

ANNEX NO. 1 TO THE ENVIRONMENTAL MANAGEMENT PLAN

FINAL

ODRA-VISTULA FLOOD MANAGEMENT PROJECT - 8524 PL

Environmental Category B - as per OP 4.01 WB

Component 1:

Flood protection of the Middle and Lower Odra

Subcomponent 1B:

Flood protection on the Middle and Lower Odra

Works Contract 1B.1/1 (a):

Rebuilding the control structures of the Odra River - adjusting it to the class III waterway, along the section from Ścinawa to the mouth of Nysa Łużycka – Stage II.

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ODRA-VISTULA FLOOD MANAGEMENT PROJECT

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ENVIRONMENTAL MANAGEMENT PLAN

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

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

Contract: *1B.1/1 (a): Rebuilding the control structures of the Odra River - adjusting it to the class III waterway, along the section from Ścinawa to the mouth of Nysa Łużycka – Stage II.*

Project Implementation Unit:

State Water Holding Polish Waters

Regional Water Management Authority in Wrocław

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ABBREVIATIONS USED

EIA Act - act of 3 October 2008 on access to information on the environment and its protection, public participation in environment protection and environmental impact assessments (consolidated text: Journal of Laws of 2021, item 247, as amended)

EMP - Environmental Management Plan

DEC - Decision on environmental conditions

RDOŚ - Regional Directorate for Environmental Protection

1. INTRODUCTION

This Annex to the Environmental Management Plan (EMP) refers to the Task *1B.1/1 (a): Rebuilding the control structures of the Odra River - adjusting it to the class III waterway*, forming a part of Subcomponent 1B under the Odra-Vistula Flood Management Project (OVFMP) and implemented as *Works Contract: 1B.1/1 (a)*.

During the execution of the contract and as a consequence of implementing the provisions of the EMP for this Contract, it became necessary to change the permitted date for carrying out construction and hydrotechnical works, restricted by the decision of the Mayor of Czerwieńsk of 18 July 2011 (ref. no.: GGRiOŚ7627-11/39/10/11) determining the environmental conditions for the execution of the project. The current provision of the DEC prevents the performance of any construction and hydrotechnical works from 15 March to 31 August.

Considering the hydrological conditions for the execution of works (high water levels making it difficult or impossible to carry out works in a significant part of the intended period) and after verifying the natural conditions for carrying out the works, the Contractor, on the basis of a power of attorney granted by the Investor, the State Water Holding Polish Waters RZGW in Wrocław, submitted an application to the Commune and Town Office in Czerwieńsk on 30.03.2021 for changing the environmental decision for the project.

The application for a partial change of the environmental decision was accompanied by the Contractor with an annex to the Environmental Impact Report containing an assessment of the possible impact of the investment at its current stage of implementation, in the light of the results of the nature inventory carried out in the Odra valley at the section of Nowa Sól to the mouth of the Nysa Łużycka River.

On the basis of the Annex to the Environmental Impact Report, the Regional Director for Environmental Protection in Gorzów Wielkopolski agreed positively the change of conditions for the execution of the above-mentioned project. The Regional Director for Environmental Protection in Gorzów Wielkopolski stated in the decision of 18 May 2021 (ref. no.: WZŚ.4221.86.2021.AN) as follows:

"I agree to amend the conditions for the execution of the above-mentioned project by:

Deleting par. II.6 in the decision on environmental conditions of the Mayor of Czerwieńsk of 18 July 2011, ref. no.: GGRiOŚ 7627-11/39/10/11 to read: "in order to eliminate the threat of disturbing the functioning of the Natura 2000 site PLB080004 "Middle Odra Valley", construction and hydrotechnical works should be carried out outside the period from 1 March to 31 August", thus, in the light of the submitted current ornithological studies of the investment site and its possible impact, I allow further construction and hydrotechnical works to be carried out in the birds' breeding period."

The Mayor of Czerwieńsk, by virtue of the Decision of 09 August 2021 (ref. no.: GGRiOŚ.6220.5.2021) amending the decision on environmental conditions of the Mayor of Czerwieńsk of 18.07.2011 (ref. no.: GGRiOŚ 7627-11/39/10/11) has made the relevant change by adding a new wording to read.

"1. Deleting par. II.6 reading: "in order to eliminate the threat of disturbing the functioning of the Natura 2000 site PLB080004 "Middle Odra Valley", construction and hydrotechnical works should be carried out outside the period from 1 March to 31 August"

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2. The remaining provisions of the decision remain unaltered”.

2. ENVIRONMENTAL CONDITIONS OF CONTRACT EXECUTION

The Contract which is the subject of the present EMP encompasses the rebuilding the control structures of the Odra River along the section from Ścinawa to the mouth of the Nysa Łużycka River. The Project Implementation Unit (PIU) for the Task is the State Water Holding Polish Waters, Regional Water Management Authority in Wrocław.

The issue which was analysed at the stage of the proceedings for the amendment of the decision on environmental conditions was the matter of a potential negative impact of the proposed change on the objects of protection of the Natura 2000 site Middle Odra Valley PLB080004. The Regional Director for Environmental Protection in Gorzów Wielkopolski stated in the content of the decision (ref. no.: WZŚ.4221.86.2021.AN), inter alia:

"The results of the nature inventory, together with other natural data for the section of the Odra River between Ścinawa and the mouth of the Nysa Łużycka, were the starting point for assessing the impact of Task 1B.1/1(b) on protected areas and populations of protected species of plants and animals".

It was essential in the present decision to consider the following information:

"1. The content of the above-mentioned updated report, which includes the results of the 2017 avifauna studies, provides that:

- "Majority of the bird species observed in the area of the works conducted do not directly use the groins or bank side areas for nesting. The exceptions are three species - Common Sandpiper, Little Ringed Plover and Common Kingfisher";

- "Common Kingfisher was observed 7 times with only 3 sightings being within the distance of less than 50 m, these were the groins 0-15/454, 0-9/484 and 0-4/456";

*- "In the case of the species Red Kite *Milvus milvus* and Black Kite *Milvus migrans*, their breeding was not confirmed within the area, as well as in the surrounding of the project. The birds were seen when flying and hunting over and around the investment site, and the Red Kite was observed frequently, virtually during each field inspection."... "Despite observing other species, including species very scarce at a domestic scale, such as Black Kite or Red Kite, the works should not cause a threat to them provided they are not carried out in a zone not less than 500 m from any identified nest of these birds."*

2. The content of the Plan of protection tasks established for the Natura 2000 site Middle Odra Valley PLB080004 stipulates that:

*- the investment area in question may potentially constitute a feeding ground for Red Kite *Milvus milvus*, for which potential threats associated with the investment in question were indicated: J02.01 Land filling, land reclamation and drainage - general, J02.03 River channel regulation (straightening) and changing the river channel course, with the following description: "Threat related to potential deterioration of the quality of the species' breeding biotopes and feeding grounds as a result of anthropogenic hydrological disturbances of the area, resulting in its intensive drainage and dewatering, as well as the need to reduce forest cover."*

*- the investment area in question may potentially constitute a feeding ground for Common Kingfisher *Alcedo atthis*, for which potential threats associated with the investment in question were indicated: J02.01 — Land filling, land reclamation and drainage - general, J02.03 - River channel regulation (straightening) and changing the river channel course, with the following description: "Threat related to the potential disappearance or reduction of the species' habitats due to anthropogenic hydrological disturbances of the area, resulting in its intensive drainage and dewatering, as well as interference with slopes of river banks and oxbow lakes".*

In consideration of the foregoing, the Regional Director for Environment Protection concluded that *"the implementation of the investment in question is not associated with the possibility of initiating the above-mentioned threats or increasing their intensity, because it pertains to the works related to the construction of groins on the Odra River without interference in the habitat parameters of species. Taking into consideration the new*

facts presented in the above-mentioned report update, it should be considered that the further execution of construction works will not have a significant negative impact on avifauna of the area, hence the execution can be continued in the above-mentioned breeding season of birds. Moreover, it should be added that with reference to the proposal for minimising measures indicated in the said application and in the above-mentioned updated report, the conditions for the execution of the investment agreed with the Regional Director for Environmental Protection in Gorzów Wlkp., listed in the above-mentioned decision of the Mayor of Czerwieńsk in par. IV, cover the monitoring requirements to a sufficient extent, namely:

"Environmental monitoring shall be conducted consisting of controlling the execution of the construction and hydrotechnical works connected with reconstruction of the control structures of the Odra River under supervision of the environmental team appointed by the investor throughout the period of entire investment execution. Nature supervision, implemented by specialists, should include:

a) inspection of the area covered by construction and hydrotechnical works prior to their commencement and inspections during construction;

b) formulating, if necessary, recommendations to undertake minimising measures, necessary to mitigate the effects of the execution of the investment on natural habitats and species being the object of the Community interest and subject to legal protection, that were unforeseeable at the stage of agreeing upon the conditions of the said decision;

c) formulating the protective indications during the execution of works;

d) obtaining, if necessary, the necessary permits to derogate from the prohibitions on the protection of species of plants, fungi or animals in accordance with the principles and procedure laid down in the act of 16 April 2004 on nature protection,

e) conducting reporting in the form of periodic reports submitted to the Regional Director for Environmental Protection in Gorzów Wielkopolski in the written form, once a year, until 30 November in the year when works are conducted. The composition of nature supervision should include specialists in the field of nature protection, including: phytosociologist, herpetologist and ornithologist; specialist in the field of environment protection must have proven experience in this field and education in environmental protection or related education." For this reason, this approval does not duplicate the provisions regarding nature supervision (ornithologist expert's supervision) of the works conducted, as such an obligation already results from the provisions of par. IV of the decision on environmental conditions".

The Mayor of Czerwieńsk stipulated in the Decision of 09 August 2021 (ref. no.: GGRIÓŚ.6220.5.2021) amending the decision on environmental conditions of the Mayor of Czerwieńsk of 18.07.2011 (ref. no.: GGRIÓŚ 7627-11/39/10/11) for the project entitled "Construction and detailed design of the rebuilding the control structures of the Odra River - adjusting it to the class III waterway": *"Taking into consideration the new facts presented in the submitted application for amending the said decision, in the report and the above findings, I conclude that the further execution of construction works will not have a significant negative impact on avifauna of the area, hence the execution can be continued in the above-mentioned breeding season of birds. (...) Considering that we only deal with a change of the investment's execution condition regarding the protection of avifauna, the Mayor of Czerwieńsk has refrained from carrying out the procedure referred to in sections V and VI of the EIA Act, including obtaining opinions and agreements of the sanitary inspection authority and the authority competent to issue a legal water assessment, as well as from carrying out a procedure with the participation of the public."*

In order to meet the conditions specified in the decision of 09 August 2021 during the execution of the investment (ref. no.: GGRIÓŚ.6220.5.2021), construction and hydrotechnical works will be carried out during the bird breeding period, under the Contractor's nature supervision. Monitoring and reporting will be conducted in line with the provisions of the EMP. These issues will be closely monitored and discussed during the EMP implementation meetings with the participation of the

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Contractor, Employer, Contract Engineer, Project Coordination Unit, Technical Assistance Consultant, reporting on the implementation of the EMP for the Contract.

3. PROCEDURE OF PUBLIC DISCLOSURE AND OF HOLDING THE PUBLIC DEBATE

Since the number of parties to the proceedings on amending the DEC exceeds 10 parties, pursuant to Article 74(3) of the EIA Act, the provision of Article 49 of the Code of Administrative Procedure applies which stipulates that the parties may be notified of the decisions and other activities of the authority in the form of a public announcement, in another form of a public notice customarily accepted in a given locality or by making the letter available in the Public Information Bulletin on the website of the competent public administration body.

In consideration of the above, the parties to the proceedings were notified of the initiation of the proceedings and the collection of complete evidence in the case, as well as of their rights, by a notice issued by the Mayor of Czerwieńsk on 13 April 2021. The announcement was published in the Public Information Bulletin at the website bip.czerwiesk.pl on 14 April 2021 and on the notice board of the Town and Commune Office in Czerwieńsk. No parties to the proceedings made any submissions or comments on the case within the specified deadline. In addition, the Mayor of Czerwieńsk, in letter ref. no. GGRiOŚ.6220.5.2021 of 13 April 2021, applied to the Regional Director for Environmental Protection in Gorzów Wielkopolski for approving the conditions for amending the final decision of the Mayor of Czerwieńsk for the aforementioned project, of 18 July 2011 (ref. no.: 7627-11/39/10/11) in the scope of the provision included in par. II.6.

At the same time, in a letter of 13 April 2021 (ref. no. GGRiOŚ.6220.5.2021), as the project exceeds the area of one commune only and covers two provinces: Lower Silesian Province and Lubuskie Province, the Mayor of Czerwieńsk, pursuant to Article 75(4) and Article 75(5b) of the EIA Act, has requested eighteen Heads of Villages and Mayors - being the parties to the administrative proceedings - to issue an opinion on the planned amendment of the final decision on environmental conditions of 18.07.2011 (ref. no. 7627-11/39/10/11) for the project entitled: "Construction and detailed design of the rebuilding the control structures of the Odra River - adjusting it to the class III waterway", within the scope of the provision included in par. II.6. The Mayor of Czerwieńsk informed the parties in the above-mentioned letter that in accordance with Article 75(5b) of the EIA act, the opinion on the matter in question is issued by way of a decision within 30 days from the date of receiving an application for issuing the opinion. Failure to give an opinion within this time limit shall be treated as a failure to raise objections to the application.

The Mayor of Czerwieńsk, in the announcement (ref. no.: GGRiOŚ.6220.5.2021) of 13 April 2021 for the parties to the administrative proceedings conducted for amending the decision on environmental conditions of 18.07.2011 (ref. no. GGRiOŚ 7627-11/39/10/11) for the project entitled: "Construction and detailed design of the rebuilding the control structures of the Odra River - adjusting it to the class III waterway", has notified the parties to the proceedings about initiating the administrative proceedings on amending the decision on environmental conditions concerning the implementation of the said project and made the notice public by posting it in the Public Information Bulletin of the Office for 14 days or as customarily accepted (posting it on the notice board of the Office).

All the parties have confirmed in return that they had made the above-mentioned announcement public by posting it in the Office's Public Information Bulletin or as customarily accepted (posting it on the notice board of the Office). No parties to the proceedings made any submissions or comments on the case within the specified time limit.

The Mayor of the Commune of Trzebiechów, the Mayor of the Commune of Jemielno, the Mayor of the City of Głogów, the Mayor of Krosno Odrzańskie, the Mayor of the Commune of Bojadła, the

Mayor of the Commune of Głogów, the Mayor of Środa Śląska and the Mayor of the City of Zielona Góra have issued positive opinions by way a decision on amending paragraph II.6 of the decision of the Mayor of Czerwieńsk of 18.07.2011, (ref. no.: GGRiOŚ 7627-11/39/10/11). The other self-government units located in the project implementation sites did not comment on the proceedings conducted.

On 19 May 2021, the Office received a decision from the Regional Director for Environmental Protection in Gorzów Wielkopolski (ref. no.: WZŚ.4221.86.2021.AN) of 18 May 2021 in which the Regional Director for Environmental Protection agreed to amend the conditions for the execution of the above-mentioned project by deleting par. II.6 in the decision on environmental conditions of the Mayor of Czerwieńsk of 18.07.2011 (ref. no.: GGRiOŚ 7627-11/39/10/11).

The Mayor of Czerwieńsk, by a notice - announcement (ref. no. GRiOŚ.6220.5.2021) of 07 June 2021 on the collected evidence prior to issuing the decision on environmental conditions, notified the parties to the proceedings of the decision of the Regional Director for Environmental Protection in Gorzów Wielkopolski (ref. no.: WZŚ.4221.86.2021.AN) of 18 May 2021 agreeing to amend the conditions for the execution of the above-mentioned project by deleting par. II.6 and about the possibility to familiarise oneself with and comment on the evidence and materials collected and the submitted claims before this decision is issued. The announcement was published in the Public Information Bulletin at the website bip.czerwiensk.pl on 10 June 2021 and posted on 08 June 2021 on the notice board of the Commune and Town Office in Czerwieńsk. No parties to the proceedings made any submissions or comments on the case within the specified time limit.

The Mayor of Czerwieńsk informed that the parties are notified of the decisions and other activities of the public administration body in the form of a public announcement for a period of 14 days by making it available in the in the Public Information Bulletin of the Commune and Town Office in Czerwieńsk: www.bip.czerwiensk.pl on the notice boards of the Commune and Town Office in Czerwieńsk.

All the parties have confirmed in return that they had made the above-mentioned announcement public by posting it in the Office's Public Information Bulletin or as customarily accepted (posting it on the notice board of the Office). No parties to the proceedings made any submissions or comments on the case within the specified deadline.

The DEC was amended in accordance with Polish procedures for amending administrative decisions. In accordance with national legislation, the amended decision on environmental conditions was also published in the generally available Public Information Bulletin of the Commune and Town Office in Czerwieńsk. Although the Mayor of Czerwieńsk - the body conducting the proceedings, refrained from conducting the public participation procedure, the whole procedure of amending the DEC was made public according to the scheme described above, i.e. - the interested parties were given the opportunity to review the decision which was made public and to submit comments and requests.

In such case, the public consultation on Annex no. 1 of the EMP would be a repetition of the same activities, which took place with exercising due diligence, in accordance with the law and custom adopted in each of the communes. Moreover, due to the fact that the amendment included in this Annex refers only to the amendment of the administrative decision, no public consultation is conducted for Annex no. 1 of the EMP.

4. PLAN OF EXECUTION AND MONITORING OF THE MEASURES SET OUT IN THE ENVIRONMENTAL MANAGEMENT PLAN

The works Contractor is required to apply all the conditions for conducting the works as specified in the appendix to the EMP for Contract 1B.1/1(a): Appendix 1 Plan of mitigating measures, Appendix 2 Plan of monitoring measures, corresponding to the types of works carried out.

The Contractor is required to obtain all administrative decisions necessary for execution of the works, if case such necessity is identified, at the stage of execution of the works.

The EMP conditions are modified in order to meet the conditions specified in the decision of 09 August 2021 (ref. no.: GGRiOŚ.6220.5.2021) amending the decision on environmental conditions of the Mayor of Czerwieńsk of 18.07.2011 (ref. no.: GGRiOŚ 7627-11/39/10/11) for the project entitled "Construction and detailed design of the rebuilding the control structures of the Odra River - adjusting it to the class III waterway":

- 1) The text of the Environmental Management Plan is amended as follows:

[existing content of the EMP]

Summary

Animated nature

Implementation of the Task will cause small adverse impacts on 5 types of natural habitats, 2 protected species of plants and several protected species of animals occurring on the area of planned works (consisting mainly of startling and disturbing of animals). These impacts, resulting mainly from the necessary scope of works within the reconstructed groins, will be significantly limited by adopting the appropriate dates and technology of works. The works will be performed outside the bird breeding season and outside the fish spawning season and the main part of the growing season. The works will be carried out on a total of 11 sections¹, dispersed along the entire section of the Odra River within the boundaries of the Lubuskie Province. Due to the spot character of the works and the adopted periods of conducting the works, the execution of the Task does not have a significant negative impact on Natura 2000 sites, as well as on other protected areas.

Impacts on protected animal species are of small scale and significance.

[content of EMP as amended]

Summary

Animated nature

Implementation of the Task will cause small adverse impacts on 5 types of natural habitats, 2 protected species of plants and several protected species of animals occurring on the area of planned works (consisting mainly of startling and disturbing of animals). These impacts, resulting mainly

¹ The works planned within the scope of Contract 1B.1/1 (a), according to the *Construction and detailed design of the rebuilding the control structures of the Odra River - adjusting it to the class III waterway. Stage II* (2013) were described as 12 sections of works, while sections no. 5 and no. 6 constitute one continuous section of works, hence in fact 11 sections of works are distinguished.

from the necessary scope of works within the reconstructed groins, will be significantly limited by conducting nature supervision during the performance of works and the implementation of appropriate mitigation measures associated with the supervision conducted.

The works will be carried out on a total of 11 sections¹, dispersed along the entire section of the Odra River within the boundaries of the Lubuskie Province. Due to the spot character of the works and the adopted conditions of conducting the works, the execution of the Task does not have a significant negative impact on Natura 2000 sites, as well as on other protected areas.

Impacts on protected animal species are of small scale and significance.

[existing content of the EMP]

5. Summary of the environmental impact assessment

5.5 Surface waters

Physiochemical elements of water quality

Impacts on biological elements associated with temporary change of physiochemical parameters of waters will be limited due to the adopted dates of works implementation: construction and hydrotechnical works, including the removal of excess sediment from the river bottom, can only be carried out outside the period from 1 March to 31 August.

[content of EMP as amended]

5. Summary of the environmental impact assessment

5.5 Surface waters

Physiochemical elements of water quality

Impacts on biological elements associated with temporary change of physiochemical parameters of waters will be limited due to the adopted dates of works implementation: the removal of excess sediment from the river bottom can only be carried out outside the period from 1 March to 31 August.

[existing content of the EMP]

5.7.2 Protected fungi, plant and animal species

Fish and lampreys

Execution of the works will be spread in time due to the possibility of performing the works only in the autumn-winter season. In addition, the Task includes a total of 11 river sections located in relation to each other at various distances (from about 1 km to over 30 km). Due to the segmental nature of the works, their spreading over time and the fact that they are carried out outside the fish

¹ The works planned within the scope of Task 1B.1/1 (a), according to the *Construction and detailed design of the rebuilding the control structures of the Odra River - adjusting it to the class III waterway. Stage II* (2013) were described as 12 sections of works, while sections no. 5 and no. 6 constitute one continuous section of works, hence in fact 11 sections of works are distinguished.

spawning season (i.e. outside the period from 1 March to 31 August), impacts on ichthyofauna will be negligible in the scale of the entire river section included in Task 1B.1/1 (a). Structures that differentiate the river channel for fish habitats, such as rocks from washed-out groins and tree logs located in the inter-groin fields, will not be disturbed during the performance of works.

[content of EMP as amended]

5.7.2 Protected fungi, plant and animal species

Fish and lampreys

Execution of the works will be spread in time due to the possibility of removing excess sediment from the river bottom only outside the period from 1 March to 31 August. In addition, the Task includes a total of 11 river sections located in relation to each other at various distances (from about 1 km to over 30 km). Due to the segmental nature of the works, their spreading over time and the removal of excess sediment from the river bottom only outside the period from 1 March to 31 August, impacts on ichthyofauna will be negligible in the scale of the entire river section included in Task 1B.1/1 (a). Structures that differentiate the river channel for fish habitats, such as rocks from washed-out groins and tree logs located in the inter-groin fields, will not be disturbed during the performance of works. Moreover, the works will be carried out under the Contractor's nature supervision, including the supervision of an ichthyologist expert.

[existing content of the EMP]

5.7.2 Protected fungi, plant and animal species

Amphibians and reptiles

The most valuable habitats of amphibians and reptiles are located within the Odra floodplain, where water bodies of various types are present. The river-bank zone is locally valuable for species of amphibians in places where areas of calm water, stagnant water and similar structures are formed. In order to preserve these habitats, it is necessary to adopt an appropriate technology of works (collection of excess earth mass and excavated material from the sites of performing the works, loading on barges, transport to ports and finally to landfills)¹. The adopted time of performing the works (the works will be carried out only in the period from 1 September to the end of February of a given year) ensures a significant reduction of impacts associated with the occurrence of accidental mortality of amphibians and reptiles that may be present within and in the vicinity of the groins in feeding periods and seasonal periods of migration of individuals. The habitats of these species, located within the inter-embankment zone of the river, will not be disturbed during the performance of works.

[content of EMP as amended]

5.7.2 Protected fungi, plant and animal species

¹ The procedure for handling earth masses extracted from the river bottom is discussed in detail in Appendix 7 of the EMP.

Amphibians and reptiles

The most valuable habitats of amphibians and reptiles are located within the Odra floodplain, where water bodies of various types are present. The river-bank zone is locally valuable for species of amphibians in places where areas of calm water, stagnant water and similar structures are formed. In order to preserve these habitats, it is necessary to adopt an appropriate technology of works (collection of excess earth mass and excavated material from the sites of performing the works, loading on barges, transport to ports and finally to landfills)¹. The adopted technology of performing the works ensures a significant reduction of impacts associated with the occurrence of accidental mortality of amphibians and reptiles that may be present within and in the vicinity of the groins in feeding periods and seasonal periods of migration of individuals. The habitats of these species, located within the inter-embankment zone of the river, will not be disturbed during the performance of works. Moreover, the works will be carried out under the Contractor's nature supervision, including the supervision of an expert herpetologist, who will continuously inspect the Construction Site to prevent any possible impacts on amphibians and reptiles.

[existing content of the EMP]

5.7.2 Protected fungi, plant and animal species

Birds

The adopted time of performing the works (the works will be carried out only in the period from 1 September to the end of February) ensures the elimination of impacts related to the startling and scaring of all bird species inhabiting the groins, inter-groin spaces, the adjacent bank slopes and trees and patches of forests located in the inter-embankment zone. No groins reconstruction works will be carried out in the breeding season of birds, therefore breeding bird species in the sections covered by the works will start breeding without any disturbance.

The time of conducting the works outside the breeding season of birds also limits the possibility of occurrence of negative impacts on black kite and red kite, which are among the most valuable bird species in the Odra Valley (a detailed analysis of the impact on these species is presented in chapt. 5.7.3). The scope of works to be carried out does not cause direct interference with forest habitats and tree-covered areas within which black and red kite nests are located.

[content of EMP as amended]

5.7.2 Protected fungi, plant and animal species

Birds

Performing the works under an expert ornithologist's supervision in the breeding period of birds ensures the elimination of impacts related to the occurrence of startling and scaring of all bird species inhabiting the groins, inter-groin spaces, the adjacent bank slopes and trees and patches of forests located in the inter-embankment zone. No groins reconstruction works will be carried out if

¹ The procedure for handling earth masses extracted from the river bottom is discussed in detail in Appendix 7 of the EMP.

nesting birds are identified, therefore breeding bird species in the sections covered by the works will start breeding without any disturbance.

Performing the works under an expert ornithologist's supervision also limits the possibility of occurrence of negative impacts on black kite and red kite, which are among the most valuable bird species in the Odra Valley (a detailed analysis of the impact on these species is presented in chapt. 5.7.3). The scope of works to be carried out does not cause direct interference with forest habitats and tree-covered areas within which black and red kite nests are located.

[existing content of the EMP]

5.7.2 Protected fungi, plant and animal species

Bats

The areas covered by the works act primarily as a feeding ground for bat species. The main area of importance for this group of animals in the bank zone are the inter-groin fields, within which the bays being formed, with reed vegetation, offer optimal feeding conditions for many bat species (e.g. pipistrelles, Daubenton's Bat, Pond Bat). The sites will be preserved in the unchanged form. The works will also be carried out outside of the normal bat activity period and hence impacts on this animal group will be of a minor scale and significance. Due to the limited scope of the works (in most cases only part of the groin body will be reconstructed), it is not planned to carry out felling of the trees which are feeding, mating and hiding places for bats.

In order to provide additional mitigation of impacts to protected species of animals and plants, appropriate mitigation measures were introduced in Appendix 1 of the EMP.

[content of EMP as amended]

5.7.2 Protected fungi, plant and animal species

Bats

The areas covered by the works act primarily as a feeding ground for bat species. The main area of importance for this group of animals in the bank zone are the inter-groin fields, within which the bays being formed, with reed vegetation, offer optimal feeding conditions for many bat species (e.g. pipistrelles, Daubenton's Bat, Pond Bat). The sites will be preserved in the unchanged form. Due to the limited scope of the works (in most cases only part of the groin body will be reconstructed), it is not planned to carry out felling of the trees which are feeding, mating and hiding places for bats. Moreover, the works will be carried out under the Contractor's nature supervision, including the supervision of an expert chiropterologist, who will continuously inspect the Construction Site to prevent any possible impacts on bats.

In order to provide additional mitigation of impacts to protected species of animals and plants, appropriate mitigation measures were introduced in Appendix 1 of the EMP.

[existing content of the EMP]

5.7.3 Natura 2000 sites

Middle Odra Valley PLB080004

Due to the scope of the works and the time of conducting the works, the Task does not cause negative impacts on the integrity of the area and the coherence of the Natura 2000 network. The works will be carried out outside the breeding season of birds, thus impacts on this group of species will be eliminated. The species whose habitats will be disturbed as a result of performing the works (Common Sandpiper, Little Ringed Plover) are not the objects of protection of Natura 2000 sites.

All sections of the works within Task 1B.1/1 (a) are located within the boundaries of the Middle Odra Valley area PLB080004, which together cover a length of 21.8 km, constituting 11.97% of the length of the Odra River within this Natura 2000 site.

The distribution of the sites of individual species in relation to the areas of works was analysed when assessing the impact of the works on bird species. Due to the time of performing the works (only between 1 September and the end of February) there will be no impact for the majority of species due to startling and scaring of individuals of the species. Therefore, the execution of the works will not cause any loss of breeding or decrease in breeding success of particular bird species. It was also analysed whether the works do not cause direct damage to bird breeding sites during the period of their absence from the breeding habitat (bank slopes, sandbanks, trees, etc.). No such threats were found in relation to the species considered as objects of protection in the Area.

[content of EMP as amended]

5.7. 3 Natura 2000 Sites

Middle Odra Valley PLB080004

Due to the scope of the works and conducting the works in the breeding season under ornithological supervision, the Task does not cause negative impacts on the integrity of the area and the coherence of the Natura 2000 network. The species whose habitats will be disturbed as a result of performing the works (Common Sandpiper, Little Ringed Plover) are not the objects of protection of Natura 2000 sites.

All sections of the works within Task 1B.1/1 (a) are located within the boundaries of the Middle Odra Valley area PLB080004, which together cover a length of 21.8 km, constituting 11.97% of the length of the Odra River within this Natura 2000 site.

The distribution of the sites of individual species in relation to the areas of works was analysed when assessing the impact of the works on bird species. As the works will be carried out in the breeding season under the supervision of an ornithologist expert, the execution of the works will not cause any loss of breeding or lower breeding success of particular bird species. It was also analysed whether the works do not cause direct damage to bird breeding sites during the period of their absence from the breeding habitat (bank slopes, sandbanks, trees, etc.). No such threats were found in relation to the species considered as objects of protection in the Area.

[existing content of the EMP]

5.7.3 Natura 2000 sites

Middle Odra Valley PLB080004

Red kite *Milvus milvus* The presence of birds was recorded in several locations adjacent to the sites of works:

- nesting site at km 454+000-457+000,
- nesting site at approx. km 475+000,
- nesting site at approx. km 490+000-495+000,
- nest at approx. km 498+500-499+500,
- nest at approx. km 537+500-538+500.

Tree-covered areas or individual trees within which nests of species are located will not be disturbed in connection with the planned works. Impacts from the scaring of birds will not occur given the phenology of the species. The breeding season of the black kite at the extreme (broad) dates extends from early April to late August, with the main breeding season occurring from mid-April to mid-August (Monitoring of Breeding Birds, Methodological Manual, GIOŚ 2015). Works associated with the performance of works may only be conducted from September 1 to the end of February. Hence there is no risk that carrying out the works will result in a threat of brood loss or reduced breeding success of the species.

The execution of the works does not result in any interference in forest areas (occurrence area of notably Middle Spotted Woodpecker, European Honey Buzzard), nor in the river inter-embankment areas where different types of water habitats and semi-aquatic habitats exist, representing a feeding ground of Whiskered Tern, White-winged Tern, Garganey and Northern Shoveler, which are the object of protection of the Natura 2000 site.

[content of EMP as amended]

5.7.3 Natura 2000 sites

Middle Odra Valley PLB080004

Red kite *Milvus milvus* The presence of birds was recorded in several locations adjacent to the sites of works:

- nesting site at km 454+000-457+000,
- nesting site at approx. km 475+000,
- nesting site at approx. km 490+000-495+000,
- nest at approx. km 498+500-499+500,
- nest at approx. km 537+500-538+500.

Tree-covered areas or individual trees within which nests of species are located will not be disturbed in connection with the planned works. Impacts related to the scaring of birds will not occur, considering the necessity to precede the planned works with an ornithologist's inspection. The breeding season of the black kite at the extreme (broad) dates extends from early April to late August, with the main breeding season occurring from mid-April to mid-August (Monitoring of Breeding Birds, Methodological Manual, GIOŚ 2015). The works will be carried out under nature supervision, including supervision by an expert ornithologist.

The execution of the works does not result in any interference in forest areas (occurrence area of notably Middle Spotted Woodpecker, European Honey Buzzard), nor in the river inter-embankment areas where different types of water habitats and semi-aquatic habitats exist, representing a feeding ground of Whiskered Tern, Tern.

[existing content of the EMP]

5.7.3 Natura 2000 sites

Kargowa Bends of the Odra PLH080012

In accordance with the conditions specified in the environmental decision, the construction and hydrotechnical works, including the removal of excess sediment from the river bottom, will be carried out outside the bird breeding season and outside the fish spawning season. At the same time, excluding the bird breeding season from the works performance period minimises negative impacts on other animal species, particularly invertebrates, amphibians and reptiles.

Impacts on the species of animals considered as objects of protection in the Natura 2000 site are limited to temporary impacts on species of fish. This impact is connected with a temporary increased concentration of suspended solids in the Odra River waters. However, the works will be carried out outside the summer period when aquatic organisms are most exposed to changes in physical and chemical parameters of water. In order to ensure the indirect protection to the bitterling, the material excavated from the river bottom was also inspected for the presence of mussels (including those of the family *Unionidae*), within which bitterling larvae develop. The mussels collected from the excavated material will be placed again in a safe place in the riverbed.

[content of EMP as amended]

5.7.3 Natura 2000 sites

Kargowa Bends of the Odra PLH080012

In accordance with the conditions specified in the environmental decision, the removal of excess sediments from the river bottom will be carried out outside the fish spawning season, which at the same time minimises negative impacts on other animal species, particularly invertebrates, amphibians and reptiles.

Impacts on the species of animals considered as objects of protection in the Natura 2000 site are limited to temporary impacts on species of fish. This impact is connected with a temporary increased concentration of suspended solids in the Odra River waters. However, the works consisting of the removal of excess sediment from the river bottom will be carried out outside the summer period when aquatic organisms are most exposed to changes in physical and chemical parameters of water. In order to ensure the indirect protection to the bitterling, the material excavated from the river bottom was also inspected for the presence of mussels (including those of the family *Unionidae*), within which bitterling larvae develop. The mussels collected from the excavated material will be placed again in a safe place in the riverbed.

[existing content of the EMP]

5.7.4 Other protected areas

In case of other protected areas such as the Krzesiński Landscape Park, Protected Landscape Areas located in the Odra valley, nature reserves and ecological sites, there will be no impact on the protection objectives of these areas and natural and cultural values. The works within the scope of the Task will be conducted in sections, within the groins selected for renovation. Implementation will take place in the period outside of the highest activity of animal species, outside of the breeding season of birds and outside of the growing season of plants. Impacts will be mainly short-term and will vanish along with the advancement of the front of works. The adopted technology and dates of works allow for significant reduction of potential negative impacts on the nature and landscape of

the river valley. In order to prevent and limit the impact of works on protected species and thus on protected areas throughout the period of Task execution, mitigation measures should be implemented, as described in Appendix no. 1 to EMP.

[content of EMP as amended]

5.7.4 Other protected areas

In case of other protected areas such as the Krzesiński Landscape Park, Protected Landscape Areas located in the Odra valley, nature reserves and ecological sites, there will be no impact on the protection objectives of these areas and natural and cultural values. The works within the scope of the Task will be conducted in sections, within the groins selected for renovation. Impacts will be mainly short-term and will vanish along with the advancement of the front of works. The adopted technology and dates of works (removal of excess sediments from the river bottom will be carried out outside the fish spawning season), and the performance of works under nature supervision allow for significant reduction of potential negative impacts on the nature and landscape of the river valley. In order to prevent and limit the impact of works on protected species and thus on protected areas throughout the period of Task execution, mitigation measures should be implemented, as described in Appendix no. 1 to EMP.

[existing content of the EMP]

5.12 Extraordinary hazards to the environment

With regard to the Task in question, the occurrence of elevated water levels and jamming floods in the period of conducting the works related to rebuilding the control structures (the works will be carried out in the autumn-winter period) can be regarded as the equivalent of industrial breakdown. In the period of high water levels or jamming floods, the Contractor's floating equipment (e.g. barges, excavators on a pontoon) may be located within the riverbed.

[content of EMP as amended]

5.12 Extraordinary hazards to the environment

With regard to the Task in question, the occurrence of elevated water levels and jamming floods in the period of conducting the works related to rebuilding the control structures (the works will be carried out in particular in the autumn-winter period) can be regarded as the equivalent of industrial breakdown. In the period of high water levels or jamming floods, the Contractor's floating equipment (e.g. barges, excavators on a pontoon) may be located within the riverbed.

[existing content of the EMP]

6.8.2 Protected areas

During the performance of works, the Contractor is obliged to observe the standards, prohibitions and indications and to respect the restrictions resulting from the existence of areas and objects created on the basis of the Nature protection act. In order to eliminate the threat of disturbing the functioning of the protected species of birds, for the protection of which the Natura 2000 site Middle Odra Valley PLB080004 was established, construction and hydrotechnical works will be carried out outside the period from 1 March to 31 August. The works related to the removal of sandbars will be performed only outside the spawning season of fish occurring in the areas intended for works (i.e. outside the period from 1 March to 31 August).

[content of EMP as amended]

6.8.2 Protected areas

During the performance of works, the Contractor is obliged to observe the standards, prohibitions and indications and to respect the restrictions resulting from the existence of areas and objects created on the basis of the Nature protection act. In order to eliminate the threat of disturbing the functioning of the protected species of birds, for the protection of which the Natura 2000 site Middle Odra Valley PLB080004 was established, construction and hydrotechnical works conducted in the breeding period of birds will be carried out under an expert ornithologist's supervision. The works related to the removal of sandbars will be performed only outside the spawning season of fish occurring in the areas intended for works (i.e. outside the period from 1 March to 31 August). In addition, the Construction Site will be inspected by nature supervision on a regular basis to reduce potential negative impacts on nature.

[existing content of the EMP]

Appendix 1 Plan of mitigation measures

No. 11

Issue: General principles of conservation of living resources

Location: Task implementation area

Mitigation measure: Limitations to the performance dates of works due to the protection of birds. In order to eliminate the threat of disturbing the functioning of the protected species of birds, for the protection of which the Natura 2000 site Middle Odra Valley OSO PLB080004 was established, construction and hydrotechnical works should be carried out outside the period from 1 March to 31 August.

Responsible party: Contractor

[content of EMP as amended]

Appendix 1 Plan of mitigation measures

Deletion of line no. 11 in the table

[existing content of the EMP]

Appendix 2 Plan of monitoring measures

Item no. 11

Issue: General principles of conservation of living resources

Subject of monitoring: Limitations to the performance dates of works due to the protection of birds. In order to eliminate the threat of disturbing the functioning of the protected species of birds, for the protection of which the Natura 2000 site Middle Odra Valley OSO PLB080004 was established, construction and hydrotechnical works should be carried out outside the period from 1 March to 31 August.

Place of monitoring: Task implementation area

Method of monitoring: Visual monitoring, photographic documentation. Verification of work schedules

Period and frequency of monitoring: During the Task implementation period, on an ongoing basis, not less frequently than once a week.

Responsible party: Contractor's Team

Method of monitoring: Verification of documentation submitted by the Contractor to the Engineer. Visual monitoring, photographic documentation.

Period and frequency of monitoring: During the Task implementation period, on an ongoing basis, not less frequently than once a month.

Responsible party: Engineer's Team

[content of EMP as amended]

Appendix 2 Plan of monitoring measures

Deletion of line no. 11 in the table

[existing content of the EMP]

Appendix 1 Plan of mitigation measures

No. 13

Issue: General principles of conservation of living resources

Location: Task implementation area

Mitigation measure: Setting up proper work schedule for Task implementation. The Contractor shall provide such a work schedule in which deadlines and locations of various stages of the Task implementation, will meet the conditions of the environmental decisions and EMP, as well as to the utmost extent will limit the negative impact on the protected species occurring in the area of the Tasks and its surroundings.

Demands concerning dates and deadlines of the works are mentioned also in items 10,11 and 41 of App. 1 of EMP.

Responsible party: Contractor

[content of EMP as amended]

Appendix 1 Plan of mitigation measures

No. 13

Issue: General principles of conservation of living resources

Location: Task implementation area

Mitigation measure: Setting up proper work schedule for Task implementation. The Contractor shall provide such a work schedule in which deadlines and locations of various stages of the Task implementation, will meet the conditions of the environmental decisions and EMP, as well as to the utmost extent will limit the negative impact on the protected species occurring in the area of the Tasks and its surroundings.

Demands concerning dates and deadlines of the works are mentioned also in items 10 and 41 of App. 1 of EMP.

Responsible party: Contractor.

[existing content of the EMP]

Appendix 2 Plan of monitoring measures

Item no. 13

Issue: General principles of conservation of living resources

Subject of monitoring: Setting up proper work schedule for Task implementation. The Contractor shall provide such a work schedule in which deadlines and locations of various stages of the Task implementation, will meet the conditions of the environmental decisions and EMP, as well as to the utmost extent will limit the negative impact on the protected species occurring in the area of the Tasks and its surroundings.

Demands concerning dates and deadlines of the works are mentioned also in items 10,11 and 41 of App. 1 of EMP.

the rest of the condition does not need to be changed

[content of EMP as amended]

Appendix 2 Plan of monitoring measures

Item no. 13

Issue: General principles of conservation of living resources

Subject of monitoring: Setting up proper work schedule for Task implementation. The Contractor shall provide such a work schedule in which deadlines and locations of various stages of the Task implementation, will meet the conditions of the environmental decisions and EMP, as well as to the utmost extent will limit the negative impact on the protected species occurring in the area of the Tasks and its surroundings.

Demands concerning dates and deadlines of the works are mentioned also in items 10 and 41 of App. 1 of EMP.

the rest of the condition does not need to be changed.

[existing content of the EMP]

Appendix 1 Plan of mitigation measures

No. 80

Issue: Implementation of EMP

Location: Task implementation area

Mitigation measure: Requirements concerning the team of environmental experts. Throughout the Task implementation period, the Contractor shall ensure permanent participation of a team of environmental experts:

- a) The Contractor's team of environmental experts shall include the following experts: phytosociologist/botanist, entomologist, ichthyologist, herpetologist, ornithologist, mammologist, chiropterologist,

- b) all experts in the Contractor's environmental team shall provide documentary evidence in their experience as well as education in the field of environmental studies,
- c) team of environmental experts must be accepted by the Engineer prior to the commencement of works. .

These experts will be engaged in introducing some measures included in the EMP, in particular:

- a) mitigation measures included in the Appendix 1 of the EMP in items: 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 35, 36, 37, 38, 39, 40, 41, 42, 43, 79, 81;

monitoring measures included in App. 2 of the EMP in item 85.

Responsible party: Contractor

[content of EMP as amended]

Appendix 1 Plan of mitigation measures

No. 80

Issue: Implementation of EMP

Location: Task implementation area

Mitigation measure: Requirements concerning the team of environmental experts. Throughout the Task implementation period, the Contractor shall ensure permanent participation of a team of environmental experts:

- c) The Contractor's team of environmental experts shall include the following experts: phytosociologist/botanist, entomologist, ichthyologist, herpetologist, ornithologist, mammologist, chiropterologist,
- d) all experts in the Contractor's environmental team shall provide documentary evidence in their experience as well as education in the field of environmental studies,
- d) team of environmental experts must be accepted by the Engineer prior to the commencement of works. .

These experts will be engaged in introducing some measures included in the EMP, in particular:

- b) mitigation measures included in the Appendix 1 of the EMP in items: 5, 6, 7, 8, 9, 10, 12, 15, 16, 35, 36, 37, 38, 39, 40, 41, 42, 43, 79, 81;

monitoring measures included in App. 2 of the EMP in item 85.

Responsible party: Contractor

[existing content of the EMP]

Appendix 2 Plan of monitoring measures

Item no. 80

Issue: Implementation of EMP

Subject of monitoring: Requirements concerning the team of environmental experts. Throughout the Task implementation period, the Contractor shall ensure permanent participation of a team of environmental experts:

- e) The Contractor's team of environmental experts shall include the following experts: phytosociologist/botanist, entomologist, ichthyologist, herpetologist, ornithologist, mammologist, chiropterologist,
- f) all experts in the Contractor's environmental team shall provide documentary evidence in their experience as well as education in the field of environmental studies,

- e) team of environmental experts must be accepted by the Engineer prior to the commencement of works. .

These experts will be engaged in introducing some measures included in the EMP, in particular:

- c) mitigation measures included in the Appendix 1 of the EMP in items: 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 35, 36, 37, 38, 39, 40, 41, 42, 43, 79, 81;

monitoring measures included in App. 2 of the EMP in item 85.

the rest of the condition does not need to be changed.

[content of EMP as amended]

Appendix 2 Plan of monitoring measures

Item no. 80

Issue: Implementation of EMP

Subject of monitoring: Requirements concerning the team of environmental experts. Throughout the Task implementation period, the Contractor shall ensure permanent participation of a team of environmental experts:

- g) The Contractor's team of environmental experts shall include the following experts: phytosociologist/botanist, entomologist, ichthyologist, herpetologist, ornithologist, mammologist, chiropterologist,
- h) all experts in the Contractor's environmental team shall provide documentary evidence in their experience as well as education in the field of environmental studies,
- f) team of environmental experts must be accepted by the Engineer prior to the commencement of works. .

These experts will be engaged in introducing some measures included in the EMP, in particular:

- d) mitigation measures included in the Appendix 1 of the EMP in items: 5, 6, 7, 8, 9, 10, 12, 15, 16, 35, 36, 37, 38, 39, 40, 41, 42, 43, 79, 81;

monitoring measures included in App. 2 of the EMP in item 85.

the rest of the condition does not need to be changed.

5. APPENDICES

1. Appendix 4c, the Decision of 09 August 2021 (ref. no.: GGRiOŚ.6220.5.2021) amending the decision on environmental conditions of the Mayor of Czerwieńsk of 18.07.2011 (ref. no. GGRiOŚ 7627-11/39/10/11) for the project entitled "Construction and detailed design of the rebuilding the control structures of the Odra River - adjusting it to the class III waterway".