (including sexual harassment and mobbing);
- ensuring the safety and health protection of persons employed in the implementation of the Contract, including the provision of legally required OHS services;
- ensure proper social and employment conditions for employees employed in the implementation of the Contract (including fair pay conditions).

The following is a list of issues in the form of requirements for the Contractor related to ES WB policies. It should be noted that the ES requirements and conditions set for the Contractor and its employees also apply to the Contractor's Subcontractors and their employees or Subcontractors.

- The Contractor shall conduct training and implement an awareness-raising programme on the prevention of sexual harassment and mobbing. These activities shall be carried out throughout the entire term of the Contract, including the defects notification period at least every two months. These will take the form of information, education and awareness-raising campaigns.
- The Contractor shall inform the Consultant immediately about all reported cases and suspicions concerning sexual harassment and mobbing.
- Contractor will inform all persons employed for the Contract implementation about the possibility of lodging complaints about working and pay conditions and will provide an information leaflet with the necessary information on how to lodge complaints and requests, in which it will ensure that there are no repercussions for a person reporting a problem. The content of the leaflet will be agreed with the Consultant.
- The Contractor shall inform the Consultant about all accidents involving employees and bystanders in accordance with the procedure provided by the Consultant. In the event of an accident, the Contractor shall take all actions required by applicable law, including the Construction Law and the Labour Code.
- The Contractor shall ensure equal rights in remuneration for employees performing the same work, without taking into account gender, sexual orientation and age. Moreover, persons employed under the Contract shall not be persecuted or discriminated against with regard to sex, sexual orientation and age.
- The Contractor, in accordance with the possibilities and conditions and the Polish Labour Code provisions, will meet the living and social needs of employees in the workplace.
- The Contractor shall be obliged to make it easier for the employees to improve their professional qualifications.
- The Contractor may employ only such a young worker who is at least 15 years old, has completed primary school of at least eight years duration and has presented a medical certificate stating that the work in question does not endanger his / her health. The Contractor shall ensure that juvenile employees (persons under 18 years of age)

will not perform works prohibited to juvenile employees[18], including in particular works which create accident hazards, such as inter allia construction and demolition works.

- The Contractor shall employ a health and safety specialist with qualifications and professional experience in accordance with the Polish labour law.

Therefore, the table of mitigation measures in the Attachment 1 to the EMP (items 87 - 95) includes detailed conditions applicable to the Contractor of the works, which are subject to the obligation to monitor and report during the Task period. It should be stressed, however, that the Contractor shall apply and comply with all provisions of the Labour Code and shall comply with the ES Code of Conduct.

[18] i.e. works specified in the Regulation of the Council of Ministers of 24 August 2004 on the list of prohibited work for juveniles and the conditions for their employment in some of these works (consolidated text: Journal of Laws of 2016, item 1509)

7. DESCRIPTION OF ENVIRONMENTAL MONITORING ACTIONS

7.1. ENVIRONMENTAL MONITORING IN THE WORKS PERIOD

Attachment 2 to the EMP provides a set of monitoring activities applicable to the Contractor for the Task. These activities were developed on the basis of the conditions contained in the binding administrative decisions issued for the Task, supplemented by additional conditions established at the stage of preparation of the EMP.

The monitoring activities listed in the Attachment 2 to the EMP in items 1 to 96 cover the monitoring of the implementation of the mitigation measures listed in the Attachment 1 to the EMP. The monitoring activities listed in the Attachment 2 to the EMP are allocated to specific groups of measures in the manner indicated in the Section 6.

Additionally, in items 97 - 99, the requirements for environmental monitoring during the Task implementation period were specified, whereas, in item 98 there were defined obligations concerning the current control of compliance with the rules specified in the Contractor's documents prepared for the Task implementation.

7.2. ENVIRONMENTAL MONITORING IN THE OPERATION PERIOD

There is no need to carry out environmental monitoring of the Task at the stage of operation. The implementation of mitigation measures ensures that the scale, intensity and negative impacts are reduced only for the duration of the works.

8. PUBLIC CONSULTATIONS

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

The draft document entitled *Environmental and Social Management Framework Plan* (ESMF) for the OVFMP Project (including Component 1, which covers this Task) was subject to a public consultation procedure, conducted in accordance with the operational policy of the World Bank OP 4.01. Their purpose was to enable the public to become familiar with the content of this document and to provide the possibility to submit any comments, questions and conclusions to its content.

Documentation of the process of social consultations of the above mentioned document is available on the website of the Project Coordination Unit for the Odra - Vistula Flood Management Project.

8.2. PUBLIC CONSULTATIONS AT THE STAGE OF ENVIRONMENTAL PROCEDURES FOR THE TASK

Consultations with the public were conducted under the responsibility of locally competent local self-government authorities, which conducted administrative proceedings to issue environmental decisione for the construction of individual berthing and mooring places, i.e. the Mayor of Szczecin, the Mayor of Cedynia, the Mayor of Słubice, the Mayor of Cybinka, the Mayor of Chojna Commune, the Head of Górzyca Commune.

In the course of the above mentioned administrative proceedings, after obtaining relevant opinions of the Regional Director for Environmental Protection in Szczecin and territorially appropriate state district sanitary inspectors, the authorities conducting the proceedings issued decisions, in which they did not state the need to carry out an environmental impact assessment for the construction of berthing and mooring places. Therefore, no environmental impact assessment was required prior to issuing environmental decisions. In accordance with the binding regulations, the possibility of public participation is ensured in the procedure, under which the environmental impact assessment of the project is carried out and thus a report on the environmental impact of the project is drawn up.

The proceedings were concluded with the issuance of the following environmental decisions:

- Environmental decision of the Mayor of Cedynia of 13.05.2019, Ref. No. PIOS.6220.6.2018.AP.
- Environmental decision of the Mayor of Słubice of 06.05.2019, Ref. No. WI.6220.24.2018.AK.
- Environmental decision of the Head of the Górzyca Commune of 05.04.2019, Ref. No. GWOŚ.6220.12.10.2018.
- Environmental decision of the Mayor of the City of Szczecin of 16.05.2019, Ref. No. WOŚr-II.6220.1.22.2019.DMł.
- Environmental decision of the Mayor of Cybinka of 03.06.2019, Ref. No. RGN-IV.6220.05.2018

- Environmental decision of the Mayor of the Chojna Commune of 10.05.2019, Ref. No. BPI.6220.4.2018.MK

During the preparation of the Task, for which co-financing from the World Bank was envisaged, the Investor conducted social consultations as a part of the information campaign for Subcomponent 1B OVFMP. In particular, information on the Task was presented to all interested parties:

- 06.06.2018 in mobile information points in Kostrzyn nad Odrą, Górzyca, Słubice,
- 13.06.2018 in mobile information points in Bielinek, Osinów Dolny, Stare Łysogórki,
- 07.11.2018 during an information meeting at the Bastion Hotel in Kostrzyn nad Odrą,
- 13.05.2019 during an information meeting in Szczecin in the Przystań Hotel on the Lake Dąbie.

During the meetings, the material scope of investment tasks was presented, along with the presentation of the main objective, basis of implementation and technical parameters; the course of environmental procedures and explanations for the questions and doubts raised. As the result of consultations with the public and non-governmental organisations, design and environmental analyses were carried out in terms of the possibility of changing the location of one of the designed berthing and mooring places. The final result of the analyses and public consultations was the decision not to build a mooring place in the city of Kaleńsko, thanks to which the place planned for the construction of the new infrastructure, distinguished by shallows and islets, constituting a breeding place for Anseriformes birds (greylag geese, mute swans, mallards, common goldeneyes) and feeding ground for terns and Eurasian oystercatchers will remain unchanged.

8.3. PUBLIC EMP CONSULTATIONS

Draft of the Environmental Management Plan (EMP) for Contract 1B.3/2: Stage II - The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation was subject to public consultation conducted in accordance with the requirements of the World Bank's operational policy (OP 4.01). The purpose of the consultation was to enable natural persons, institutions, and all interested parties to become acquainted with the content of this document and to provide them with the opportunity to submit any comments, queries, and requests related to its content. Because of the state of epidemiological threat, the formula for conducting public consultations on the draft EMP document has changed. There was no open meeting for all interested parties and the consultation was conducted in the form of a webinar.

Once the draft EMP was prepared, the document was submitted to the World Bank for approval to begin the publishing procedure. After obtaining the approval of the World Bank to begin the draft EMP publishing procedure, the electronic version of the document with the notice of public consultation was published on the following websites:

- State Water Management Polish Waters, Regional Water Management Authority in Szczecin – (Fig. 2);

- Odra-Vistula Flood Management Project Coordination Unit – (Fig. 3);
- Szczecin City Hall – (Fig. 4);
- Municipal Office Chojna – (**Błąd! Nie można odnaleźć źródła odwołania.**)
- Municipal Office Cedynia – (**Błąd! Nie można odnaleźć źródła odwołania.**)
- Municipal Office Górzyca– (Fig.)
- Słubice City Hall – (
- Fig. 8)
- Cybinka City Hall – (
- Fig. *9*)
- portal wszczecinie.pl – (Fig. 10)
- Odra-Vistula Flood Management Project – (Fig. 11)

Information on the possibility to review the content of the EMP draft and to submit requests and comments, along with detailed information (correspondence address, e-mail address, and phone number) was published in local press. The notice was published on 22.06.2020 in the local press to Gazeta Lubuska (Fig. 12) and on 22.06.2020 in Kurier Szczeciński (Fig. 13). The published Notice contains information about the revised formula for conducting public consultations due to the state of epidemiological threat in Poland, including indication of the website where the link to the webinar to be posted at least 10 days before the on-line meeting and the step-by-step instruction on how to join the online meeting conducted as part of concluding the public consultations of the EMP draft (along with the date, time, website where the link to the webinar will be posted, and the purpose of the meeting).

Information (Fig. 14) about the initiated EMP draft publishing procedure and the possibility to submit requests and comments as well as the invitation to participate in the webinar was sent via email to the identified project stakeholders. The list of persons, institutions, and organisations, to which the invitation was sent, is included in Attachment 9 to the EMP.

In order to ensure the widest possible access to information on the EMP draft due to the epidemiological threat in Poland, it was decided that the electronic version of the documentation would be posted and accessible to all interested parties during the period from 22.06.2020 to 13.07.2020 (i.e. 16 working days) on the following websites:

- State Water Management Polish Waters the Regional Water Management Authority in Szczecin, at www.szczecin.wody.gov.pl;
- Odra-Vistula Flood Management Project Coordination Unit, at www.odrapcu2019.odrapcu.pl;
- Szczecin City Hall, at www.szczecin.pl;
- Municipal Office Chojna, at www.chojna.pl;
- Municipal Office Cedynia, at www.cedynia.pl;
- Municipal Office Górzyca, at www.gmina.gorzyca.pl;
- Słubice City Hall, at www.slubice.pl;

- Cybinka City Hall, at www.cybinka.pl;
- Odra-Vistula Flood Management Project, at www.bs.rzgw.szczecin.pl.

Information on the possibility to review the content of the EMP draft was also posted on social media site (Facebook) of portal "wSzczecinie" (Fig. 15).

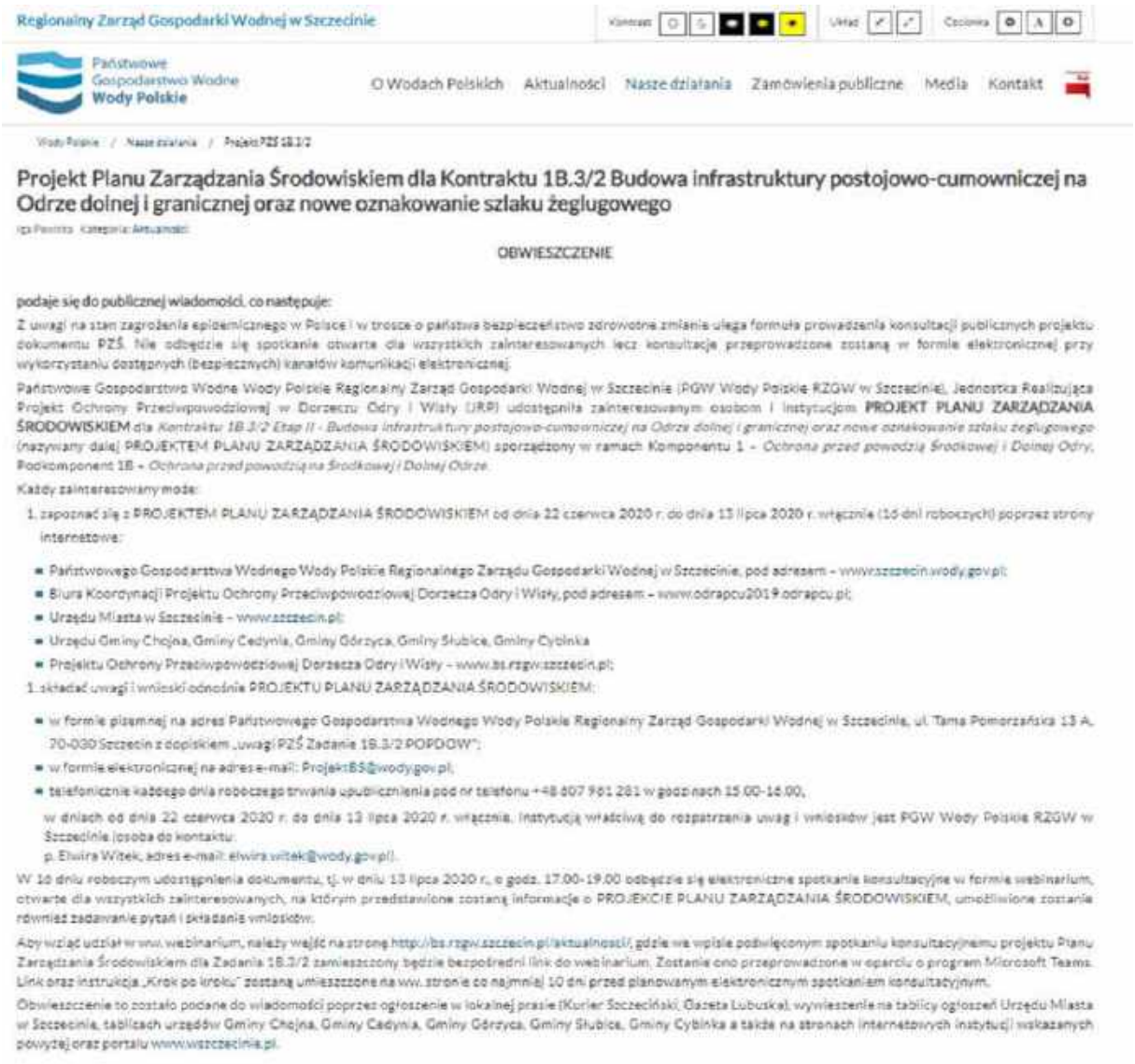
Consultation meeting

After the end of the EMP draft publishing period (electronic version of the documentation was available to all interested parties from 22.06.2020 to 13.07.2020), an open online meeting was organised in the form of a webinar for all interested parties. The meeting was organised on 13.07.2019 and took place via the Microsoft Teams programme. In order to take part in the webinar, one had to go to http://bs.rzgw.szczecin.pl/aktualnosci/, where a link to the webinar was posted in the entry on the consultation meeting for the draft Environmental Management Plan for Task 1B.3/2. As indicated in the notice, the meeting started at 5 p.m. Representatives of the PIU joined the online meeting. For the purpose of the meeting, a multimedia presentation was prepared containing information on the principles of development and functioning of the EMP during the implementation of investments co-financed by the World Bank and detailed information on the draft EMP for Contract 1B.3/2: Stage II - The construction of docking-mooring infrastructure on Lower Odra River and on boundary sections of Odra River as well as new aids to navigation. The meeting ended at 7 p.m. The webinar was chaired by the Consultant at the headquarters of Sweco Consulting.

COMMENTS SUBMITTED DURING THE PUBLISHING PERIOD

During the webinar as well as during the entire public disclosure procedure of the EMP draft, no comments were made to the content of EMP or its annexes.

Therefore, the public consultation process was deemed completed.



Regionalny Zarząd Gospodarki Wodnej w Szczecinie

Państwowe Gospodarstwo Wodne Wody Polskie

O Wodach Polskich | Aktualności | Nasze działania | Zamówienia publiczne | Media | Kontakt

Projekt Planu Zarządzania Środowiskiem dla Kontraktu 1B.3/2 Budowa infrastruktury postojowo-cumowniczej na Odrze dolnej i granicznej oraz nowe oznakowanie szlaku żeglugowego

OBWIESZCZENIE

podaje się do publicznej wiadomości, co następuje:

Z uwagi na stan zagrożenia epidemicznego w Polsce i w trosce o państwa bezpieczeństwo zdrowotne zmianie ulega formuła prowadzenia konsultacji publicznych projektu dokumentu PZŚ. Nie odbędzie się spotkanie otwarte dla wszystkich zainteresowanych lecz konsultacje przeprowadzone zostaną w formie elektronicznej przy wykorzystaniu dostępnych (bezpiecznych) kanałów komunikacji elektronicznej.

Państwowe Gospodarstwo Wodne Wody Polskie Regionalny Zarząd Gospodarki Wodnej w Szczecinie (PGW Wody Polskie RZGW w Szczecinie), Jednostka Realizująca Projekt Ochrony Przeciwpowodziowej w Dorzeczu Odry i Wisły (JRP) udostępnia zainteresowanym osobom i instytucjom **PROJEKT PLANU ZARZĄDZANIA ŚRODOWISKIEM** dla *Kontraktu 1B.3/2 Etap II - Budowa infrastruktury postojowo-cumowniczej na Odrze dolnej i granicznej oraz nowe oznakowanie szlaku żeglugowego* (nazywany dalej PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM) sporządzony w ramach Komponentu 1 – *Ochrona przed powodzią Środkowej i Dolnej Odry*, Podkomponent 1B – *Ochrona przed powodzią na Środkowej i Dolnej Odrze*.

Każdy zainteresowany może:

1. zapoznać się z PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020 r. włącznie (16 dni roboczych) poprzez strony internetowe:
   - Państwowego Gospodarstwa Wodnego Wody Polskie Regionalnego Zarządu Gospodarki Wodnej w Szczecinie, pod adresem – www.szczecin.wody.gov.pl;
   - Biura Koordynacji Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły, pod adresem – www.odrapcu2019.odrapcu.pl;
   - Urzędu Miasta w Szczecinie – www.szczecin.pl;
   - Urzędu Gminy Chojna, Gminy Cedynia, Gminy Górzyca, Gminy Słubice, Gminy Cybinka
   - Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły – www.bs.rzgw.szczecin.pl;
1. składać uwagi i wnioski odnośnie PROJEKTU PLANU ZARZĄDZANIA ŚRODOWISKIEM:
   - w formie pisemnej na adres Państwowego Gospodarstwa Wodnego Wody Polskie Regionalny Zarząd Gospodarki Wodnej w Szczecinie, ul. Tama Pomorzańska 13 A, 70-030 Szczecin z dopiskiem „uwagi PZŚ Zadanie 1B.3/2 POPODW";
   - w formie elektronicznej na adres e-mail: ProjektBS@wody.gov.pl;
   - telefonicznie każdego dnia roboczego trwania upublicznienia pod nr telefonu +48 607 961 281 w godzinach 15.00-16.00,

   w dniach od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020 r. włącznie. Instytucją właściwą do rozpatrzenia uwag i wniosków jest PGW Wody Polskie RZGW w Szczecinie (osoba do kontaktu: p. Elwira Witek, adres e-mail: elwira.witek@wody.gov.pl).

W 10 dniu roboczym udostępnienia dokumentu, tj. w dniu 13 lipca 2020 r., o godz. 17.00-19.00 odbędzie się elektroniczne spotkanie konsultacyjne w formie webinarium, otwarte dla wszystkich zainteresowanych, na którym przedstawione zostaną informacje o PROJEKCIE PLANU ZARZĄDZANIA ŚRODOWISKIEM, umożliwione zostanie również zadawanie pytań i składanie wniosków.

Aby wziąć udział w ww. webinarium, należy wejść na stronę http://bs.rzgw.szczecin.pl/aktualnosci/, gdzie we wpisie poświęconym spotkaniu konsultacyjnemu projektu Planu Zarządzania Środowiskiem dla Zadania 1B.3/2 zamieszczony będzie bezpośredni link do webinarium. Zostanie ono przeprowadzone w oparciu o program Microsoft Teams. Link oraz instrukcja „Krok po kroku" zostaną umieszczone na ww. stronie co najmniej 10 dni przed planowanym elektronicznym spotkaniem konsultacyjnym.

Obwieszczenie to zostało podane do wiadomości poprzez ogłoszenie w lokalnej prasie (Kurier Szczeciński, Gazeta Lubuska), wywieszenie na tablicy ogłoszeń Urzędu Miasta w Szczecinie, tablicach urzędów Gminy Chojna, Gminy Cedynia, Gminy Górzyca, Gminy Słubice, Gminy Cybinka a także na stronach internetowych instytucji wskazanych powyżej oraz portalu www.szczecinie.pl.


Upublicznienie projektu
Planu Zarządzania Środowiskiem
dla Zadania 1B.3/2
„Etap II - Budowa infrastruktury postojowo-cumowniczej na Odrze dolnej i granicznej oraz nowe oznakowanie szlaku żeglugowego", realizowanego w ramach Projektu Ochrony Przeciwpowodziowej w Dorzeczu Odry i Wisły
Serdecznie Państwa zapraszamy
do wzięcia udziału w prezentacji projektu PZŚ,
która odbędzie się w formie webinarium
dnia 13 lipca br. o godzinie 17.00.
Link do webinarium będzie dostępny na stronie
http://bs.rzgw.szczecin.pl/aktualnosci/

Załączniki:

Plik	Opis	Rozmiar	Utworzono	Ostatnia modyfikac
EMP_1B.3_2_TEXT.pdf		1566 kB	2020-06-22 09:32	2020-06-22 09:32
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EMP_1B.3_2_Attachment_5a_Szczecin.pdf		409 kB	2020-06-22 09:16	2020-06-22 09:16
EMP_1B.3_2_Attachment_4g_Zaton.pdf		150 kB	2020-06-22 09:16	2020-06-22 09:16
EMP_1B.3_2_Attachment_4f_Zaton.pdf		184 kB	2020-06-22 09:16	2020-06-22 09:16
EMP_1B.3_2_Attachment_4e_Szczecin.pdf		194 kB	2020-06-22 09:15	2020-06-22 09:15
EMP_1B.3_2_Attachment_4d_Pławidło_Kunice.pdf		216 kB	2020-06-22 09:15	2020-06-22 09:15
EMP_1B.3_2_Attachment_4c_Osinow_Doiny.pdf		376 kB	2020-06-22 09:15	2020-06-22 09:15
EMP_1B.3_2_Attachment_4b_Ługi_Gorzyckie.pdf		503 kB	2020-06-22 09:09	2020-06-22 09:09
EMP_1B.3_2_Attachment_4a_Biała_Gora.pdf		318 kB	2020-06-22 09:09	2020-06-22 09:09
EMP_1B.3_2_Attachment_3.pdf		135 kB	2020-06-22 09:09	2020-06-22 09:09
EMP_1B.3_2_Attachment_2.pdf		686 kB	2020-06-22 09:09	2020-06-22 09:09
EMP_1B.3_2_Attachment_1.pdf		495 kB	2020-06-22 09:06	2020-06-22 09:06
PZŚ_1B.3_2_Tekst.pdf		1653 kB	2020-06-22 09:04	2020-06-22 09:04
PZS_1B.3_2_Zal_8k_MZ_Zaton_Dolna.pdf		792 kB	2020-06-22 09:04	2020-06-22 09:04
PZS_1B.3_2_Zal_8j_MZ_Osinow_Doiny.pdf		814 kB	2020-06-22 09:04	2020-06-22 09:04
PZS_1B.3_2_Zal_8i_ML_Ługi_Gorzyckie.pdf		1911 kB	2020-06-22 09:03	2020-06-22 09:03
PZS_1B.3_2_Zal_8e_RDOS_Pławido_Kunice.pdf		1266 kB	2020-06-22 09:03	2020-06-22 09:03
PZS_1B.3_2_Zal_8d_RDOS_Osinow.pdf		1237 kB	2020-06-22 09:02	2020-06-22 09:02
PZS_1B.3_2_Zal_8c_RDOS_Ługi_Gorzyckie.pdf		1030 kB	2020-06-22 09:02	2020-06-22 09:02
PZS_1B.3_2_Zal_8b_RDOS_Biała_Gora.pdf		1060 kB	2020-06-22 09:02	2020-06-22 09:02
PZS_1B.3_2_Zal_8a_GDOS_trzepla zielona.pdf		830 kB	2020-06-22 09:02	2020-06-22 09:02
PZS_1B.3_2_Zal_7g_PZT_Biała_Gora.pdf		902 kB	2020-06-22 09:01	2020-06-22 09:01
PZS_1B.3_2_Zal_7f_PZT_Kunice.pdf		697 kB	2020-06-22 09:01	2020-06-22 09:01
PZS_1B.3_2_Zal_7e_PZT_Pławidło.pdf		747 kB	2020-06-22 09:01	2020-06-22 09:01
PZS_1B.3_2_Zal_7d_PZT_Ługi Gorzyckie.pdf		745 kB	2020-06-22 09:01	2020-06-22 09:01
PZS_1B.3_2_Zal_7c_PZT_Osinow_Doiny.pdf		1086 kB	2020-06-22 09:01	2020-06-22 09:01

PZS_18.3.2_Zal_7b_PZT_Zaton_Dolina.pdf	787 kB	2020-06-22 09:00	2020-06-22 09:00
PZS_18.3.2_Zal_7a_PZT_Szczecin.pdf	1131 kB	2020-06-22 09:00	2020-06-22 09:00
PZS_18.3.2_Zal_6f_Biała_Gora.pdf	1213 kB	2020-06-22 09:00	2020-06-22 09:00
PZS_18.3.2_Zal_6e_Pławidło_Kunice.pdf	1149 kB	2020-06-22 09:00	2020-06-22 09:00
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PZS_18.3.2_Zal_6b_Zaton_Dolina.pdf	1016 kB	2020-06-22 08:59	2020-06-22 08:59
PZS_18.3.2_Zal_6a_Szczecin.pdf	1260 kB	2020-06-22 08:59	2020-06-22 08:59
PZS_18.3.2_Zal_5f_N2000_Biała_Gora.pdf	1119 kB	2020-06-22 08:59	2020-06-22 08:59
PZS_18.3.2_Zal_5e_N2000_Pławidło_Kunice.pdf	1098 kB	2020-06-22 08:59	2020-06-22 08:59
PZS_18.3.2_Zal_5d_N2000_Ługi_Gorzyckie.pdf	985 kB	2020-06-22 08:59	2020-06-22 08:59
PZS_18.3.2_Zal_5c_N2000_Osinow_Dolny.pdf	911 kB	2020-06-22 08:58	2020-06-22 08:58
PZS_18.3.2_Zal_5b_N2000_Zaton_Dolina.pdf	969 kB	2020-06-22 08:58	2020-06-22 08:58
PZS_18.3.2_Zal_5a_N2000_Szczecin.pdf	1026 kB	2020-06-22 08:58	2020-06-22 08:58
PZS_18.3.2_Zal_4g_DSU_Zaton_korekta.pdf	166 kB	2020-06-22 08:58	2020-06-22 08:58
PZS_18.3.2_Zal_4f_DSU_Zaton.pdf	1924 kB	2020-06-22 08:58	2020-06-22 08:58
PZS_18.3.2_Zal_4e_DSU_Szczecin.pdf	1446 kB	2020-06-22 08:57	2020-06-22 08:57
PZS_18.3.2_Zal_4d_DSU_Pławidło_Kunice.pdf	1626 kB	2020-06-22 08:57	2020-06-22 08:57
PZS_18.3.2_Zal_4c_DSU_Osinow_Dolny.pdf	1710 kB	2020-06-22 08:57	2020-06-22 08:57
PZS_18.3.2_Zal_4b_DSU_Ługi_Gorzyckie.pdf	1947 kB	2020-06-22 08:57	2020-06-22 08:57
PZS_18.3.2_Zal_4a_DSU_Biała_Gora.pdf	1333 kB	2020-06-22 08:57	2020-06-22 08:57
PZS_18.3.2_Zal_3.pdf	186 kB	2020-06-22 08:56	2020-06-22 08:56
PZS_18.3.2_Zal_2.pdf	703 kB	2020-06-22 08:56	2020-06-22 08:56
PZS_18.3.2_Zal_1.pdf	534 kB	2020-06-22 08:56	2020-06-22 08:56

Fig. 2 Notice on PGW WP RZGW Szczecin website

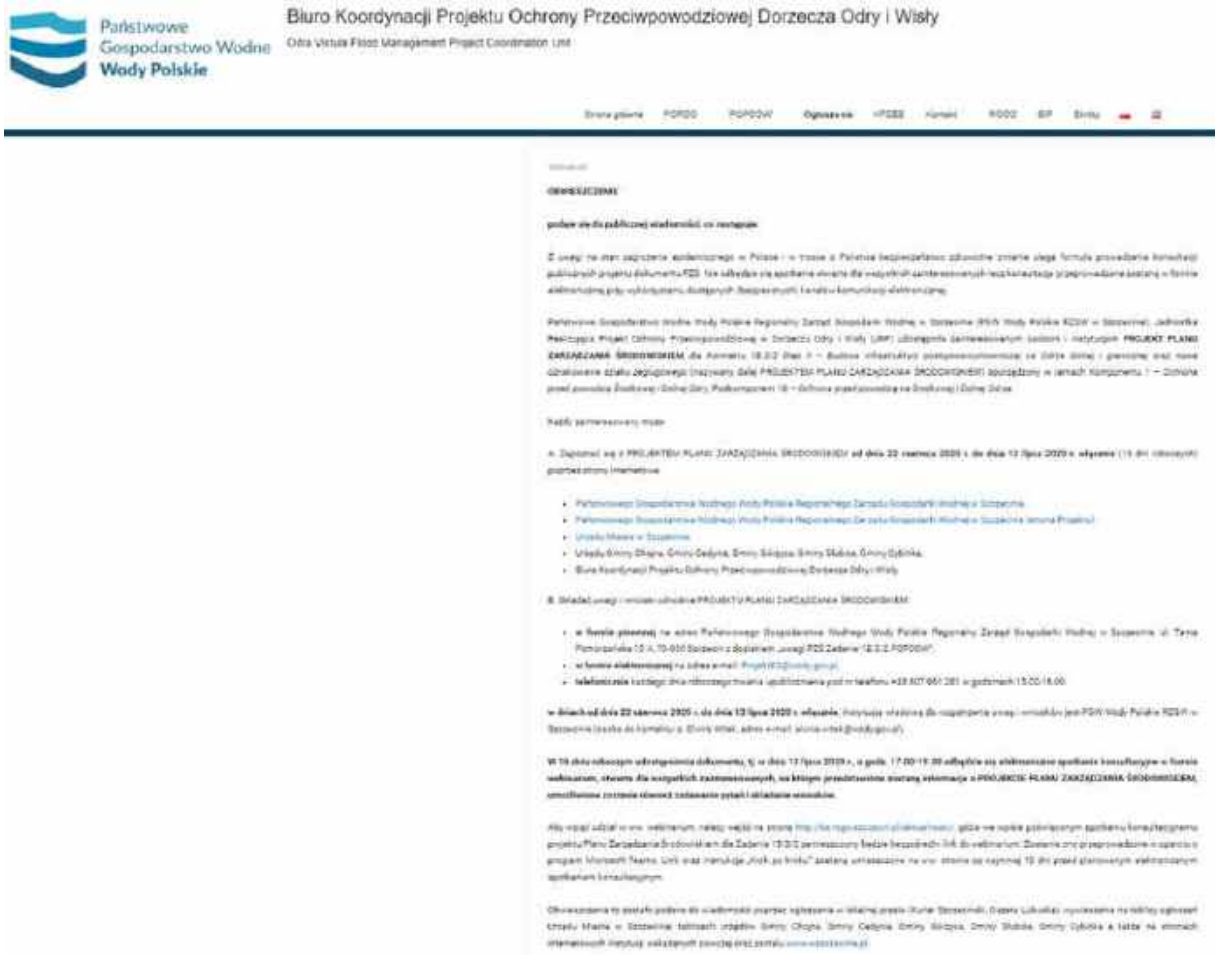

Fig. 3 Content of the draft document on the OVFM PCU website

ELEKTRONICZNA TABLICA OGŁOSZEŃ

OBWIESZCZENIE

podaje się do publicznej wiadomości, co następuje:

Z uwagi na stan zagrożenia epidemicznego w Polsce i w trosce o państwa bezpieczeństwo zdrowotne zmianie ulega formuła prowadzenia konsultacji publicznych projektu dokumentu PZŚ. Nie odbędzie się spotkanie otwarte dla wszystkich zainteresowanych lecz konsultacje przeprowadzone zostaną w formie elektronicznej przy wykorzystaniu dostępnych (bezpiecznych) kanałów komunikacji elektronicznej.

Państwowe Gospodarstwo Wodne Wody Polskie Regionalny Zarząd Gospodarki Wodnej w Szczecinie (PGW Wody Polskie RZGW w Szczecinie), Jednostka Realizująca Projekt Ochrony Przeciwpowodziowej w Dorzeczu Odry i Wisły (JRP) udostępniła zainteresowanym osobom i instytucjom **PROJEKT PLANU ZARZĄDZANIA ŚRODOWISKIEM** dla *Kontraktu 1B.3/2 Etap II - Budowa infrastruktury postojowo-cumowniczej na Odrze dolnej i granicznej oraz nowe oznakowanie szlaku żeglugowego* (nazywany dalej PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM) sporządzony w ramach Komponentu 1 – *Ochrona przed powodzią Środkowej i Dolnej Odry*, Podkomponent 1B – *Ochrona przed powodzią na Środkowej i Dolnej Odrze*.

Każdy zainteresowany może:

A) zapoznać się z PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020 r. włącznie (16 dni roboczych) poprzez strony internetowe:

- Państwowego Gospodarstwa Wodnego Wody Polskie Regionalnego Zarządu Gospodarki Wodnej w Szczecinie, pod adresem – www.szczecin.wody.gov.pl;
- Biura Koordynacji Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły, pod adresem – www.odrapcu2019.odrapcu.pl;
- Urzędu Miasta w Szczecinie – www.szczecin.pl;
- Urzędu Gminy Choina, Gminy Cedynia, Gminy Górzyca, Gminy Słubice, Gminy Cybinka

Urząd Miasta Szczecin
pl. Armii Krajowej 1
70-456 Szczecin

Fig. 4 Notice on the website of the Szczecin City Hall

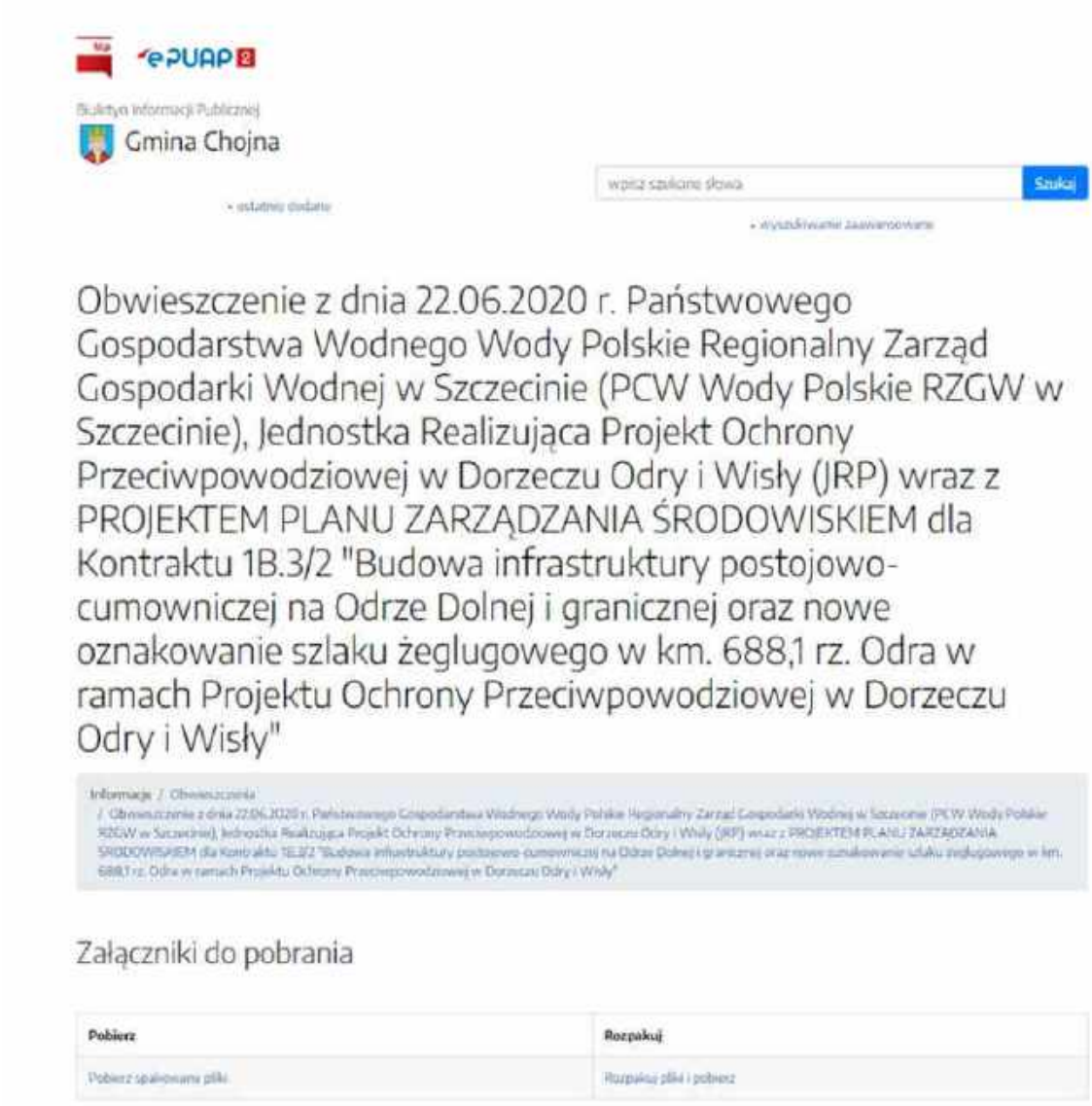

Fig. 5 Notice on the website of the Chojna Municipal Office

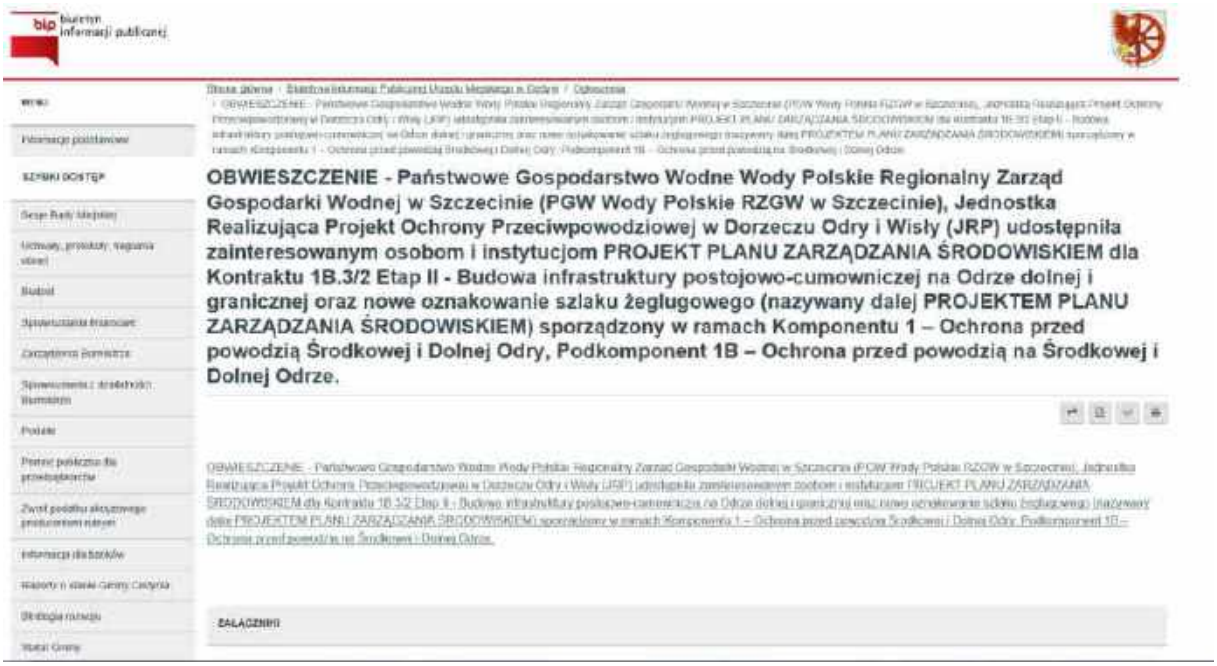

Fig. 6 Notice on the website of the Cedynia Municipal Office

Fig. 7 Notice on the website of the Górzyca Municipal Office

Obwieszczenie – Projekt Planu Zarządzania Środowiskiem dla Kontraktu 1B.3/2 Etap II – Budowa infrastruktury postojowo-cumowniczej na Odrze dolnej i granicznej oraz nowe oznakowanie szlaku żeglugowego

22 czerwca 2020r.

OBWIESZCZENIE podaje się do publicznej wiadomości, co następuje: Z uwagi na stan zagrożenia epidemicznego w Polsce i w trosce o państwa bezpieczeństwo zdrowotne zmianie ulega formuła prowadzenia konsultacji publicznych projektu dokumentu PZŚ. Nie odbędzie się

OGŁOSZENIA

Obwieszczenie – Projekt Planu Zarządzania Środowiskiem dla Kontraktu 1B.3/2 Etap II – Budowa infrastruktury postojowo-cumowniczej na Odrze dolnej i granicznej oraz nowe oznakowanie szlaku żeglugowego

22 czerwca 2020r.

OBWIESZCZENIE

podaje się do publicznej wiadomości, co następuje:

Z uwagi na stan zagrożenia epidemicznego w Polsce i w trosce o państwa bezpieczeństwo zdrowotne zmianie ulega formuła prowadzenia konsultacji publicznych projektu dokumentu PZŚ. Nie odbędzie się spotkanie otwarte dla wszystkich zainteresowanych lecz konsultacje przeprowadzone zostaną w formie elektronicznej przy wykorzystaniu dostępnych (bezpiecznych) kanałów komunikacji elektronicznej.

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Każdy zainteresowany może:

A) zapoznać się z PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020 r. włącznie (16 dni roboczych) poprzez strony internetowe:

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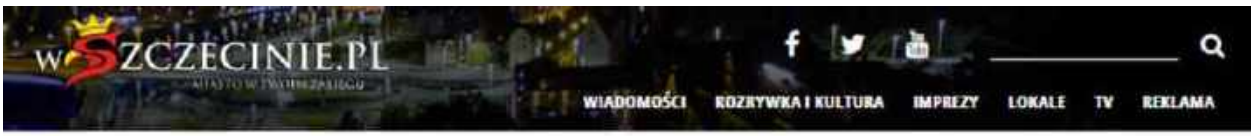
- Biura Koordynacji Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły, pod adresem – www.odrapcu2019.odrapcu.pl;
- Urzędu Miasta w Szczecinie – www.szczecin.pl;

Fig. 8 Notice on the website of the Słubice City Hall

Fig. 9 Notice on the website of the Cybinka City Hall



AKTUALNOŚCI

OBWIESZCZENIE

22.06.2020 08:13 / ostatnia modyfikacja: 23.06.2020 08:07

Podaje się do publicznej wiadomości, co następuje:

Z uwagi na stan zagrożenia epidemicznego w Polsce i w trosce o państwa bezpieczeństwo zdrowotne zmianie ulega formuła prowadzenia konsultacji publicznych projektu dokumentu PZŚ. Nie odbędzie się spotkanie otwarte dla wszystkich zainteresowanych lecz konsultacje przeprowadzone zostaną w formie elektronicznej przy wykorzystaniu dostępnych (bezpiecznych) kanałów komunikacji elektronicznej.

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Najczęściej czytane

ZAPOWIEDZI

13.07.2020

Wielki koncert na nabrzeżu! Gwiazdy zjadą do Szczecina

AKTUALNOŚCI

14.07.2020

Strefa Płatnego Parkowania zostanie powiększona! Zdrożeją opłaty i powstaną nowe parkingi

INWESTYCJE

13.07.2020

IKEA w Szczecinie już z niebieską elewacją [foto]

Polecane wydarzenia

Każdy zainteresowany może:

A. zapoznać się z PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020 r. włącznie (16 dni roboczych) poprzez strony internetowe:

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- Biura Koordynacji Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły, pod adresem – www.odrapcu2019.odrapcu.pl;
- Urzędu Miasta w Szczecinie – www.szczecin.pl;
- Urzędu Gminy Chojna, Gminy Cedynia, Gminy Górzyca, Gminy Słubice, Gminy Cybinka
- Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły – www.bs.rzgw.szczecin.pl;

B. składać uwagi i wnioski odnośnie PROJEKTU PLANU ZARZĄDZANIA ŚRODOWISKIEM:

- w formie pisemnej na adres Państwowego Gospodarstwa Wodnego Wody Polskie Regionalny Zarząd Gospodarki Wodnej w Szczecinie, ul. Tama Pomorzańska 13 A, 70-030 Szczecin z dopiskiem „uwagi PZŚ Zadanie 1B.3/2 POPDOW";
- w formie elektronicznej na adres e-mail: ProjektBS@wody.gov.pl;
- telefonicznie każdego dnia roboczego trwania upublicznienia pod nr telefonu +48 607 961 281 w godzinach 15.00-16.00, w dniach od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020r. włącznie. Instytucją właściwą do rozpatrzenia uwag i wniosków jest PGW Wody Polskie RZGW w Szczecinie (osoba do kontaktu: p. Elwira Witek, adres e-mail: elwira.witek@wody.gov.pl).

W 16. dniu roboczym udostępnienia dokumentu, tj. w dniu 13 lipca 2020 r., o godz. 17.00-19.00 odbędzie się elektroniczne spotkanie konsultacyjne w formie webinarium, otwarte dla wszystkich zainteresowanych, na którym przedstawione zostaną informacje o PROJEKCIE PLANU ZARZĄDZANIA ŚRODOWISKIEM, umożliwione zostanie również zadawanie pytań i składanie wniosków.

Aby wziąć udział w ww. webinarium, należy wejść na stronę http://bs.rzgw.szczecin.pl/aktualnosci/, gdzie we wpisie poświęconym spotkaniu konsultacyjnemu projektu Planu Zarządzania Środowiskiem dla Zadania 1B.3/2 zamieszczony będzie bezpośredni link do webinarium. Zostanie ono przeprowadzone w oparciu o program Microsoft Teams. Link oraz instrukcja „Krok po kroku" zostaną umieszczone na ww. stronie co najmniej 10 dni przed planowanym elektronicznym spotkaniem konsultacyjnym.

Obwieszczenie to zostało podane do wiadomości poprzez ogłoszenie w lokalnej prasie (Kurier Szczeciński, Gazeta Lubuska), wywieszenie na tablicy ogłoszeń Urzędu Miasta w Szczecinie, tablicach urzędów Gminy Chojna, Gminy Cedynia, Gminy Górzyca, Gminy Słubice, Gminy Cybinka a także na stronach internetowych instytucji wskazanych powyżej oraz portalu www.wszczecinie.pl.

CEB

THE WORLD BANK

Państwowe Gospodarstwo Wodne Wody Polskie

Fig. 10 Notice on the wszczecinie.pl website

SWECO

Zadania Aktualności Kontakt ZADAJ PYTANIE

Obwieszczenie o upublicznieniu PZŚ dla zadania 1B.3/2 19.06.2020

OBWIESZCZENIE

podaje się do publicznej wiadomości, co następuje:

Z uwagi na stan zagrożenia epidemicznego w Polsce i w trosce o państwa bezpieczeństwo zdrowotne zmianie ulega formuła prowadzenia konsultacji publicznych projektu dokumentu PZŚ. Nie odbędzie się spotkanie otwarte dla wszystkich zainteresowanych lecz konsultacje przeprowadzone zostaną w formie elektronicznej przy wykorzystaniu dostępnych (bezpiecznych) kanałów komunikacji elektronicznej.

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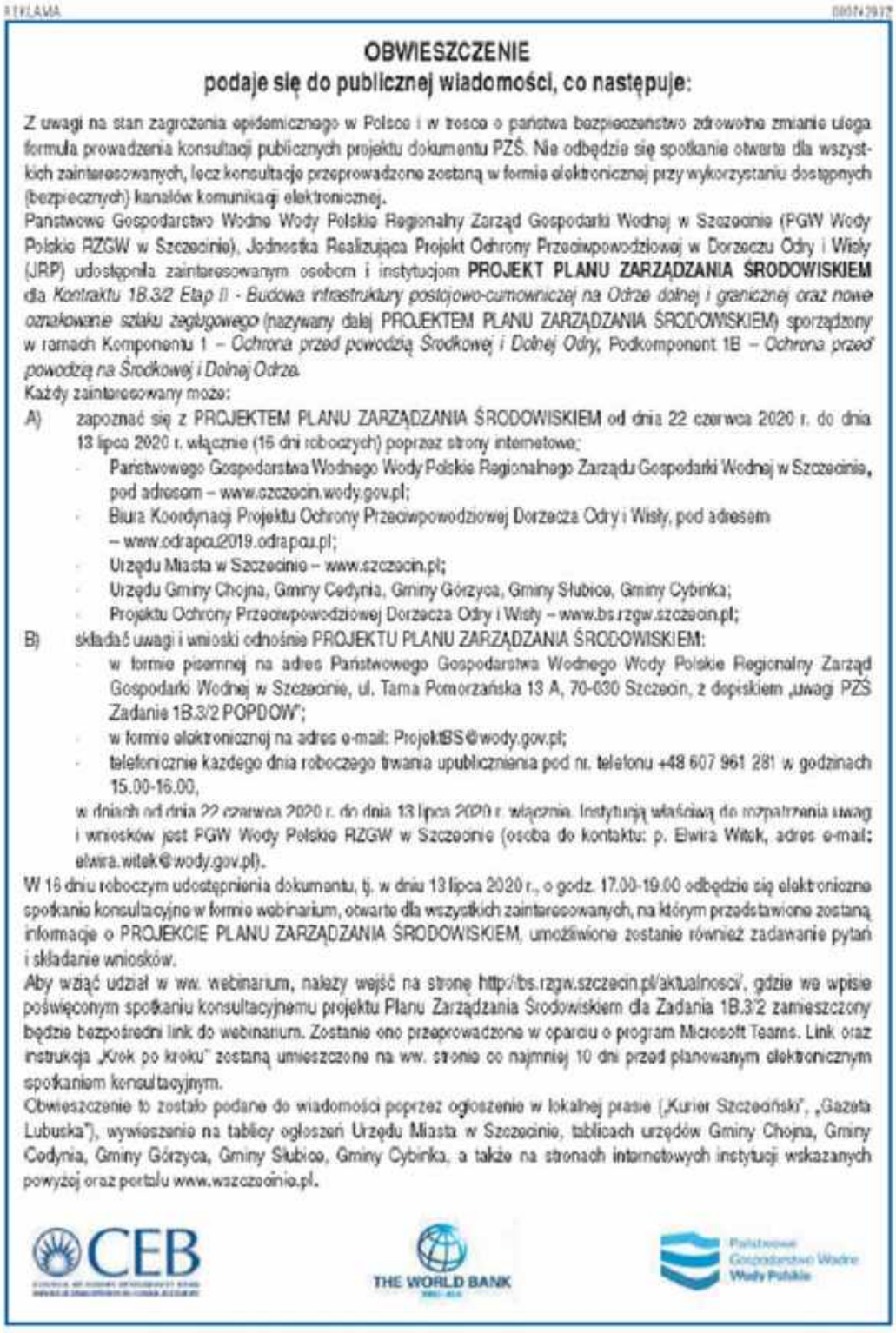
Fig. 1 Notice on the Project website – bs.rzgw.szczecin.pl



REKLAMA

OBWIESZCZENIE

podaje się do publicznej wiadomości, co następuje:

Z uwagi na stan zagrożenia epidemicznego w Polsce i w trosce o państwa bezpieczeństwo zdrowotne zmianie ulega formuła prowadzenia konsultacji publicznych projektu dokumentu PZŚ. Nie odbędzie się spotkanie otwarte dla wszystkich zainteresowanych, lecz konsultacje przeprowadzone zostaną w formie elektronicznej przy wykorzystaniu dostępnych (bezpiecznych) kanałów komunikacji elektronicznej.

Państwowe Gospodarstwo Wodne Wody Polskie Regionalny Zarząd Gospodarki Wodnej w Szczecinie (PGW Wody Polskie RZGW w Szczecinie), Jednostka Realizująca Projekt Ochrony Przeciwpowodziowej w Dorzeczu Odry i Wisły (JRP) udostępnia zainteresowanym osobom i instytucjom **PROJEKT PLANU ZARZĄDZANIA ŚRODOWISKIEM** dla *Kontraktu 1B.3/2 Etap II - Budowa infrastruktury postojowo-cumowniczej na Odrze dolnej i granicznej oraz nowe oznakowanie szlaku żeglugowego* (nazywany dalej PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM) sporządzony w ramach Komponentu 1 – *Ochrona przed powodzią Środkowej i Dolnej Odry*, Podkomponent 1B – *Ochrona przed powodzią na Środkowej i Dolnej Odrze*.

Każdy zainteresowany może:

A) zapoznać się z PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020 r. włącznie (15 dni roboczych) poprzez strony internetowe:
- Państwowego Gospodarstwa Wodnego Wody Polskie Regionalnego Zarządu Gospodarki Wodnej w Szczecinie, pod adresem – www.szczecin.wody.gov.pl;
- Biura Koordynacji Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły, pod adresem – www.odrapcu2019.odrapcu.pl;
- Urzędu Miasta w Szczecinie – www.szczecin.pl;
- Urzędu Gminy Chojna, Gminy Cedynia, Gminy Górzyca, Gminy Słubice, Gminy Cybinka;
- Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły – www.bs.rzgw.szczecin.pl;

B) składać uwagi i wnioski odnośnie PROJEKTU PLANU ZARZĄDZANIA ŚRODOWISKIEM:
- w formie pisemnej na adres Państwowego Gospodarstwa Wodnego Wody Polskie Regionalny Zarząd Gospodarki Wodnej w Szczecinie, ul. Tama Pomorzańska 13 A, 70-030 Szczecin, z dopiskiem „uwagi PZŚ Zadanie 1B.3/2 POPDOW";
- w formie elektronicznej na adres e-mail: ProjektBS@wody.gov.pl;
- telefonicznie każdego dnia roboczego trwania upubliczniania pod nr. telefonu +48 607 961 281 w godzinach 15.00-16.00,

w dniach od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020 r. włącznie. Instytucją właściwą do rozpatrzenia uwag i wniosków jest PGW Wody Polskie RZGW w Szczecinie (osoba do kontaktu: p. Elwira Witek, adres e-mail: elwira.witek@wody.gov.pl).

W 15 dniu roboczym udostępnienia dokumentu, tj. w dniu 13 lipca 2020 r., o godz. 17.00-19.00 odbędzie się elektroniczne spotkanie konsultacyjne w formie webinarium, otwarte dla wszystkich zainteresowanych, na którym przedstawione zostaną informacje o PROJEKCIE PLANU ZARZĄDZANIA ŚRODOWISKIEM, umożliwione zostanie również zadawanie pytań i składanie wniosków.

Aby wziąć udział w ww. webinarium, należy wejść na stronę http://bs.rzgw.szczecin.pl/aktualnosci/, gdzie we wpisie poświęconym spotkaniu konsultacyjnemu projektu Planu Zarządzania Środowiskiem dla Zadania 1B.3/2 zamieszczony będzie bezpośredni link do webinarium. Zostanie ono przeprowadzone w oparciu o program Microsoft Teams. Link oraz instrukcja „Krok po kroku" zostaną umieszczone na ww. stronie co najmniej 10 dni przed planowanym elektronicznym spotkaniem konsultacyjnym.

Obwieszczenie to zostało podane do wiadomości poprzez ogłoszenie w lokalnej prasie („Kurier Szczeciński", „Gazeta Lubuska"), wywieszenie na tablicy ogłoszeń Urzędu Miasta w Szczecinie, tablicach urzędów Gminy Chojna, Gminy Cedynia, Gminy Górzyca, Gminy Słubice, Gminy Cybinka, a także na stronach internetowych instytucji wskazanych powyżej oraz portalu www.szczecinie.pl.

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Fig. 2 Notice in Gazeta Lubuska dated 22.06.2020

OBWIESZCZENIE

podaje się do publicznej wiadomości, co następuje:

Z uwagi na stan zagrożenia epidemicznego w Polsce i w trosce o państwa bezpieczeństwo zdrowotne zmianie ulega formuła prowadzenia konsultacji publicznych projektu dokumentu PZŚ. Nie odbędzie się spotkanie otwarte dla wszystkich zainteresowanych, lecz konsultacje przeprowadzone zostaną w formie elektronicznej przy wykorzystaniu dostępnych (bezpiecznych) kanałów komunikacji elektronicznej.

Państwowe Gospodarstwo Wodne Wody Polskie Regionalny Zarząd Gospodarki Wodnej w Szczecinie (PGW Wody Polskie RZGW w Szczecinie), Jednostka Realizująca Projekt Ochrony Przeciwpowodziowej w Dorzeczu Odry i Wisły (JRP) udostępniła zainteresowanym osobom i instytucjom **PROJEKT PLANU ZARZĄDZANIA ŚRODOWISKIEM** dla *Kontraktu 1B.3/2 Etap II – Budowa infrastruktury postojowo-cumowniczej na Odrze dolnej i granicznej oraz nowe oznakowanie szlaku żeglugowego* (nazywany dalej PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM) sporządzony w ramach Komponentu 1 – *Ochrona przed powodzią Środkowej i Dolnej Odry*, Podkomponent 1B – *Ochrona przed powodzią na Środkowej i Dolnej Odrze*.

Każdy zainteresowany może:

A) zapoznać się z PROJEKTEM PLANU ZARZĄDZANIA ŚRODOWISKIEM od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020 r. włącznie (16 dni roboczych) poprzez strony internetowe:
- Państwowego Gospodarstwa Wodnego Wody Polskie Regionalnego Zarządu Gospodarki Wodnej w Szczecinie, pod adresem – www.szczecin.wody.gov.pl;
- Biura Koordynacji Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły, pod adresem – www.odrapcu2019.odrapcu.pl;
- Urzędu Miasta w Szczecinie – www.szczecin.pl;
- Urzędu Gminy Chojna, Gminy Cedynia, Gminy Górzyca, Gminy Słubice, Gminy Cybinka
- Projektu Ochrony Przeciwpowodziowej Dorzecza Odry i Wisły – www.bs.rzgw.szczecin.pl;

B) składać uwagi i wnioski odnośnie PROJEKTU PLANU ZARZĄDZANIA ŚRODOWISKIEM:
- w formie pisemnej na adres Państwowego Gospodarstwa Wodnego Wody Polskie Regionalny Zarząd Gospodarki Wodnej w Szczecinie, ul. Tama Pomorzańska 13 A, 70-030 Szczecin z dopiskiem „uwagi PZŚ Zadanie 1B.3/2 POPDOW";
- w formie elektronicznej na adres e-mail: ProjektBS@wody.gov.pl;
- telefonicznie każdego dnia roboczego trwania upublicznienia pod nr. telefonu +48 607 961 281 w godzinach 15.00-16.00, w dniach od dnia 22 czerwca 2020 r. do dnia 13 lipca 2020 r. włącznie. Instytucją właściwą do rozpatrzenia uwag i wniosków jest PGW Wody Polskie RZGW w Szczecinie (osoba do kontaktu: p. Elwira Witek, adres e-mail: elwira.witek@wody.gov.pl).

W 16 dniu roboczym udostępnienia dokumentu, tj. w dniu 13 lipca 2020 r., o godz. 17.00-19.00 odbędzie się elektroniczne spotkanie konsultacyjne w formie webinarium, otwarte dla wszystkich zainteresowanych, na którym przedstawione zostaną informacje o PROJEKCIE PLANU ZARZĄDZANIA ŚRODOWISKIEM, umożliwione zostanie również zadawanie pytań i składanie wniosków.

Aby wziąć udział w ww. webinarium, należy wejść na stronę http://bs.rzgw.szczecin.pl/aktualnosci/, gdzie we wpisie poświęconym spotkaniu konsultacyjnemu projektu Planu Zarządzania Środowiskiem dla Zadania 1B.3/2 zamieszczony będzie bezpośredni link do webinarium. Zostanie ono przeprowadzone w oparciu o program Microsoft Teams. Link oraz instrukcja „Krok po kroku" zostaną umieszczone na ww. stronie co najmniej 10 dni przed planowanym elektronicznym spotkaniem konsultacyjnym. Obwieszczenie to zostało podane do wiadomości poprzez ogłoszenie w lokalnej prasie (Kurier Szczeciński, Gazeta Lubuska), wywieszenie na tablicy ogłoszeń Urzędu Miasta w Szczecinie, tablicach urzędów Gminy Chojna, Gminy Cedynia, Gminy Górzyca, Gminy Słubice, Gminy Cybinka, a także na stronach internetowych instytucji wskazanych powyżej oraz portalu www.wszczecinie.pl.

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1956-20-A

Fig. 3 Notice in Kurier Szczeciński dated 22.06.2020

SWECO

Państwowe Gospodarstwo Wodne Wody Polskie

PROJEKT OCHRONY PRZECIWPOWODZIOWEJ W DORZECZU ODRY I WISŁY
POŻYCZKA nr 8524-PL

***Sweco Consulting sp. z o.o. – Lider JV,* ul. Łyskowskiego 16, 71-641 Szczecin**
Tel. 605 071 242, email: odra.szczecin@sweco.pl

Nr pisma: POPDOW-OG.101.7.2020 Szczecin, dnia 22.06.2020

ZAPROSZENIE

Szanowni Państwo,

W związku z trwającym procesem upublicznienia PROJEKTU PLANU ZARZĄDZANIA ŚRODOWISKIEM, dla Kontraktu *1B.3/2 Etap II - Budowa infrastruktury postojowo-cumowniczej na Odrze dolnej i granicznej oraz nowe oznakowanie szlaku żeglugowego* sporządzonego w ramach realizowanego Projektu Ochrony Przeciwpowodziowej w Dorzeczu Odry i Wisły (Komponent 1 – Ochrona przed powodzią Środkowej i Dolnej Odry, Podkomponent 1B – Ochrona przed powodzią na Środkowej i Dolnej Odrze), współfinansowanego ze środków Banku Światowego, mamy przyjemność zaprosić Państwa do wzięcia udziału w otwartym spotkaniu, na którym przedstawione zostaną informacje o PROJEKCIE PLANU ZARZĄDZANIA ŚRODOWISKIEM, przeprowadzone zostaną publiczne dyskusje na temat dokumentu oraz uwag złożonych w ramach procesu upublicznienia oraz w trakcie przedmiotowego spotkania.

Webinarium informacyjne odbędzie się po zakończeniu procesu upublicznienia, w dniu 13.07.2020 r. o godz. 17.00-19.00, pod adresem: http://bs.rzgw.szczecin.pl/aktualnosci/, gdzie we wpisie poświęconym spotkaniu konsultacyjnemu projektu Planu Zarządzania Środowiskiem będzie bezpośredni link do webinarium.

Szczegółowe informacje na temat możliwości zapoznania się z dokumentacją oraz wnoszenia uwag znajdują się w obwieszczeniu, dołączonym do niniejszej korespondencji.

Uprzejmie prosimy o potwierdzenie udziału w spotkaniu, za pomocą poczty elektronicznej na adres: odra.szczecin@sweco.pl lub pod numerem telefonu +48 605 071 242.

Z wyrazami szacunku
Krystyna Araszkiewicz
Kierownik Projektu

Otrzymują:
1. Adresat
2. a/a
Załączniki:
1. obwieszczenie o upublicznieniu PZŚ

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Fig. 4 Invitation to the meeting sent to representatives of local governments, private individuals, and NGOs

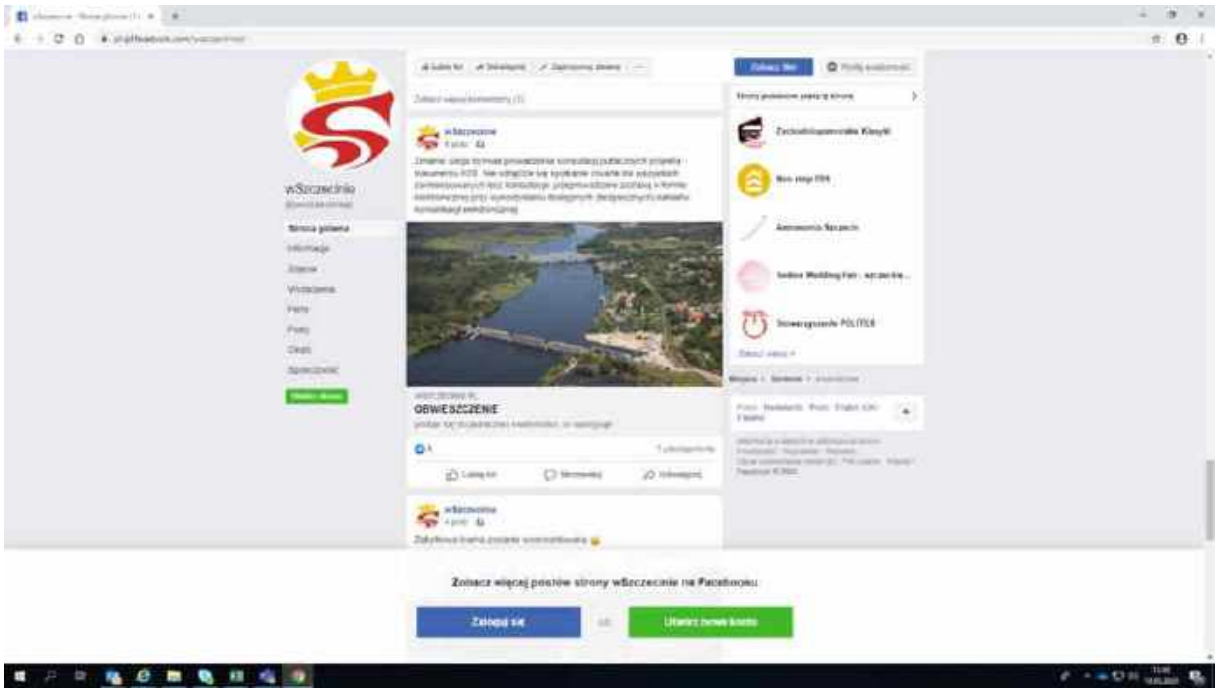

Fig. 5 Information about the webinar posted on the social media profile of portal wszczecinie.pl

9. ORGANISATIONAL STRUCTURE OF THE EMP IMPLEMENTATION

The Project Coordination Unit (PCU), which is currently a budget unit subordinate to the minister competent for the water management.

The tasks of the PCU for OVFMP include:

- coordination of activities of individual Project Implementing Units and support for these units in the scope of implementation of the EMP;
- monitoring and evaluation of the progress of the implementation of the EMP;
- ongoing cooperation with the World Bank, including preparation of quarterly reports on the implementation of the OVFMP Project.

9.1. PROJECT IMPLEMENTING UNIT (PIU) AND PROJECT IMPLEMENTATION OFFICE (PIO)

The entity directly responsible for the implementation of the Task and monitoring the progress of its implementation will be the Project Implementing Unit (PIU), i.e. the Państwowe Gospodarstwo Wodne Wody Polskie Regionalny Zarząd Gospodarki Wodnej, PGW WP RZGW *[State Water Holding Polish Waters Regional Water Management Board]* in Szczecin.

In connection with the implementation of the OVFMP Project, the Project Implementation Office (PIO) was separated within the structure of the PIU, constituting a separate organisational unit and supervised by the Chairman of the State Water Holding Polish Waters. Such a structure is transparent and has a very high decision-making level, which increases the effectiveness of the Project implementation. As part of the supervision over the implementation of the EMP, the PIO performs the following tasks:

- monitoring of the EMP implementation progress;
- financial management and accounting;
- drawing up the necessary reports for monitoring the implementation of the EMP and coordinating its implementation by all departments involved in the implementation of the EMP

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

- managing, coordinating and supervising the implementation of the EMP by the Consultant and the Contractor;
- direct supervision of the proper implementation of the Task;
- cooperation with the PCU;
- administrative and legal supervision of the implementation of the EMP;
- verification of reports on the implementation of the EMP prepared by the Consultant and the Contractor;
- exercising financial supervision of the implementation of the EMP;
- supervision of the correctness of the application of formal procedures in the implementation of the EMP, resulting, *inter alia*, from the requirements of the

Contract, Construction Law, Environmental Protection Law and other relevant administrative decisions and legal acts

9.2. CONSULTANT / ENGINEER

The role of the Consultant/ Engineer is to support PIU (State Water Holding Polish Waters Regional Water Management Board in Szczecin) in the effective implementation of the entire investment process - from the preparation of the project to its settlement.

The Consultant/Engineer was selected using the QCBS (Selection based on quality and price) method, in accordance with the "Guidelines for Selection and Employment of Consultants by World Bank Borrowers". The Consultant/ Engineer is obliged to supervise the implementation of the EMP, in accordance with the scope specified in the Consultant/ Engineer contract, which will include, inter alia:

- monitoring the implementation of the EMP;
- monitoring of the implementation of the EMP;
- monitoring of the activities of the Contractor;
- checking the quality of the works carried out by the Contractor;
- representing the Investor on the construction site by controlling the compliance of its implementation with the project and permit for execution, environmental regulations and technical knowledge principles;
- supervising all issues related to the environmental protection by specialists in the field of environmental protection and other Engineer's personnel;
- constant monitoring of the correctness of execution of measures mitigating the negative impact on the environment;
- carrying out additional tests in case of the need to verify the Contractor's reports;
- identification of problems resulting from the harmful impact of the works on the environment and presenting proposals for solving these problems;
- checking and acceptance of performed works;
- confirmation of actually performed works and remedying of defects, as well as, at the request of the Investor, control of construction settlements.

9.3. CONTRACTORS

In order to implement the Contract, a Contractor will be selected who will be responsible for the implementation of the EMP. The Contractor's obligations in this respect include:

- execution of works according to the rules specified in the EMP, in accordance with the contractual terms and conditions and design documentation, and in accordance with applicable laws and requirements of administrative decisions issued for the Task;
- implementation of the Engineer's recommendations (including environmental supervision specialists and investor supervision inspector) concerning the implementation of the EMP;
- ensuring that the following are prepared prior to the commencement of work: Health and Safety Plan (BIOZ plan), Waste Management Plan, Construction Site Flood Protection Plan for the duration of works, Spillage Procedure, Dredging Work Plan

and Safe Shipping Project, as well as other documents indicated in the EMP and contractual conditions;

- ensuring compliance with the provisions of the ES Code of Conduct, including those on the elimination of discriminatory behaviour and the risk of sexual abuse, mistreatment for sexual exploitation and sexual harassment;
- keeping the construction site documentation;
- preparation of monthly reports and inspection reports;
- preparation of reports on environmental protection;
- applying to the Investor for changes in design solutions, if it is justified by the need to increase the safety of construction works or improve the construction process in the scope concerning the implementation of the EMP.

10. TIME SCHEDULE FOR IMPLEMENTING EMP AND REPORTING PROCEDURES

The implementation of the EMP enables the parties involved in the preparation, implementation and supervision of the Task:

- identification of various environmental aspects, which have a significant impact on the condition of the environment, and which may give rise to economic effects so that they can be controlled, corrected and reduced;
- correction of the adverse consequences of the works carried out during the implementation for the benefit of the environment and financial results;
- determination of objectives and tasks implemented within the adopted environmental policy, covered by the EMP, which require outlays and bring measurable effects;
- identification and elimination of potential hazards and accidents, prevention and elimination of environmental effects, which may be related to them and entail losses disproportionate to the preventive costs;
- rational use of natural assets, with minimal environmental losses and optimal cost generation.

Moreover, the implementation of recommendations and actions resulting from the EMP may reduce or even eliminate the risk on the Contract, in particular:

- risk of omission of the environmental protection issues in the process of the Task implementation by the Contractor;
- risk of escalation of protests of local communities as the result of the Contractor's failure to comply with the work technology and environmental procedures approved by the Engineer;
- risk of additional environmental penalties;
- risk of incurring additional losses in the environment

Taking into account the importance of issues determining environmental and social conditions, the following procedures for implementation of the EMP are envisaged:

- before selecting the Contractor, the Employer will submit a draft of this EMP to the World Bank for its opinion;
- the EMP will then be subject to public consultation;
- after the public consultation (and supplementing the document with the results of the consultation), the EMP will be completed and the final version will be submitted to the World Bank for approval;
- after the approval of the EMP by the World Bank, the final document will be included in the bidding documentation for the selection of the Contractor;
- all activities of the Contractor will be reported at regular intervals (monthly), in paper and electronic format, with respect to obligations under the EMP and other contractual documents. These reports will be subject to approval by the Engineer and the Employer.

Environmental monitoring in the scope of the impact of the task on the environment consists, among other things, in:

1. control of the execution of construction works related to the implementation of the Task under the supervision of a team of environmental specialists appointed by the Contractor for the Contract implementation period.
2. The team of environmental specialists of the Contractor shall carry out activities including, but not limited to

- review and on-going control of the area covered by the Works prior to their commencement and inspections during the execution of the Works, together with preparation of appropriate reports, constituting documentation of the proper performance of environmental supervision and, at the same time, informing about the proper implementation of mitigation measures,
- formulating and submitting to the Engineer conclusions regarding the need to take mitigation measures (including their implementation) necessary to mitigate the potential adverse effects of the Task on natural habitats and species of fauna and flora of interest to the Community and subject to legal protection (species), unforeseeable and/or impossible to reveal at the stage of determining the conditions of the Task implementation. The measures can only be implemented after the Engineer's approval,
- obtaining, if necessary, the necessary permits to derogate from the prohibitions of species protection of plants, fungi or animals in accordance with the rules and procedure laid down in the Nature Conservation Act,
- reporting in the form of periodical reports.

3. The Contractor will appoint specialists in the following fields as a part of the team of environmental specialists: bird fauna, mammalian fauna, herpetology, botany/ phytosociology and fish fauna science. The above mentioned specialists must have documented experience in this field and have education in biology or related fields.

At the stage of the works implementation, it is planned that the Contractor will prepare collective reports on environmental monitoring, confirmed by specialists of the environmental team of the Contractor's team, approved by the environmental supervision of the Engineer. The detailed scope of the report will be determined by the Engineer (commencement report, periodical - monthly, quarterly, ad-hoc, closing), he will also determine the dates of their execution.

The team of environmental specialists of the Contractor shall also prepare periodic reports, submitted to relevant environmental protection authorities in writing in accordance with the requirements of administrative decisions issued in connection with the implementation of the Task by these authorities (in particular species decisions), these reports (in advance, two weeks before the date of submission to the authority) shall be submitted to the Engineer.

The Project reporting system will be, however, based on monthly reports submitted by Contractors to PIO via the Engineer and monthly reports from the Engineer. As a part of the monthly reports or as a separate document, monthly reports on the implementation of the EMP (Contractor and Engineer) will also be prepared. Collective quarterly reports will also be prepared on this basis.

The PIU shall submit quarterly reports to the PCU in the part concerning the tasks performed by them. They will contain the required set of information and descriptions to enable the PCU to prepare a quarterly report on the Project. Moreover, especially in case of problems with the implementation of the Task, the PCU will expect from the PIO the submission of statements and data on a monthly basis.

The following reporting procedures have been established:

1) Reporting:

   a) reports (commencement, monthly, quarterly, final), reports to the environmental authorities on execution of administration decisions (in particular species decisions) prepared by the Contractor of works,
   b) Engineer's review of reports,
   c) Submission of a report to the Employer (for information purposes),
   d) Submission of a report to the environmental authorities by the Engineer,
   e) submission of a quarterly report by the PIU to the PCU.

2) Archiving:

   a) Contractor: 1 copy of each electronic report for 5 years from the date of completion of the Contract,
   b) Engineer: 1 copy of each electronic report for 5 years from the date of completion of the Contract,
   c) Employer: 1 copy of each electronic report for 5 years from the date of completion of the Contract.

3) Evaluation - ongoing evaluation of the results of the implementation of planned activities resulting from the EMP. Current analysis of documentation (Contractor's Reports) by the Engineer. Providing the Employer with reliable information on the course of the construction process, with particular emphasis on the implementation of actions reducing negative impact on the environment and recommendations resulting from environmental decisions.

The PCU shall also prepare, at quarterly intervals, reports submitted to the World Bank.

The following are planned:

- ex-ante evaluation: Report before the commencement of the Contract implementation (Engineer's Report),
- ongoing evaluation: Engineer's Quarterly Reports,
- ex-post evaluation:
  - ✓ Report after completion of the Contract implementation (Final Report from the EMP prepared by the Contractor and the Engineer),
  - ✓ Report on the EMP after the defects notification period prepared by the Engineer.

11. LIST OF SOURCE MATERIALS

1) Project Operational Manual (POM) for the Odra - Vistula Flood Management Project. OVFMP Project Coordination Office Wrocław, October 2015 with the update approved on 20.06.2017.

2) Environmental and Social Management Framework Plan for the Odra - Vistula Flood Management Project - final document. RZGW *[Regional Water Management Board]* in Szczecin, RZGW in Wrocław, RZGW in Kraków, Lubuski ZMiUW *[Board of Land Amelioration and Water Facilities]* in Zielona Góra, West Pomeranian ZMiUW in Szczecin, Świętokrzyski ZMiUW in Kielce, Dolnośląski ZMiUW in Wrocław, Małopolski ZMiUW in Kraków, Podkarpacki ZMiUW in Rzeszów, IMiGW - State Research Institute. April 2015.

3) Concept of technical solutions - Berthing and mooring infrastructure on the Lower and Border Odra River and new marking of the shipping lane, Szczecin 2019.

4) Environmental decision of the Mayor of Cedynia of 13.05.2019, Ref. No. PIOS.6220.6.2018.AP.

5) Environmental decision of the Mayor of Słubice of 06.05.2019, Ref. No. WI.6220.24.2018.AK.

6) Environmental decision of the Head of the Górzyca Commune of 05.04.2019, Ref. No. GWOŚ.6220.12.10.2018.

7) Environmental decision of the Mayor of the City of Szczecin of 16.05.2019, Ref. No. WOŚr-II.6220.1.22.2019.DMł.

8) Environmental decision of the Mayor of Cybinka of 03.05.2019, Ref. No. RGN-IV.6220.05.2018.

9) Environmental decision of the Mayor of the Chojna Commune of 10.05.2019, Ref. No. BPI.6220.4.2018.MK. (including the decision of 13 June 2019 correcting an obvious typographical error in the date of the decision).

10) Permit for derogation from the species protection for Osinów Dolny: Decision of the Regional Director for Environmental Protection in Szczecin of 27.06.2019, Ref. No. WOPN-OG.6401.02.162.2019.MK, WOPN-OG.6401.03.16.2019.MK, WOPN-OG.6401.04.14.2019.MK, WOPN-OG.6401.06.08.2019.MK.

11) Permit for derogation from the species protection for Zatoń Dolna: Decision of the Regional Director for Environmental Protection in Szczecin of 27.06.2019, Ref. No. WOPN-OG.6401.02.164.2019.MK, WOPN-OG.6401.03.17.2019.MK, WOPN-OG.6401.04.15.2019.MK, WOPN-OG.6401.06.09.2019.MK.

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12. LIST OF ATTACHMENTS

Attachment 1. Plan of mitigation measures

Attachment 2. Plan of monitoring actions

Attachment 3. Summary of national environmental legislation

Attachment 4. Environmental decisions

Attachment 5. Maps with Task location against the background of protected areas (Natura 2000)

Attachment 6. Maps with Task location in comparison with other protected areas

Attachment 7. Land development plans (LDP) of the planned mooring and berthing places

Attachment 8. Permits for derogations from species protection.

Attachment 9. Report from Public Consultation on the Environmental Management Plan