



Conservation of Wetland Biodiversity and Sustainable Management of Freshwater Ecosystems in the Western Dvina/Daugava Transboundary River Basin

Part I: Project Information

GEF ID

10462

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT

NGI

Project Title

Conservation of Wetland Biodiversity and Sustainable Management of Freshwater Ecosystems in the Western Dvina/Daugava Transboundary River Basin

Countries

Belarus

Agency(ies)

UNDP

Other Executing Partner(s)

Ministry of Natural Resources and Environment Protection of the Republic of Belarus

Executing Partner Type

Government

GEF Focal Area

Multi Focal Area

Taxonomy

Biodiversity, Focal Areas, Protected Areas and Landscapes, Terrestrial Protected Areas, Productive Landscapes, Financial and Accounting, Payment for Ecosystem Services, Species, Threatened Species, Invasive Alien Species, Biomes, Wetlands, Rivers, Lakes, International Waters, Fisheries, Pollution, Nutrient pollution from all sectors except wastewater, Transboundary Diagnostic Analysis, Freshwater, River Basin, Demonstrate innovative approaches, Influencing models, Transform policy and regulatory environments, Type of Engagement, Stakeholders, Participation, Partnership, Information Dissemination, Consultation, Beneficiaries, Private Sector, SMEs, Civil Society, Academia, Non-Governmental Organization, Local Communities, Communications, Awareness Raising, Gender Mainstreaming, Gender Equality, Gender-sensitive indicators, Sex-disaggregated indicators, Gender results areas, Knowledge Generation and Exchange, Access to benefits and services, Participation and leadership, Capacity Development, Capacity, Knowledge and Research, Learning, Adaptive management, Theory of change, Indicators to measure change, Innovation, Knowledge Exchange, Knowledge Generation, Targeted Research

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 1

Duration

60 In Months

Agency Fee(\$)

363,559

Submission Date

1/7/2020

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
IW-3-6	GET	1,780,484	7,400,000
BD-2-7	GET	1,180,000	7,800,000
BD-1-1	GET	421,836	10,454,500
LD-2-5	GET	444,621	1,300,000
	Total Project Cost (\$)	3,826,941	26,954,500

B. Indicative Project description summary

Project Objective

To achieve improved status of biodiversity and water resources, including key wetland areas, through the integrated management of the Western Dvina/Daugava transboundary river basin.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
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Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Effective integrated management of freshwater resources within the Western Dvina basin	Technical Assistance	<p>Outcome 1.1: Mechanisms for transboundary cooperation in the water resources management of the transboundary Daugava/Western Dvina river basin developed and agreed upon between two riparian countries</p> <p>Indicators:</p> <ul style="list-style-type: none"> - Transboundary Diagnostic Analysis (TDA) finalised for the Western Dvina Basin in Belarus - Western Dvina River Basin Management Plan (RBMP) developed and endorsed by Western Dvina Basin Council - Provisions and practical measures in place to implement special protection regime for at least 5,000 ha of freshwater habitats as a pilot measure in support to RBMP implementation - A bilateral agreement for protection and sustainable use of the transboundary river basin developed and agreed between two countries 	<p><u>Output 1.1.1:</u> Delineation and classification of surface and underground waters within the Western Dvina Basin</p> <p><u>Output 1.1.2:</u> Transboundary Diagnostic Analysis (TDA) of the Western Dvina Basin, including an assessment of the water management and hydrological characteristics of water bodies and analysis of point and non-point pollution impacts, other threats and their immediate and root causes.</p> <p><u>Output 1.1.3:</u> Establishment of the national Western Dvina Advisory Council in Belarus and the joint Western Dvina/Daugava Basin Commission between Belarus and Latvia</p> <p><u>Output 1.1.4:</u> Harmonisation of basin management approaches for the Western Dvina and Daugava RBMPs, including the transboundary management and coordination aspects, for the development of a regional SAP outlining the key priorities and directions for joint actions</p>	GET	1,700,000	7,400,000

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
2. Conservation, restoration and sustainable management of wetlands and associated freshwater ecosystems in the Western Dvina Basin	Technical Assistance	<p>Outcome 2. 1.Sustainable management of key internationally important wetland areas (Ramsar sites and/or national level PAs) in the Western Dvina River Basin ensured at 194,500 ha</p> <p>Indicators:</p> <ul style="list-style-type: none"> - at least 100,000 ha of wetland areas receive the Ramsar status;- a new wetland refuge “Lebediny Mokh” established with an area of 15,000 ha; - at least 15% increase in METT score for the targeted PAs covering 179,500 ha; - <i>Other indicators will be elaborated at the PPG stage</i> <p>Outcome 2.2. Key ecosystem characteristics and functions restored for sustainable management of wetlands and freshwater habitats at 15,000 ha</p>	<p><u>Output 2.1.1:</u> Ramsar nominations for the following protected areas: Braslav Lakes National Park, Selyava, Yanka, Sinjsha, Boloto Mokh state refuges, and Lebediny Mokh IBA</p> <p><u>Output 2.1.2:</u> Development/revision of PA management plans and protection regimes to ensure protection and sustainable use of globally significant wetlands. Establishment of management units.</p> <p><u>Output 2.1.3:</u> Incremental support to the implementation of new management plans, including development of sustainable finance solutions.</p> <p><u>Output 2.1.4:</u> Development and testing of co-management scenarios involving PA management and bioresource users (fishing, hunting, ecotourism at Osveysky Ramsar refuge)</p> <p><u>Output 2.1.5:</u> Support to relevant strategic framework development, in particular the Ramsar Convention Implementation Strategy</p>	GET	1,944,800	18,313,000

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
				Sub Total (\$)	3,644,800	25,713,000
Project Management Cost (PMC)						
				GET	182,141	1,241,500
				Sub Total(\$)	182,141	1,241,500
				Total Project Cost(\$)	3,826,941	26,954,500

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Government	Ministry of Environment	Public Investment	Recurrent expenditures	2,000,000
Government	Ministry of Forestry	Public Investment	Recurrent expenditures	1,900,000
Government	Ministry of Agriculture	Public Investment	Recurrent expenditures	320,000
Government	Ministry of Energy	Loans	Investment mobilized	18,100,000
Government	Vitebsk Regional Committee	Public Investment	Recurrent expenditures	1,290,000
Government	Scientific and Practical Center of the National Academy of Sciences of Belarus on Bioresources	Public Investment	Recurrent expenditures	80,000
Government	Institute of Fisheries	Public Investment	Recurrent expenditures	60,000
Government	Central Research Institute for Integrated Use of Water Resources	Public Investment	Recurrent expenditures	85,000
Government	Braslav Lakes National Park	Public Investment	Recurrent expenditures	235,100

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Government	Selyava Refuge	Public Investment	Recurrent expenditures	65,800
Government	Osvejsky Refuge	Public Investment	Recurrent expenditures	37,800
Government	Sinjsha and Krasny Bor refuges	Public Investment	Recurrent expenditures	56,100
Government	Kozyansky Refuge	Public Investment	Recurrent expenditures	33,500
Government	Elnya and Boloto Mokh Refuge	Public Investment	Recurrent expenditures	100,000
CSO	Vitebsk regional organization "Belarusian Society of Hunters and Fishermen"	Grant	Investment mobilized	880,000
Private Sector	Hunting farm "Krasny Bor" LLC "Interservice"	Grant	Investment mobilized	370,000
CSO	Public organization “Akhova ptushak Batskaushchyna”	Grant	Investment mobilized	1,200
Others	National Academy of Sciences	Grant	Investment mobilized	710,000
GEF Agency	UNDP	Grant	Recurrent expenditures	130,000
Government	Ministry of Environment of Latvia	In-kind	Recurrent expenditures	500,000

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
			Total Project Cost(\$)	26,954,500

Describe how any "Investment Mobilized" was identified

Clarification on “investment mobilized”: Pending this project approval, Ministry of Energy is planning on credit resources for conservation activities as part of the project for the construction of Biešankovičy hydroelectric power station on Western Dvina River (construction of a fish ladder, purification plants, creating conditions for fish spawning and other fish conservation activities), which will be coordinated with the GEF investment. NGO “Akhova ptushak Batskaushchyna” (Birdlife Belarus) is planning on raising funds and joining them with GEF project for the development of ecotourism and ensuring capacity building for sustainable regional development in the Miory district. The Vitebsk Oblast division of the Belarusian Hunting and Fishing Society is planning investment in game conservation and sustainable use, planting of fish, restoration of spawning grounds pending assistance from GEF project, The National Academy of Sciences of Belarus will provide co-financing and synergetic effect through investment in targeted R&D projects (funded by EU and other sources) on invasive alien species and environmental risk management for the Braslav Lakes National Park and Zemgale region, and transboundary programmes ensuring better protection for keystone and endangered species of transboundary importance, such as Whipping Warbler. Sectoral commercial enterprises have already indicated their interest in implementing project activities. In particular, Krasny Bor hunting enterprise, which conducts a broad range of activities for the conservation of wild animal species and development of ecotourism, offered to co-finance activities for the restoration of spawning grounds, stocking of water bodies with native fish species, invasive species control, etc.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Belarus	International Waters	International Waters	1,780,484	169,146	1,949,630
UNDP	GET	Belarus	Biodiversity	BD STAR Allocation	1,601,836	152,174	1,754,010
UNDP	GET	Belarus	Land Degradation	LD STAR Allocation	444,621	42,239	486,860
Total GEF Resources(\$)					3,826,941	363,559	4,190,500

E. Project Preparation Grant (PPG)

PPG Required

PPG Amount (\$)

100,000

PPG Agency Fee (\$)

9,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	Belarus	Land Degradation	LD STAR Allocation	12,000	1,140	13,140
UNDP	GET	Belarus	Biodiversity	BD STAR Allocation	42,000	3,990	45,990
UNDP	GET	Belarus	International Waters	International Waters	46,000	4,370	50,370
Total Project Costs(\$)					100,000	9,500	109,500

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
194,512.00	0.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
15,000.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Akula National Park Lebediny Mokh Refuge	125689 N/A	Select Protected area with sustainable use of natural resources	15,000.00			<input type="checkbox"/>

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
179,512.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
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Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Akula National Park Boloto Mokh Refuge	125689 N/A	Select Habitat/Species Management Area	4,602.00						<input type="checkbox"/>
Akula National Park Braslav Lakes National Park	125689 N/A	Select National Park	64,493.00						<input type="checkbox"/>
Akula National Park Drozhbitka-Svina Refuge	125689 N/A	Select Habitat/Species Management Area	6,727.00						<input type="checkbox"/>
Akula National Park Kozyansky Refuge	125689 N/A	Select Habitat/Species Management Area	26,060.00						<input type="checkbox"/>

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Akula National Park Osveysky Refuge	125689	N/A	Select Habitat/Species Management Area	30,567.00					
Akula National Park Selyava Refuge	125689	N/A	Select Habitat/Species Management Area	19,365.00					
Akula National Park Sinjsha Refuge	125689	N/A	Select Habitat/Species Management Area	13,398.00					
Akula National Park Vileyty Refuge	125689	N/A	Select Habitat/Species Management Area	8,452.00					
Akula National Park Yanka Refuge	125689	N/A	Select Habitat/Species Management Area	5,848.00					

Indicator 3 Area of land restored

Ha (Expected at PIF)

Ha (Expected at CEO Endorsement)

Ha (Achieved at MTR)

Ha (Achieved at TE)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
15000.00	0.00	0.00	0.00
Indicator 3.1 Area of degraded agricultural land restored			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Indicator 3.2 Area of Forest and Forest Land restored			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Indicator 3.3 Area of natural grass and shrublands restored			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
15,000.00			
Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
5000.00	0.00	0.00	0.00
Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
5,000.00			
Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Type/Name of Third Party Certification			

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
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Daugava	2			<input type="checkbox"/>
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Select SWE

Indicator 7.4 Level of engagement in IWLEARN through participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
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Daugava	1			<input type="checkbox"/>
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Select SWE

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	7,000			
Male	8,000			
Total	15000	0	0	0

Part II. Project Justification

1a. Project Description

1a. Project Description

1.a.1. The global environmental and/or adaptation problems, root causes and barriers that need to be addressed

The Western Dvina River (Daugava in Latvia) with a basin area of 87.9 thousand square kilometers is a major European river basin. The area of the Western Dvina (Daugava) Basin exceeds an area equal to that of the entire country of Austria and is comparable in area to such river basins as the Neman, Rona, or Dniester. The Western Dvina (Daugava) is a transboundary river flowing through Russia and Belarus and then going into the Gulf of Riga and the Baltic Sea in Latvia. The Russian part of the Basin is 19,000 sq. km. (21% of the total basin area), the Belarusian part – 33,300 sq.km. (38% of the total basin area), and the Latvian part – 23,600 sq.km. (27% of the total basin area). The part of the Basin area within Lithuania and Estonia is 12,000 sq.km. (14% of the total basin area).

The part of the Western Dvina/Daugava River Basin occupies almost the entire Vitebsk Region in the northern part of Belarus. The Basin also lies in the northern part of the Minsk region and flows through 23 different administrative regions of the country. The river has a total length of 1020 km, with 328 km in Belarus.

The drainage area of the Western Dvina in Belarus is 33.15 thousand sq.km. The main feature of the drainage is a dense river network (the Basin includes 12,000 large and small rivers) and an abundance of lakes, which occupy about 3% of the Basin area. Forests, including marshy ones, occupy 31% of the territory with another 20% covered by swamps and wetland forests. More than 16% of the drainage area within Belarus has been subjected to drainage amelioration^[1].

The Western Dvina in Belarus experiences intense water use by industrial and agricultural enterprises and energy facilities. There are 14 reservoirs and six hydroelectric dams, including the largest one - Lukoml State District Power Plant. Two power plants, Vitebsk and Polotsk have been built on the Western Dvina River in recent decades. The Western Dvina is one of the main navigable arteries of the country with a length of 108.9 km of waterways in service within the basin.

The quality of the water resources of the Western Dvina River Basin and the hydrological regime depend on effective water management in the drainage area. The effectiveness of water management, in turn, largely impacts the ecological status of the Baltic Sea.

Lakes and lake-marsh complexes are an integral part of the landscapes and the natural environment of the Western Dvina Basin and play a leading role in the regulation and formation of river flow and water self-purification processes. The global importance of the basin's wetland ecosystems is established by their unique biodiversity. There are 34 endangered species of animals and plants associated with these wetland ecosystems (IUCN categories CR, EN, VU, NT). Of the endangered species, 15 species inhabit the rivers and lakes of the Western Dvina Basin. More than 40 lakes in the drainage area are inhabited by the European eel, a species whose condition is assessed as being in critical danger (CR).

The thick-shelled river mussel *Unio crassus*, a beetle *Agabus clypealis* and the waterwheel plant *Aldrovanda vesiculosa* are endangered species which occur in these lakes and rivers. Registered vulnerable species include the European crayfish *Astacus astacus*, two beetles *Graphoderus bilineatus* and *Dytiscus latissimus*, the river orb mussel *Sphaerium rivicola* and depressed river mussel *Pseudanodonta complanata*. Nearly threatened are pygmy damselfly (*Nehalennia speciosa*), a medicinal leech (*Hirudo medicinalis*) and mussels (*Vertigo angustior*, *Vertigo lilljeborgi*, *Sphaerium solidum*). The Western Dvina Basin is arguably the last European shelter for the European mink (*Mustela lutreola*). A number of globally threatened bird species, such as the Common Pochard (*Aythya ferina*) are nesting, feeding, and resting along the lakes. A number of these lakes are subject to protection both at the national level and in accordance with the Bern Convention and with Annex 1 of the Council of Europe Directive 92/43 / EEC for the protection of natural habitats of wild flora and fauna (categories 3130, 3140, 3150, 3160, 3190). The lakes have significant water, vegetation, animal, mineral and recreational resource potential. The shore areas accommodate settlements, farms, industrial and tourist facilities.

Threats and problems of the basin:

Water bodies of the Western Dvina Basin are subject to considerable anthropogenic pressure, from various activities such as industry, transportation and agriculture. The chemical composition of surface and groundwater are significantly affected in almost all regions where intensive economic activity is conducted. The basin hosts numerous sectoral water users and over 100 wastewater discharge points negatively affecting the quality of water resources.

Industrial and municipal wastewaters of large cities are the main source of pollution in the rivers in the Western Dvina Basin. Agricultural by-products are also increasing the pollution of water bodies. The tributaries of the Western Dvina are often more polluted than the main river, due to wastewater influx from urban and rural settlements along with pollutants from agricultural lands^[2].

Economic activities, especially water use, land reclamation and flow regulation have led to a significant transformation of the hydrologic network. Small rivers have undergone the greatest impact. They were especially vulnerable after land drainage activities were carried out, including straightening and deepening of the riverbed.

The construction and operation of hydroelectric dams is one of the main threats that is still in place. In the 1970's and 1980's the Plyavinsky, Kegums and Riga Dams were built in Latvia. As a result, anadromous species (specifically European eel *Anguilla anguilla*) could no longer get upstream (into Belarus) for spawning, and the Atlantic sturgeon (*Acipenser sturio*) has completely disappeared from Belarus. In the last decade Belarus has done a considerable amount of hydroelectric development which adds to the impact of the existing Latvian hydroelectric power plants. Belarus has added the Vitebsk Dam, the Polotsk hydroelectric power plant is under construction, and the Beshenkovichi Station is in the design stage. The construction of power plants has led to the redistribution of annual runoff, changes in the quality of surface water, and the disruption of the seasonal migration of fish.

Modern monitoring studies indicate the deterioration of a majority of natural populations of plants and animals associated with aquatic ecosystems. In the last 20-30 years, the freshwater pearl mussel (*Margaritifera margaritifera (EN)*) has completely disappeared from the country's rivers. This disappearance is associated both with the deterioration of water quality in the rivers and with changes in their hydrological regimes. The termination of European eel larvae stocking of the lakes in Belarus (along with the deleterious changes of migration routes) caused a decrease in its number and distribution. Without the adoption of urgent measures in the next decade, this species will also completely disappear from the country. Changes made to the hydrological regime of rivers (their straightening, building of embankments, deterioration of surface water quality) has led to the loss of habitats and the degradation of the freshwater mussel population. Hydrological changes, along with climate change, leads to a deterioration of the living conditions of globally threatened aquatic species.

The aquatic ecosystem changes also affect commercially valuable species. There is a decrease in the number of ducks, primarily Common Pochard (*Aythya ferina (VU)*) and White-eyed Pochard (*Aythya nyroca (NT)*). In the last 20-40 years there has been a rapid decline in stocks of the following commercial fish species: bream, ide, roach, perch, etc. The cause of these deteriorations is a decrease in the overall productivity and the amount of food supply for fish and avifauna, specifically, a decrease in the biomass of benthos and plankton.

Inadequate water quality is one of the main causes for freshwater habitat degradation. Direct runoff from livestock farms and enterprises and non-point runoff from agricultural fields remain the main sources of water pollution and the direct drivers of man-induced eutrophication and degradation of aquatic and wetland habitats. The increase in organic matter content in water comes from its inflow from adjacent territories that are prone to water and/or wind soil erosion.

An equally important problem for aquatic ecosystems is the disturbance of the hydrological regime of lakes, caused by the amelioration of their catchment area, excessive use of water, and construction of hydrotechnical facilities. Changes in the water level in lakes lead to such negative phenomena as changes in the hydrological characteristics and morphometry of lakes, a decrease in inflow and outflow from lakes, a decrease in level and a decrease in depth (by 0.3–1.5 m), shrinking of lakes (up to 10%) and a decrease in volume of water. In combination with impaired water quality, this leads to progressive dystrophication of water bodies. According to monitoring studies, the open water area in the region has decreased by 0.4% over the past 10 years.

Studies carried out in Belarus over the past decades show that practically all large watercourses and reservoirs in the country have had spawning conditions deteriorate through degradation of spawning grounds.

The main spawning grounds problems in Belarus are as follows:

- declining water level causing coastal vegetation accretion and eutrophication; these effects lead to loss of potential spawning areas and limits the ability of fish to approach the coastline and the mouths of flowing rivers for spawning;
- frequent extremes in the water level dynamics, when unusually low high-water levels prevent spawning, while sharp declines in water levels lead to the death of young fish; abnormal temperature fluctuations can also lead to the death of eggs;
- hydrotechnical and other river bed structures prevent the passage of fish to the spawning sites; accumulation of water in the channel reservoirs leads to the redistribution of runoff and low water levels at spawning grounds; and
- the end of traditional uses of coastal meadow and marsh ecosystems and their overgrowth, which contributes to the degradation of the spawning grounds of native phytophilic fish species, which spawn in the spring on the flood plain.

Introduction of alien species (silver carp, bighead carp, grass carp and carp hybrids), into the natural lakes negatively impacts freshwater ecosystems and leads to their degradation, productivity loss, destruction of natural food chains, and, ultimately, a decrease in the number of native species.

In general, the reason for the deterioration of the living conditions for most of the aboriginal species of animals and plants (inhabitants freshwater ecosystems) is a complex destruction of aquatic ecosystems. Passive protection measures (the formal introduction of prohibitions and restrictions, giving protection status, etc.) do not seem to solve the problems that have arisen. In this regard, an expedient integrated approach to solving these problems is the development and implementation of a set of active measures to complement the passive measures.

The main drivers of degradation are common for the Western Dvina and Daugava sub-basins and include non-point nutrient loads into aquatic ecosystems from agricultural fields and direct runoff from local livestock farms and enterprises; insufficient water treatment and households not connected to centralized sewerage networks; man-made changes in water regime (including HPP), changes in sediment flows; bioresources management deficiencies, etc. However, the countries are yet to reach a common understanding of the water resources of the shared sub-basins, of the existing pressures and drivers of change impacting the sustainability of the resources and of the dependent ecosystems, in particular increasing climatic variability and change and to move towards joint planning and management of the basin.

Barriers

Barrier 1. Lack of transboundary management framework for the Western Dvina/Daugava, in particular, the lack of a joint management mechanism, and a transboundary cooperation agreement between the two countries presents a major barrier towards joint management of shared resources of the basin.

According to Article 19 of the Water Code of the Republic of Belarus, basin councils are interdepartmental and inter-territorial advisory bodies that are created in order to develop recommendations for the protection and rational (sustainable) use of water resources for the major river basins in Belarus. Decisions of basin councils are taken into account when developing river basin management plans, as well as in developing programs and regional complexes of measures for the protection and use of water within the boundaries of the river basins. The members of basin councils include representatives of governmental authorities, water users, as well as public associations and scientific organizations. For the Dnieper, Western Bug and Pripyat river basins, basin councils have been created and are functioning successfully, contributing to the efficiency of management planning for these basins. For the Western Dvina river basin, there is neither inter-sectoral nor inter-governmental mechanism in place to support the management of the transboundary river basin.

The absence of joint monitoring and assessment of water quality approaches is a significant obstacle in the way of coordinated water management in the basin. Monitoring data exchange exists; however, there is no unified approach to data collection, processing and presentation. Therefore, exchange and harmonization of monitoring results between the basin's countries is essentially lacking. The joint monitoring and implementation of coordinated measures to manage the transboundary basin's water resources are necessary to reduce the negative impact of anthropogenic activity on surface and groundwater. The absence of these measures is the main barrier to the management of water resources in the Western Dvina Basin.

The systems for assessing the quality of surface water bodies by hydrochemical indicators in the Republic of Belarus and in the Republic of Latvia have significant differences. In Belarus, the chemical (hydrochemical) state of surface water bodies is determined by the main hydrochemical indicators. In Latvia, as in other EU countries, hydrochemical indicators are taken into account when assessing the ecological status of water bodies (physicochemical elements) along with hydromorphological, hydrobiological and biological elements. The approaches for assessing the state (status) of aquatic ecosystems by biological (hydrobiological) indicators in the respective countries also differ significantly both in the list of hydrobiological indicators and in the methods of sampling and their analysis.

Insufficient consideration of hydrobiological indicators and characteristics of fish resources, while taking into account transboundary impact factors, makes it impossible to obtain a comprehensive assessment of the environmental conditions. This has led to having incomplete information in managing water resources in the Western Dvina River Basin and contributes to its uncoordinated management. This has not allowed for development of required and timely measures to improve the ecological status of water bodies.

The lack of scientific knowledge about the state and trends of surface and groundwater, including the main sources of their pollution and the dynamics of changes in the state of aquatic organisms, do not allow for the development of measures aimed at improving the ecological status of water bodies, and restoring and preserving their social and environmental functions.

Barrier 2. Bioresource users in the basin are not engaged in finance for sustainable management of those resources; finance for wetland PAs is not sustainable

The existing financial and organizational framework for managing protected areas in the region limits the effective work on minimizing threats to biodiversity and ecosystems. The PA management structures require various measures for the conservation, restoration and sustainable use of the biological resources of lake and river ecosystems. These activities are carried out through funding from state programs and international projects. However, there is a lack of financial sustainability of these activities, since after the completion of these projects the funding is terminated. In addition, organizations and private businesses that use the biological resources of water bodies are not sufficiently involved in the management of lake ecosystems. The basis for the financial sustainability of management is the presence of stable biological resources that ensure profit from fishing, hunting and eco-tourism. To ensure the financial sustainability of aquatic ecosystem management, it is necessary to develop and test new approaches for the interrelationship between the PA management structures that ensure the sustainability of biological resources of wetlands and the private businesses (organizations) that use these resources (fishing, hunting, ecotourism).

The existing financial and administrative baseline for wetland PAs is insufficient for the effective response to numerous threats to wetland biodiversity and ecosystems. With limited funding from the baseline PA program and international projects, the freshwater ecosystem degradation in some of the wetland PAs was being managed for one or two years, but when funding ceased, degradation re-appeared. Overgrowth by coastal vegetation, disturbances in the water regime and the declining water quality resulted in drastic declines in populations of aboriginal species. The challenge, therefore, is one of finding a long-term sustainable mechanism for PAs to manage the sustainable use of wetland resources on an ongoing basis. When the management plans were designed, little attention was given to finding partnerships with local farmers or businesses to make this happen.

Barrier 3. Existing wetland PA coverage and configuration is not sufficient for effective conservation of valuable freshwater ecosystems and their globally significant biodiversity

Belarus has a well-developed PA system with adequately represented peatland and forest ecosystem conservation hotspots. However, freshwater ecosystems, bogs and marshes are underrepresented. Several national protected areas in the Western Dvina Basin, although qualifying as Ramsar wetlands, have not yet been nominated for Ramsar status. The unique Lebediny Mokh IBA wetland does not have any protection status. There are no management plans for Ramsar sites covering ca. 40,500 ha and several wetland refuges do not have responsible management authorities. Management plans for at least four PAs covering ca. 100,000 ha require substantive revision.

Barrier 4. The lack of a systematic approach to solving the problem of reproduction of valuable indigenous fish species and the lack of successful examples and experience in the restoration of spawning grounds.

Studies on the identification of problematic spawning sites, during 2006-2010, addressed the Dnieper, Sozh, Pripyat, Berezina and Neman Rivers, whereas such work in the Western Dvina Basin was either not carried out or was not systematic. The experience of restoring fish spawning grounds in Belarus is based mainly on the use of floodplain polder systems and old lakes as spawning grounds, and it is of little use for the Western Dvina River that mostly flows through a narrow valley. There is practically no effective experience in the restoration of spawning grounds for the River's lake ecosystems.

Barrier 5. Lack of recreational fishing regulation. The use of aquatic biological resources for fisheries in Belarus is carried out in two main areas: the organization of fisheries by legal entities and the use of fish resources by the population on a general basis. Fishery management is carried out by tenants of fishing grounds through the organization of commercial fishing and/or paid recreational fishing. In addition to commercial fishing and the organization of paid sport fishing in fishing grounds, there is free recreational fishing. According to the National Statistical Committee, over the past 5 years, amateur fishermen have caught about 7,200 to 7,900 tons of fish annually, which is about 7 times more than the amount of fish taken by fishing and organized paid sport fishing.

According to expert estimates, about 10% of the country's population is engaged in recreational/sport fishing, which is about 1 million people. Excessive fishing by amateur fishermen (the total fishing volume is 1.5 times higher than scientifically based maximum permissible values) leads not only to a reduction in fish resources, but also to changes in the species composition, the population structure of the species (age, size characteristics), as well as to a significant reduction and even extinction of some species of fish from certain reservoirs.

Thus, recreational fishing, with its mass character, became a significant factor influencing the state of ichthyofauna. At the same time, recreational fishing can be turned into a profitable industry, which allows one to create new jobs, preserve and increase existing fish resources, allows for quality recreation.

There is a lack of an effective concept for the development of recreational fisheries aimed at effectively addressing the issues of the protection and use of ichthyofauna. Amateur anglers do not participate in replenishing the biological resources of used water bodies. There is a lack of objective statistical data on fishing by amateur anglers (the volume of fish caught, the species composition, etc.) necessary for adequate fisheries management. There are high environmental risks from the activities of amateur fishermen associated with excessive withdrawal of fish from certain water bodies and their low environmental awareness.

Barrier 6. Unreasonable introduction of non-indigenous commercial fish species into natural reservoirs. Important fish-amelioration action, allowing for an increase in the fish productivity of fishing grounds, is stocking. According to current legislation, the governing principles for stocking natural bodies of water are the biological justification for stocking or the fish-breeding biological justification of fisheries management. The legislation entrusts the development of these management elements to the users, which leads to a conflict of environmental and economic interests. In addition, there are no legally accepted norms that regulate the species composition and density of stocking material in natural water bodies.

Practice shows that in the past decades, the stocking of natural water bodies in the country has mainly been carried out with silver carp, bighead carp, grass carp and their hybrids. These are all alien to the fauna of Belarus. The introduction of these species leads to the degradation of lake ecosystems, the erosion of the productivity and natural food supply in lakes, the degradation of spawning grounds, and competition with valuable native fish species. Silver carp stocking is especially environmentally unfounded due to its wide ecological adaptive abilities. These adaptive abilities pose a direct threat to indigenous fish species.

1.a.2. Baseline scenario and associated baseline projects.

Component I.

At present, river basin management plans (RBMS) for the Dnieper, Pripyat, Neman, and Western Bug River Basins have been or are being developed in Belarus, while there is no Western Dvina River Basin management plan.

Cooperation in the area of environmental conservation between the Belarus and Latvia is governed by the Intergovernmental Agreement signed on February 21, 1994 in Minsk. According to Article 2 of that Agreement, the cooperation between the parties covers the following areas: protection of the atmosphere, water conservation (especially in the Western Dvina/Daugava River Basin), flora and fauna conservation, development of protected areas, environmental monitoring, protection from potential harmful impacts of power generation and industrial facilities in case of accidents at such facilities, etc.

Cooperation also occurs between local agencies. On June 6-7, 2018 a Memorandum of Understanding was signed in the city of Polack (Republic of Belarus) between the Vitebsk Oblast Committee of Natural Resources and Environmental Protection and the State Environmental Service of the Republic of Latvia on environmental conservation. The Memorandum of Understanding is expected to become the foundation for the development of bilateral cross-border cooperation in the following areas: environmental monitoring data exchange, early notification in case of industrial accidents that may have a cross-border environmental impact (including information about pollution sources of transboundary water bodies in the Western Dvina/Daugava River Basin), design of joint environmental projects and assistance in their implementation, etc.

Continuous efforts are being made to advance an international inter-agency cooperation agreement between the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus and the Ministry of Environmental Protection and Regional Development of the Republic of Latvia for the conservation and rational use of transboundary waters in the Western Dvina/Daugava River Basin. The two countries shared the final draft of the Agreement in July 2019. Internal appraisal procedures need to be carried out before the respective governmental authorities can sign it. The GEF project will facilitate the consultations and assist the two countries with the development of a road-map for the implementation of the bilateral agreement, in the form of the Strategic Action Programme for conservation and sustainable use of the Western Dvina/Daugava basin.

Without the GEF increment the implementation of fragmented and poorly coordinated policies for the protection and use of water resources without taking into account transboundary effects will proceed. This will continue to threaten the integrity of water-dependent ecosystems. Transboundary cooperation in the Western Dvina/Daugava River Basin will remain insufficient to solve basin problems and implement sustainable development goals (SDGs).

Component II.

At present, 26 Ramsar sites have been created in Belarus, and management plans for these territories have been developed and are being implemented. However, most of these sites are represented by wetland and peatland ecosystems. The management of those sites have benefitted from the considerable experience of the framework of GEF projects and they have created a political and operational system for the sustainable use of all peatlands in Belarus. The lake and lake-marsh ecosystems, which are underrepresented among wetlands of international importance, are of the greatest importance for the conservation of biodiversity and the hydrological regime of the Western Dvina Basin, and management plans have not been developed for a number of these wetlands. This hinders the use of advanced world technologies for the restoration and sustainable use of these ecosystems, which are currently being subjected to degradation. The existing number and location of protected areas cannot ensure the preservation of the most significant freshwater ecosystems and the associated globally significant biodiversity in the Western Dvina Basin.

The main problems associated with aquatic ecosystems are (a) pollution by diffuse runoff from agricultural fields, (b) insufficiently treated wastewater, and (c) degradation of natural watercourses and water bodies (rivers, lakes, swamps, forests) due to the disruption of the natural hydrological regime, land reclamation and hydrotechnical construction. Negative processes have been aggravated by climate change in recent decades, which has led to a reduction in the area of water bodies, a decrease in the level of surface and groundwater, and a change in water temperature and transparency. The impact of the above factors is complex, leading to the degradation of water bodies and watercourses, deterioration of water quality, progressive overgrowing of lakes by aquatic vegetation, and reduction and disappearance of animal and plant species, including endangered species.

In particular, the issue of preserving wetland ecosystems is important for the Western Dvina Basin, where valuable and unique water bodies are preserved in their natural state. This includes rare habitats of lakes, rivers and springs, which are protected at the international and national level and are of fundamental importance for the conservation of biological diversity. These ecosystems are most vulnerable to anthropogenic impacts, and when the external conditions change, measures are needed to maintain and restore them.

At the same time, Belarus lacks practical experience and examples of restoration of lake ecosystems. In contrast, the neighbouring Europe has gained experience in using various processes for the restoration of lake ecosystems that had been degraded as a result of anthropogenic eutrophication, degradation of the hydrological regime, and water quality.

The main problems in the use of water resources are the reduction of fish stocks, the destruction of spawning grounds, the invasion of alien fish species, the deterioration of fish habitat, and the degradation of water bodies as a result of their pollution. There are gaps in the regulatory framework that regulates issues of commercial and recreational fisheries making the regulation ineffective.

The ineffectiveness of legislation that administers the field of conservation and sustainable use of wildlife, including hunting and fishing, is the cause of uncontrollable effects from recreational fishing on fish resources, the negative effects on the ichthyofauna structure resulting from the stocking of natural water bodies by non-native fish species (carp, silver carp) and inefficient management of fisheries, including a reduction in the number of migratory birds.

The project increment will allow for solving the above noted problems, introducing principles of sustainable management of biological water resources, and increasing the efficiency of fishing and hunting management. The basis for the future financial sustainability of wetland management is the establishment of sustainable biological resources that ensure profit from fishing and hunting and eco-tourism.

Relevant baseline programmes in Belarus:

Baseline Programme 1. PROGRAM "ENVIRONMENTAL PROTECTION AND SUSTAINABLE USE OF NATURAL RESOURCES" FOR 2016-2020 (hereinafter referred to as the State Program "Environmental Protection". Of relevance to the project is Subprogramme 4 "Conservation and sustainable use of biological and landscape diversity" (hereinafter - the Subprogramme "Biodiversity"). Subprogramme 5 "Ensuring the functioning, development and improvement of the National Environmental Monitoring System in the Republic of Belarus" (hereinafter - the "Monitoring" subprogramme. The activities of the "Biodiversity" Subprogramme of the State Program "Environmental Protection"

are aimed at solving the following tasks: developing and ensuring the functioning of the protected area system; developing and implementing PA management plans; implementing measures to restore disturbed ecological systems; developing additional tourist infrastructure facilities in protected areas; raising public awareness of the functioning of protected areas; and, preserving rare and endangered species of wild animals and wild plants. The activities of the Monitoring Subprogramme of the State Program for the Protection of the Environment are aimed at ensuring the functioning and development of the system for monitoring the state of the environment, including the observation system for surface waters and the sources of their pollution; forest observation systems; monitoring systems for the state of the plant world; systems of observation of the state of the animal world; integrated monitoring of natural ecological systems in PAs; local environmental monitoring; and, the environmental monitoring information system.

The Ministry of Natural Resources and Environmental Protection coordinates the activities within the State Program “Environmental Protection”. The planned co-financing resources from that programme are assessed at USD 4.5 mln.

Baseline Programme 2. STATE PROGRAM “BELARUSIAN FOREST” FOR 2016–2020; Subprogramme 3 “Hunting development”. The subprogramme is of relevance to the following elements of the proposed project: ensuring the growth of the number of hunting species of animals to the optimum level and the organization of their environmentally sustainable use (in particular, of waterfowl species) and increasing the willingness of hunters towards proper implementation of the conservation of resources for game animals and the qualitative implementation of biotechnical measures (the protection of waterfowl on the spring flight and the optimization of water ecosystems). The provider for the implementation of the Subprogramme is the Ministry of Forestry. As a co-funding source for the GEF project, it is planned to attract about \$ 2.1 million from this budget of the State Program, which will be used to reproduce and protect the resources of game animals, in particular, waterfowl.

Baseline Programme 3. STATE PROGRAM OF DEVELOPMENT OF AGRARIAN BUSINESS IN BELARUS FOR 2016-2020; Subprogramme 5 "Development of fisheries activities". A number of its objectives coincide with the planned project activities, including: improving the natural productivity of fishing grounds; restoration of biodiversity of fish resources; the use of economically sound innovative technologies for the development of rare and valuable species of fish; improving the efficiency of fisheries activities; stocking fishing grounds with rare valuable fish species; restoring natural, and creating artificial, spawning grounds; and, reproduction and reintroduction of rare and valuable species of fish (whitefish, pike perch, pike, salmon, sturgeon and others). The administrator of this State program is the Ministry of Agriculture and Food. As a co-funding of the GEF project, it is planned to attract about \$ 0.3 million from the budget of the Fisheries Management Program, which will be used to increase the natural productivity of fishing grounds; restoration of biodiversity of fish resources; restoration of natural and creation of artificial spawning grounds; and, reproduction and reintroduction of rare and valuable species of fish in order to obtain fish stock of rare and valuable species of fish (whitefish, pike perch, pike, salmon, sturgeon and others).

1.a.3. Proposed alternative scenario including expected outcomes and components of the project.

Project Theory of Change

The proposed project is geographically focused on the Western Dvina/Daugava river basin. In accordance with its Theory of Change (Annex E), the project will start its basin-wide intervention with the identification/confirmation of threats, root-causes and negative environmental impacts in the basin. The Transboundary Diagnostic Analysis (TDA) approach will help the two countries to reach a common understanding of the water resources of the shared basins, of the existing pressures, drivers, effects on the freshwater and associated ecosystems, specifically those associated with water regime changes, eutrophication, ecosystem degradation, biodiversity loss and effects of climatic variability and change. Once a common problem statement is secured, the project, according to the Theory of Change, will work on the legal and institutional framework that is required for the countries to move towards joint planning and management of the sub-basins.

Project Component 1 will offer mechanisms for transboundary cooperation in the integrated management of the water resources of the transboundary Daugava/Western Dvina river basin. For the Daugava basin in Latvia, a River Basin Management Plan has already been developed in accordance with the EU Water Framework Directive and adopted in 2009; thus, the project will start with the key prerequisites for future transboundary management at the national level in Belarus with the following: the Transboundary Diagnostic Analysis (TDA) and the national Western Dvina River Basin Management Plan (RBMP). Conceptually, the development of the Western Dvina RBMP in Belarus will be harmonized with the existing Daugava River Basin Management Plan in Latvia. Once Latvia starts developing a new 6-year RBMP for the Daugava, the experience and information obtained during the Western Dvina RBMP development will be offered to support that exercise.

Improving the management of transboundary waters in the Western Dvina river basin will be based on the implementation of respective national-level management plans for the transboundary river basin, both in Belarus and in Latvia. The Western Dvina River Basin Management Plan for Belarus will be developed for the first time taking into account national legislation and EU recommendations. It will be based on a cross-border diagnostic analysis, and also take into account the experience of Latvia in developing a Daugava basin management plan. In turn, the Daugava basin management plan for the next cycle of its implementation can be significantly improved by using the Western Dvina basin management plan. The approaches for the development of the national river basin management plans of the Western Dvina and the Daugava will be harmonised, however, the development and official ministerial endorsement of a common management plan is problematic due to the different laws and regulations of the two countries. The project will identify common environmental problems and ways to solve them, which will increase the effectiveness of national management plans for the Western Dvina / Daugava river basin. As part of the development of the TDA, accounting for the effects of long-term climate change and adaptation to climate change will be considered.

Simultaneously, the project will support further development, appraisal and adoption of the transboundary cooperation agreement between the two countries. The project will assist the two countries with preparation of a regional Strategic Action Programme (SAP), to be approved by Ministers of Environment of both countries, outlining the key priorities and directions for joint management actions and transboundary cooperation in the basin for conservation and sustainable use of the shared transboundary resources, as a roadmap for the implementation of the transboundary cooperative agreement. These essential steps, according to the project Theory of Change, will help the countries to come to an agreement on the policy, legal and institutional reforms, and the investments that will be needed to ensure the sustainability of the transboundary freshwater resource management, conservation of globally significant biodiversity in the basin, provide for the ecosystem health and resilience to the impacts of climatic variability and change. The project will support a transboundary basin-wide change and the harmonisation of the long-term sustainable management approaches in the two countries, by consolidating transboundary coordination and cooperation at the level of the two national governments.

The project will further accelerate the transformative processes in the Western Dvina basin by pilot testing conjunctive management solutions offered through the national Western Dvina River Basin Management Plan, and providing targeted incremental support to concrete activities aimed at restoring and protecting valuable freshwater ecosystems and ecosystem services. The theory of change (ToC) for this project results from a strategy to provide Belarus with an effective, integrated freshwater resource management plan in the Western Dvina Basin. This includes both the direct River Basin as well as the wetlands and associated freshwater ecosystems in the Western Dvina Basin. There will be elements of conservation, restoration and sustainable management of the wetlands and the bioresources in the sub-basin. The results from the project will avert the present continued destruction of the aquatic ecosystem and associated wetlands in this region; they will be applicable to the lower (Daugava) sub-basin in Latvia and will have a high replication potential in Belarus.

Project Component 1 focuses on conservation, restoration and sustainable management of wetlands and associated freshwater ecosystems in the Western Dvina Basin. The National Sustainable Development Strategy has set a target of 8.8 % PA coverage in the country by 2030. **Outcome 2.1** within Component 1 of the proposed project will contribute to this ambitious goal through its effort to ensure sustainable management of internationally important wetlands and expansion of the network of Ramsar sites. The regulatory provisions for establishing PAs of international importance will be updated, while the boundaries, and protection and use regimes of wetland PAs will be revised.

Acknowledgement of lakes and associated wetlands as internationally important Ramsar sites will emphasize their critical role in biodiversity conservation and maintenance of the balance and quality of surface waters in Belarus. This will attract international attention and experience to the problems that these ecosystems are currently facing.

Outcomes 2.2 and 2.3 within Component 2 are mostly about restoration and sustainable use of wetlands and associated freshwater ecosystems. The project will develop and test restoration methods for aquatic systems through optimization of the water supply regime, prevention of non-point pollution originating from farmlands and peatlands, and will demonstrate sustainable restoration of spawning grounds. Restoration of the essential elements and functions of wetlands, along with associated freshwater ecosystems, will provide for better quality ecosystem services, and allow for more diversified and sustainable use of lakes with better fishing grounds and improved tourism potential. The restoration pilots will be selected to counterbalance the required investment to the value of the impact, and the results will be duly assessed and presented to catalyze investment for further replication.

Component 1. Effective integrated of freshwater resources within the Western Dvina Transboundary River Basin

Component I will start with delineation and classification of surface and underground waters within the Western Dvina Basin (**Output 1.1.1**), in accordance with the national regulations and guidelines for RBMP. This first step will provide the basis for recommendations and decisions on the ecological status, protection and sustainable use objectives for the basin. This study will include an environmental status assessment for the surface and groundwater elements against the quantitative and hydrochemical indicators approved as best practice in the EU.

Transboundary Diagnostic Analysis (TDA) will be one of the key outputs within this component (**Output 1.1.2**) and will comply with national regulations, GEF guidelines and the EU Water Framework Directive. The TDA will include an assessment of the water management and hydrological characteristics of water bodies in association with climate-change induced effects, and analyze the impacts of point and non-point pollution. The TDA will identify the major transboundary problems of the basin, their sources and impacts through a causal chain analysis. TDA will take into account the requirements of national technical regulations for the assessment of the ecological status of water bodies, their hydromorphological indicators, and chemical and wastewater discharge standards.

TDA will serve as the basis for development of the national Western Dvina River Basin Management Plan (RBMP) and identification of concrete activities aimed at restoring and protecting valuable freshwater ecosystems and ecosystem services, with due consideration of climate change effects. Component I will also provide for an inventory of typical and rare freshwater habitats that qualify for special protection in Belarus; it is planned to develop passports and protection requirements for such habitats, and ensure their incorporation into regional development plans^[3]. The protection requirements for rare habitats will include restrictions for economic and other activities, and restoration plans where required. Passports and protection requirements will be submitted to the respective governmental authorities, while concerned officials, practitioners and the general public will be informed about the new regulations. The sectoral practitioners will be trained in sustainable practices to be implemented for the protected habitats.

The RBMP for the Daugava basin in Latvia had been developed in accordance with the EU Water Framework Directive (WFD) and was adopted in 2009; the country will be developing a next phase RBMP after 2021. Objectives and content of the Daugava RBMP follow the WFD Directive.

The Daugava RBMP does not include transboundary cooperation aspects; the 2019 WFD Commission recommendation for Latvia was to include a section in the national RBMP on transboundary coordination efforts. Bilaterally, at the level of the two ministries of the environment, the countries are working towards establishing a formal agreement for transboundary cooperation in the transboundary river basin.

Institutionally, the project will support these processes through establishment of a national Western Dvina Basin Council in Belarus and the joint Western Dvina/Daugava Basin Commission (Output 1.1.3). Harmonization of basin management approaches for the Western Dvina and Daugava RBMPs, including the transboundary management and coordination aspects, will become one of the key tasks for the joint Western Dvina/Daugava Basin Commission (Output 1.1.4).

A national strategic document (RBMP) focused on sustainable management of the Western Dvina Basin will be developed for the first time in Belarus, in accordance with the relevant national regulations (Output 1.1.5). The national RBMP will be presented to the national interministerial Western Dvina Basin Council, endorsed and recommended for implementation to the regional executive authorities, as is the existing national practice.

The project will make incremental steps advancing the appraisal and signature of the bilateral agreement for protection and sustainable use of the transboundary river basin. As a roadmap for the implementation of this agreement, a regional Strategic Action Programme (SAP) will be developed to outline the key priorities and directions for joint actions (Output 1.1.6). The SAP as a roadmap is not expected to be as comprehensive as a model SAP in accordance with the GEF IW:LEARN best practices. However, the SAP will retain the key model elements and will address the environmental problems and objectives for the transboundary basin, will outline and prioritize the management and cooperation actions towards achievement of these objectives, suggest measures to enhance the existing cooperation framework and offer joint management solutions and scenarios, and suggest the monitoring and evaluation criteria (indicators, targets, timescale, etc.) for the implementation of the SAP/RBMP. The project will be aiming to have the SAP ultimately approved by Ministers of Environment of both countries.

As part of the knowledge management process, the project will actively participate in the IW:LEARN activities: it will establish its website following the IW:LEARN standards, and populate it with progress reports, documents, webinars and other project products (Output 1.1.7). The knowledge management and information exchange activities will include support for information dissemination through IW:LEARN platforms and networks, relevant training and twinning exercises. Knowledge exchange will include the participation in relevant regional and international workshops and conferences (such as GEF International Waters Conferences, World Water Forum, World Water Week).

Component 2 – Conservation, restoration and sustainable management of wetlands and associated freshwater ecosystems in the Western Dvina Basin

The Component includes project **Outcomes 2.1-2.3.**

Outcome 2.1: Sustainable management of key internationally important wetland areas (Ramsar and/or national level PAs) in the Western Dvina River Basin

The activities in support to this Outcome will be aimed at ensuring the sustainable functioning of wetland protected areas.

The national report on Ramsar Convention Implementation (2017) indicates that, until now, the priority in Ramsar nominations were given to “typical” wetlands, while the complex ecosystems around big lakes and close to rivers and marshes are underrepresented. The project will support and stimulate the national effort towards bridging this gap preparing Ramsar nominations for the following protected areas: Braslav Lakes National Park, Selyava, Yanka, Sinjsha, Boloto Mokh state refuges, and Lebediny Mokh IBA; the latter will become a new national PA established with direct support from the project. The project will revise the existing management plans for Braslav Lakes National Park and Selyava Refuge to reflect their newly acquired Ramsar status.

The management plans will be developed for the existing Ramsar wetlands (Drozhbitka-Svina, Vileyty, Yanka)^[4]. For the better management, their boundaries, protection and sustainable use regimes will be re-visited. Management units will be established for Yanka, Krozhbitka-Svina and Golubitskaya Puscha refuges in cooperation with the local authorities.

The project will support, where feasible, implementation of the new management plans, including development of sustainable finance solutions. For capacity strengthening and financial sustainability of Ramsar refuges Kozyansky, Sinjsha and Drozhbitka-Svina the project will provide incremental support to development of agricultural and ecological tourism, establishment of tourism infrastructure and valorization of Ramsar sites.

The project will also attempt to develop mechanisms for profitable engagement of private sector stakeholders who use the wetland bioresources. The Osveysky refuge will become a pilot for developing and testing of co-management scenarios involving PA management and bioresource users (fishing, hunting, ecotourism).

Table 1. Project pilot protected areas

№	Name	Area, ha	International status	National protection status, IUCN category	Management authority	Planned project activities
1.	Drozhitka-Svina	6,727	Ramsar (2261)	Refuge, category IV	No assigned management authority. Ramsar site managed by district government authorities	<ul style="list-style-type: none"> - functional management unit; - management plan; - Bolnyrya Lake: pilot restoration of water regime; - technical support to management capacity building
2.	Kozyansky	26,060	Ramsar (2196)	Refuge, category IV	Authorized individual management unit	<ul style="list-style-type: none"> - Rosolaj Lake: pilot restoration of water regime; - BD valorization/awareness raising targeted support; - support to management capacity building
3.	Osveysky (incl.Krasny Bor refuge)	30,567	Ramsar (1217)	Refuge, category IV	Authorized individual management unit	<ul style="list-style-type: none"> - Osveyskoe Lake and Lisno Lake: pilot restoration of spawning grounds; - BD valorization/awareness raising targeted support; - technical support to management capacity building
4.	Vilyty	8,452	Ramsar (2251) Transboundary PA with Lithuania	Refuge, category IV	No assigned management authority. Ramsar site managed by district government authorities	<ul style="list-style-type: none"> - management plan; - coordinated action plan with the transboundary PA in Luthuania (<i>Adutiškio pelkė</i>)
5.	Selyava	19,365	Ramsar eligible (planned)	Refuge, category IV	Authorized individual management unit	<ul style="list-style-type: none"> - justification for the Ramsar site nomination; - management plan revision (once Ramsar status confirmed); - Pilot demo for the Selyava Lake: reduction of nutrient flows; - technical support to management capacity building

6.	Yanka	5,848	Ramsar eligible (planned)	Refuge, category IV	No assigned management authority. Ramsar site managed by district government authorities	- justification for the Ramsar site nomination; - management plan; - Osvyato Lake: pilot restoration of water regime
7.	Braslav Lakes	64,493	Ramsar eligible (planned) Transboundary PA with Latvia	National park, category II	Authorized individual management unit	- justification for the Ramsar site nomination; - management plan revision (once Ramsar status confirmed); - pilot restoration of spawning grounds; - co-financing for non-point discharge reduction
8.	Sinjsha	13,398	Ramsar eligible (planned)	Refuge, category IV	Authorized management unit for Sinjsha and Krasny Bor refuges	- justification for the Ramsar site nomination; - management plan revision (once Ramsar status confirmed); - support to management capacity building
9.	Boloto Mokh	4,602	Ramsar eligible (planned)	Refuge, category IV	Managed by district management authority	- management plan; - water management regime
10.	Lebediny Mokh	15,000	Ramsar eligible (planned)	- (planned refuge category IV)	Not yet a protected area, no Ramsar site nomination	- justification for the Ramsar site nomination; - justification for the national category PA; - management plan

In addition to working directly with the protected areas, the project will assist the Ministry of natural resources and environment with the revision of the Ramsar Convention Implementation Strategy. The project will also engage relevant expertise for development of proposals for conservation and sustainable use of wetlands to be included into the National Biodiversity Conservation Action Plan for 2021-2025.

Outcome 2.2: Key ecosystem characteristics and functions for sustainable management of wetlands and freshwater habitats restored for sustainable management

Improved management and financial sustainability of wetland PAs will be difficult to achieve without restoration of key ecosystem characteristics and functions. Recovery of water supply regime, restoration of spawning grounds and better water quality will mean improved, larger stock and restoration of indigenous fish populations. This will bring

higher incomes to the PA authorities from fishing: fish selling to the local people and visitors; income from fish processing at the local fish factory; amateur fishing fees and associated income (accommodation, equipment); diversified environmental tourism.

Incremental funding will be extended to support implementation of new management plans for the Ramsar sites (developed under the [Outcome 2.1](#)) where it concerns restoration of water supply regime, spawning grounds, protection of globally significant biodiversity, reduction of man-induced effects of environmental degradation.

A number of pilot initiatives will be implemented to demonstrate innovative methods for restoring wetlands and associated freshwater ecosystems and their key elements and characteristics (water regime and water quality, ichthyofauna). The wetland restoration pilots will be selected within the existing Ramsar PAs to ensure protection of globally significant biodiversity (project [Output 2.2.1](#) with a targeted area of 8,000 ha). Water supply disturbed because of forest amelioration will be brought to the quasi-natural regime within Drozhbitka-Svina, Kozyansky, Yanka and Boloto Mokh wetland refuges and the Lebediny Mokh IBA. New approaches to restoration of disturbed peatlands as spawning grounds and waterfowl nesting spot will be tested for at least 1,000 ha within the Ramsar wetlands ([Output 2.2.2](#)).

Technologies to reduce contamination of freshwater ecosystems by wastewater from agricultural land and floodplain peat development will be tested and demonstrated for the impact areas within the Braslav Lakes and Selyava refuges (project [Output 2.2.3](#), targeted direct impact area at least 5,000 ha). In order to reduce the anthropogenic eutrophication by drainage water from agricultural lands and peat extraction, the project will test the following two methods: construction of settling tanks before discharge of water into natural water bodies and establishment of water protection zones along drainage channels (increasing the filtration of water from fields to channels). In some cases, re-wetted and inefficiently used peat bogs will serve as sedimentation tanks/basins.

The project will support an inventory of the spawning grounds of native commercial and rare fish in the main natural water bodies and watercourses within the project area. Problem spawning grounds will be identified and a set of measures to restore them will be developed ([Output 2.2.4](#)). A database of spawning grounds will be prepared and monitoring will be organized. Based on the inventory, several spawning grounds will be selected to demonstrate various examples of restoration of spawning sites and creation of artificial spawning grounds. This will include clearing the shoreline of lakes, providing passages to salmon spawning and other valuable species, and using summer polders and former peat development sites for the reproduction of fish stocks. The indicators that the restoration of spawning grounds has occurred will be the presence of larvae and young fish (in quantity and species composition) in reservoirs and watercourses. These indicators will be measured before and after the pilot activity implementation at the various locations. In addition to direct indicators, it is planned to use indirect indicators of the state of the spawning grounds as follows: hydrochemical and biological measurements of the water and the dynamics of the changes in water surface area and depth. The positive results from the project will be disseminated via a series of seminars and used in the preparation of a new State program in the field of fisheries development and fish farming (supported under the [Outcome 2.3](#)).

The project will support an inventory of erosion control plant communities and restoration of at least 1000 ha of anti-erosion vegetation cover, to prevent soil erosion and organic runoff ([Output 2.2.5](#)). For the sustainability of this endeavor, a monitoring system will be provided.

In order to determine the dynamics of vegetation overgrowth in water bodies under the influence of climatic change and anthropogenic factors, a methodology will be developed for taking into account the ratio of open water and aquatic vegetation in lake, river, and wetland ecosystems[5]⁵. As part of the testing of these methods, an assessment will be made of the dynamics of changes in the area of open-water ecosystems.

The project will support development of a Sustainable Management Plan for the Eurasian Otter population in Belarus (Output 2.2.6). Together with partners, the project will provide for population recovery of the endangered inhabitants of freshwater ecosystems: Common Pochard, White-eyed Pochard, European Eel, Thick-shelled River Mussel, European Crayfish, diving beetle *Dytiscus latissimus*, European Medicinal Leech, European Pond Turtle, etc., and re-introduce Atlantic Sturgeon extinct in Belarus (Output 2.2.7).

Outcome 2.3 – Regulatory framework for sustainable use of wetland bioresources improved and functional

For the wetland management in the Western Dvina Basin, the way to achieve financial sustainability is via more effective and sustainable use of bioresources.

The project will assist the relevant authorities within the Ministry of Natural Resources and Environmental Protection and the Ministry of Agriculture and Food in the development of technical regulations aimed at the sustainable development of amateur fisheries in accordance with the Concept of Fishery Development in the Republic of Belarus along with international obligations set forth in the CBD, the Nagoya Protocol, and the CITES convention (Output 2.3.1). The project will hold consultations on changes in legislation with all interested parties, including republican government bodies, local executive and administrative bodies, state-public and public associations, legal entities, individual entrepreneurs, and citizens.

The final result of the implementation of activities under this component will be the improvement of legislation for more sustainable fisheries management. The legislative reform will introduce incentives aimed at increasing the interest of amateur anglers in preserving fish resources. It is expected that the new regulatory and legal framework will be based on the principle of paying for the use of fish resources both by fishing ground tenants and amateur fishermen. New technical regulations will help protect fishing grounds and preserve aquatic biological resources, improve and strengthen methods for combating poaching in fishing grounds, develop and support angling ecotourism. These actions will also ensure the rights of citizens to undertake recreational fishing, increase the efficiency of fishing farms and ensure sustainable use of fish resources. The actual implementation of technical regulations will be vested with the Ministry of Natural Resources and Environmental Protection, the Ministry of Agriculture and Food, and the State Inspectorate for the Protection of Fauna and Flora under the President of the Republic of Belarus.

Considering the existing gaps in the regulations related to stocking of natural reservoirs, as well as possible risks to lake ecosystems from the introduction of alien species (carp, silver carp and grass carp), the project expects to develop stocking standards for natural reservoirs, namely stock release density and species composition (Output 2.3.2). It is

planned that the standards will provide for stocking of natural reservoirs with native fish species, which ultimately will contribute to the sustainable functioning of lake ecosystems, the preservation of biological diversity and the increase in fish stocks of reservoirs[6]⁶.

In order to improve the skills of professional fishermen, as well as environmental literacy of amateur fishermen, training programs will be developed and the necessary education and educational materials will be provided. As part of this implementation, a register of fishing grounds with a cadastral assessment of their productivity will be developed and integrated into the State Cadastre of the Animal World. There will also be an open information system for collecting information on recreational fishing in the country's water bodies.

The project will engage expertise to prepare amendments to the Hunting Rules in order to mainstream BD considerations into waterfowl hunting regulations (Output 2.3.3). The Project will prepare justification for spring hunting ban at particular habitats sheltering numerous waterfowl during spring migration, to be endorsed by the Ministerial Decision (Output 2.3.4).

In order to minimize damage to lake and river ecosystems, Action Plans will be developed to prevent the spread of aggressive alien species including American Mink (*Neovison vison*), Spinycheek Crayfish (*Orcanectes limosus*), Amur Sleeper (*Perccottus glehni*), and brown bullhead (*Ictalurus nebulosus*) (Output 2.3.5). The project will provide incremental support and stimulate sustainable implementation of these invasive species management plans and ensure engagement of fishing areas' users. The Ministry of Natural Resources and Environment will be responsible for monitoring and control over implementation of the invasive species Action Plans.

1.a.4. Alignment with GEF focal area strategy

The project Component 1 (Outcome 1.1) is programmed for the International Waters focal area and follows the traditional IW focal area approach where the project interventions are built on an initial assessment of threats and opportunities from a Transboundary Diagnostic Analysis. The TDA will be followed by the development of a national-level Water Basin Management Plan for the Western Dvina Basin in Belarus that will be conceptually in agreement with the respective RBMP developed for the Daugava Basin in Latvia. The project will support finalization of the appraisal process for the signature of the bilateral agreement for protection and sustainable use of the transboundary river basin. In parallel, the project will support the establishment of a joint Basin Commission and assist the two governments with development of a road-map for the implementation of the bilateral cooperation agreement, in the form of a regional SAP approved at the ministerial level. In line with the key focal area programming direction, the project will support enhanced regional and national cooperation in this shared freshwater basin.

The project Component 2, (Outcomes 2.1-2.2) is programmed for the BD focal area within its Objective 2 "Address direct drivers to protect habitats and species", with LD focal area programming under Outcome 2.2 for restoration activities, while Outcome 2.3 addresses Objective 1 "Mainstream biodiversity across sectors as well as landscapes and

seascapes”. The project will, to various extents, address all five main direct drivers of biodiversity loss: habitat change (loss, degradation, and fragmentation), overexploitation or unsustainable use, occurrence of invasive alien species (particularly in island ecosystems), climate change, and pollution.

For **Outcome 2.1**, in accordance with GEF 7 Programming directions, the main entry point to address direct drivers of biodiversity loss will be “Improving Financial Sustainability, Effective Management, and Ecosystem Coverage of the Global Protected Area Estate.” The project will work to strengthen the capacity of existing Ramsar wetlands and assign improved protection status to the internationally important ecosystems that are currently unprotected.

Outcome 2.2 will test and ensure sustainability of innovative mechanisms for restoration of wetland and associated freshwater ecosystem elements and functions. In accordance with the GEF 7 programming directions, the project directly supports the national LDN target implementation with restoration of degraded landscapes to reverse negative impacts on biodiversity and maintain ecosystem services. The focus of the LD intervention and the high potential for wider replication of the restoration pilots reflects the GEF’s strategic shift towards landscape-wide impacts.

The project interventions within **Outcome 2.3** are to respond to one of the key GEF 7 programming priority, which is to develop policy and regulatory frameworks that provide incentives for biodiversity-positive resource use. The new mechanisms and regulations will ensure economic viability of bioresource use, at the same time preventing practices that degrade vulnerable biodiversity. The amended regulatory framework will be a prerequisite for changing fishery and waterfowl hunting practices to be more biodiversity-positive, with a focus of areas and spots with global biodiversity values and significant biodiversity impact. The project expects to develop policy and regulatory framework for biodiversity positive use of bioresources that will be applicable to the Western Dvina basin and beyond.

The project will contribute to the achievement of global and regional targets for the following GEF 7 core indicators for the BD and LD focal areas:

- 1.1 Newly created terrestrial protected areas
- 1.2 Terrestrial protected areas placed under improved management for conservation and sustainable use (hectares)”
- 3.4 Area of wetlands restored, and
- 4.1 Area of landscapes under improved management to benefit biodiversity.

Following the GEF 7 Programming Directions, the project will help the country intensify its national efforts towards achieving the Aichi Targets, including finding new ways to increase financing for biodiversity conservation and sustainable use and applying new approaches to eliminate threats to biodiversity.

1.a.5. Incremental/additional cost reasoning and expected contributions from the baseline, GEF TF, and co-financing

Baseline	GEF scenario and increment
<i>Component 1: Effective integrated management of freshwater resources within the Western Dvina Basin</i>	
<p>In the baseline scenario, there is no strategic framework for the Western Dvina Basin management allowing for coordinated planning and implementation of sustainable water resource management measures.</p> <p>Each of the Western Dvina / Daugava River basin countries pursues “business-as-usual” independent water resources management policies.</p> <p>None of the countries is ready to fully appreciate the international and national advantages that can be obtained from integrated cooperative management of water resources.</p>	<p>The joint Basin Commission, the bilateral cooperation agreement and the regional ministry-approved SAP as a road-map for its implementation will become the key institutional and strategic elements for the joint management in the shared river basin.</p> <p>With the Western Dvina Basin Management plan prepared, endorsed and implemented for the identified priority areas and hot spots, Belarus will adopt the existing best practices for transboundary waters and test innovative approaches towards conservation, sustainable management and restoration of valuable biodiversity and bioresources.</p> <p>Efficiency and water quality will be improved, balanced with the needs of economic centres and community development needs. Transboundary cooperation in the basin will be streamlined for jointly protecting and using the water resources of the transboundary basin of the Western Dvina / Daugava River in order to minimize the imminent and future negative impacts and threats.</p> <p>Baseline: USD 2,100,000 (state programmes Environment Protection and Belarus Forest: business-as-usual sectoral policies and practices that are not necessarily linked to the interconnected elements of the transboundary river basin and the most imminent threats and drivers of degradation of its biodiversity and ecosystems)</p> <p>Increment: GEF USD 1,700,000</p> <p>Co-financing: USD 7,400,000</p>
<i>Component 2: Conservation, restoration and sustainable management of wetlands and associated freshwater ecosystems in the Western Dvina Basin</i>	
Outcome 2.1: <i>Sustainable management of key internationally important wetland areas (Ramsar and/or national level PAs) in the Western Dvina River Basin</i>	

Belarus has declared 26 Ramsar sites with a total area of 778,903 hectares. Of these, about 30 thousand hectares of Ramsar sites do not have protection status, 11 Ramsar sites do not belong to the state management system, 17 Ramsar territories do not have management plans. The baseline scenario does not allow for effective protection and sustainable use of Ramsar wetlands.

Important lakes and wetlands of Belarus, including the Braslav Lakes and the Slyava, Yanka, Sinjscha, Boloto Mokh, Lebediny Mokh refuges have not been officially designated as Ramsar sites.

The project provides an essential increment towards improved management of key internationally important wetlands:

- develops management plans for Ramsar PAs covering above 100,000 ha;
- establishes management units for ca. 18,200 ha of wetland PAs;
- ensures that all Ramsar sites have national PA status;
- declares new Ramsar sites (the Braslav Lakes and the Slyava, Yanka, Sinjscha, Boloto Mokh, Lebediny Mokh refuges).

Ramsar PAs are presented with enhanced opportunities for diversification of finance flows, and broader private sector involvement associated with sustainable use of bioresources and ecotourism development

Baseline: USD 600,000 (state programme Environment Protection and baseline management costs for the pilot PAs)

Increment: GEF USD 1,000,000

Co-financing: USD 6,800,000

Outcome 2.2: *Key ecosystem characteristics and functions for sustainable management of wetlands and freshwater habitats restored for sustainable management*

Ramsar wetlands are facing biodiversity loss and ecosystem degradation threats

Most of the lakes in the Western Dvina basin suffer from ecosystem degradation due to disturbed water supply regimes and low quality, leading to diminishing aquatic resources and biodiversity. There is no positive record of rehabilitation of degraded lake ecosystems

Business-as-usual restoration scenario practiced for abandoned peat deposits does not fully provide for their use at fishing and spawning grounds.

A significant area of agricultural lands is subject to wind and water erosion resulting in decrease in crop yields on eroded lands.

Non-point agricultural nutrient pollution leads to deterioration of water quality, degradation of biodiversity and decrease in fish productivity

Most globally endangered waterfowl, spawning salmon, eels and other species are decreasing in number

Key functional elements for wetlands and associated freshwater ecosystems within the existing Ramsar PAs are restored to ensure continued compliance with the Ramsar criteria and the global BD value of the areas

The project demonstrates modern restoration techniques replicable for Belarus and beyond. Restored bioresources allow for sustainable management scenarios.

Peatland restoration cycle includes their use as fishing, spawning and nesting grounds (tested on 1000 ha)

Anti-erosion plantings created (reconstructed) on erosion-vulnerable lands (piloted on 1000 ha), accompanied by a monitoring system.

The project develops and tests technologies for prevention of non-point agricultural nutrient pollution (5000 ha)

The project provides for restoration of globally endangered waterfowl, spawning salmon, and eels in their principal habitats

Baseline: USD 1,822,000 (state programmes Environment Protection, Belarus Forest, Agro-Business Development: “spotted” restoration activities that are majorly focused on water protection forests)

Increment: GEF USD 544,800

Co-financing: USD 10,500,000

Outcome 2.3: *Regulatory framework for sustainable use of wetland bioresources improved and functional*

Amateur fishermen annually catch from 7,200 to 7,900 tons of fish, which is 7 times higher than the amount of fish seized by commercial fishing plus organized paid amateur fishing. At the same time, recreational fishing is practically unregulated and no fee is charged for it, although about 10% of the country's population participates (which is about 1 million people).

Over the past decades, the total commercial stock of fish has decreased by about 1/3 in Belarus water bodies. With the business-as usual scenario the downward trend will continue, as the fish resources depend on the rejuvenation of fish populations, and primarily on the state of their spawning grounds.

There are no laws nor regulations governing the fish stocking of natural water bodies, including alien carps

Spring hunting is carried out in places where waterfowl are concentrated during the spring. This negatively affects the success of duck breeding and the future hunting potential.

Invasive species cause significant damage to the species diversity of natural reservoirs and watercourses (of the 65 species of fish that live in the reservoirs of Belarus, 18 species are not native, and 1 out of 3 species of crayfish are not native).

The sustainability of the use of fish stocks will be ensured via a regulatory framework aimed at the sustainable development of amateur and commercial fisheries; introducing fees for use fish resources by both water users and amateur fishermen.

Technologies aimed at increasing fish stocks and natural reproduction of fish populations are to be developed and tested. These are to restore spawning grounds by improving the hydrological regime and water quality over an area of 8,000 hectares; the experience gained will be replicated over an area of about 20,000 hectares.

Norms and regulations for fish stocking will provide for sustainable functioning of aquatic ecosystems, their productivity and biodiversity.

Principle areas of waterfowl concentration during the spring migration over an area of 5,000 hectares will be defined and stably protected. This will increase the success of duck breeding and the hunting potential of wetlands.

Damage to lake and river ecosystems is to be minimized through the development and implementation of action plans to prevent the spread of harmful alien species American Mink (*Neovison vison*), Spinycheek Crayfish (*Orcanectes limosus*), Amur Sleeper (*Perccottus glehni*), and brown bullhead (*Ictalurus nebulosus*)

Baseline: USD 200,000 (state programmes Environment Protection and Agro-business development: business-as-usual activities aimed to ensure reproduction of commercial bioresources without linking it to ecosystem-level effects or to other sectors active in the river basin)

Increment: GEF USD 400,000

Co-financing: USD 1,013,000

1.a.6. Global environmental benefits

The proposed project will geographically focus on a transboundary river basin that faces a number of serious threats to the quality of water resources and biodiversity of valuable ecosystems that it hosts. The project will provide positive steps towards delivering the following global environmental benefits in the focal area of international waters:

- provide long-term management mechanisms and a strategic framework for reduction of threats to the transboundary water basin;
- restore and sustain key freshwater ecosystem goods and services in the river basin; and
- enhance water security in freshwater ecosystems of the Western Dvina/Daugava transboundary basin through strengthened national cooperation.

The project will accrue global environmental benefits in a number of ways, first of all by fostering cooperation among countries sharing transboundary water systems, i.e. the overarching goal of the International Waters focal area, and by striving to reverse the degradation trends (i) of the quality of transboundary water resources, caused mainly by pollution from land based activities including toxic chemicals, and (ii) of physical habitats such as wetlands, mangroves, estuaries, as a result of inadequate land and water management, and of excessive water withdrawals.

Within its Component 2, the project will focus on conservation, restoration and sustainable management of wetlands and associated freshwater ecosystems in the Western Dvina Basin, delivering the following global environment benefits which are focused on BD and LD (where it concerns restoration):

- enhance the protection/recognition status for over 100,000 of Ramsar wetlands;
- ensure sustainable management of the national PA estate covering 179,500 ha;
- ensure restoration of key ecosystem characteristics and functions for sustainable management of wetlands and freshwater habitats on 20,000 ha;
- reduce threats to endangered species, such as the Eurasian Otter (*Lutra Lutra*), the common Pochard (*Aythya ferina*), the European Eel (*Anguilla Anguilla*), and endangered sturgeons and salmon, including enabling an environment for successful natural migration (of endangered waterfowl, and anadromous aquatic life);
- restore and sustain key freshwater ecosystem goods and services in the river basin; and
- control invasive species populations within the Western Dvina River Basin.

The Project will contribute to the implementation of the following Aichi targets:

Target 6. By 2020, the regulation and fishing of all stocks of fish and invertebrate and aquatic plants is to be carried out sustainably, legally and using ecosystem approaches to avoid over-exploitation of fish resources, measures are to be taken for the restoration of all depleted species, to make sure that fisheries do not have a significant adverse effect on threatened species and vulnerable ecosystems, and that the impact of commercial fisheries on living stocks, species and ecosystems does not exceed ecologically safe fishing.

Target 12. By 2020, the extinction of known threatened species has been prevented and the number of species that are the most vulnerable are protected.

Target 14. By 2020, ecosystems that provide essential services, including water-related services, and which promote health, livelihood and well-being are respected and protected, while taking into account the needs of women, indigenous and local communities and the poor and vulnerable.

Target 15. By 2020, the resilience of ecosystems will have been increased and the contribution of biodiversity to carbon accumulation will be increased due to conservation and restoration of nature, including restoration of at least 15% of degraded ecosystems. This will help mitigate the effects of climate change and adapt to the effects and combat desertification.

The Project will support the achievement of SDG 5.5 (empowerment of women); 6.3, 6.5 and 6.6 (reduction of water pollution, strengthening transboundary cooperation, ensuring the protection of aquatic ecosystems); 13.1 (strengthening resilience to climate change); 15.1, 15.3, 15.5 (restoring freshwater ecosystems, combating land degradation, stopping the loss of biodiversity).

1.a.7. Innovation, sustainability, replication and potential for scaling up

Innovation:

The Project is aimed at the conservation and sustainable use of freshwater ecosystems of international importance, which includes the development of innovative approaches to improve the quality of surface water, as well as the restoration and maintenance of the biological diversity of lake and river ecosystems. The following innovative approaches will be developed and tested in the Project for the first time:

- a technology to reduce non-point pollution of aquatic ecosystems from agricultural and peat development;
- degraded lake restoration technology; and,
- a technology for restoration and creation of artificial spawning grounds in order to enhance fish stocks, including clearing the shoreline of the lakes, using summer polders and areas formerly used for peat production.

The project plans for the development of a methodology for determining the state of open waters in lake, river, wetland and forest ecosystems. Based on this methodology, the growth dynamics of lake ecosystems in the Vitebsk region will be assessed. This assessment can be replicated for similar ecosystems countrywide.

The Project will use innovative methodologies for identification, typology and assessment of surface and groundwater bodies using agreed upon assessment systems, taking into account the best practices of European Union countries. The Transboundary Diagnostic Analysis, which will be carried out within the framework of the Project, includes a comprehensive inter-sectoral analysis of water resources (surface and groundwater), taking into account the prospects for their protection and use. This approach is consistent with the priorities established in the GEF MB-6 Strategy for Joint Management of Surface and Groundwaters.

Replication:

The proposed project will demonstrate how to improve the protection and sustainable use of freshwater and wetland ecosystems under increasing man-made pressures. This unique experience will be applicable to similar freshwater bodies and watercourses in temperate climate zones.

Project activities and results will be mainstreamed through the national Strategy for the Implementation of the Ramsar Convention for 2021-2030 and the Action Plan for the implementation of the Ramsar Convention for the period 2021-2025, and serve as the basis for national programs and plans of sectoral ministries and agencies, along with management plans of the protected areas. METT assessment of the effectiveness of the Ramsar sites management will lead to identification of best practices in the management of Ramsar sites and extending them to other territories.

The following specific project activities have a significant replication potential within the managed freshwater and wetland areas:

- restoration of lake ecosystems and spawning grounds on the sites managed for commercial fishing;
- converting former peat producing sites to spawning and feeding grounds for phytophilic fish species, waterfowl residence and nesting; and
- restoration and stabilization of waterfowl populations.

The project will develop and test technologies aimed at reducing the pollution of aquatic ecosystems by dispersed sources from agricultural lands and peat development, that will be further integrated into RBMPs for the Dnipro, Pripyat and Neman Rivers.

Sustainability:

The sustainability of key management solutions for the freshwater resources for the Western Dvina Basin will be ensured via their integration into the River Basin Management Plan that will be endorsed by the interministerial Basin Council and implemented at the individual district level in Belarus during several 6-year phases. This has become a standard practice in the country and its viability has been proven at the Dnipro and Pripyat river basins.

The wetland management solutions will be integrated into the updated Strategy for the implementation of the Ramsar Convention for 2021–2030 and the Action Plan for the implementation of the Ramsar Convention for the period 2021–2025, along with other national strategies and government programs and conservation and sustainable use of biological diversity. This will assure sustainable funding for the project endeavours targeted at wetland conservation and sustainable use.

The proposed project interventions will be incremental to the baseline freshwater and wetland management scenarios in the country, and will be implemented in collaboration and synergy with the sectoral authorities and institutions. The project intervention strategy will ensure early buy-in and ownership at the level of individual PA management authorities and key stakeholders. These interventions include development and implementation of management plans for the Ramsar territories, creation of customized management units for the lower level PAs, development of an ecotourism infrastructure and the involvement of private businesses in PA management.

The sustainability of recreational fisheries in Belarus will be increased through the development and adoption of regulatory and technical documents supported by the proposed project, as well as by changing the approaches to managing recreational fishing. It is anticipated that the implementation of certain development concepts for commercial and recreational fishing, including the establishment of fees for the use of fish resources by amateur fishermen, will provide additional revenue to the baseline income. These revenues will be used to enhance fish stocks and improve their protection and use.

The sustainability of the project results and their widespread implementation will be enhanced through interaction with all interested countries and organizations. These interactions will continue the protection and rational use of water resources in the Western Dvina River Basin under the UNECE Water Convention and the EU water policy.

Effective public involvement is seen as a significant aspect of sustainable water management. Participation in the project by key stakeholders, including the general public, will improve the dissemination of vital water related issues. The future project team will consult with relevant ministries and organizations involved in addressing issues related to freshwater and wetland resources and management.

[1] M.Kalinin, A.Pakhomov. State of water resources in the Western Dvina and Neman Basins in Belarus. Minsk, 2008

[2] As above

[3] Protected areas in Belarus are either specified as such (including the land category change) or are declared by assigning a special use regime, limitations and bans on certain activities, through the land use licenses.

[4] The management plans for Ramsar wetlands will be appraised by the Ministry of Natural Resources and Environment and endorsed by the district administrations. The Ministry of Environment and its district branches will control the implementation of management plans

[5] The open water area is one of the indicators for the SDG 6; the trends in ratio of open water and aquatic vegetation are monitored for water resources availability forecasting. The forecasts are of special relevance in the changing climate (low snow cover in winter, summer draughts) and for sustainable development of agriculture and fisheries

[6] Fish stock release will require a biological justification that is subject to an EIA. Once the ban on alien species release is in place, the non-native stock release justification will not pass the EIA

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.



2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

Indicative information on the key stakeholders' roles and the bases for their engagement are presented below.

Stakeholders	Responsibility and role in the project
<i>Latvia</i>	
Ministry of Environmental Protection and Regional Development of the Republic of Latvia	National responsible agency for the development and implementation of the Daugava river basin management plan. Will be responsible for the coordination of the next cycle Daugava RBMP with the Western Dvina RBMP in Belarus and other results of the project. The Ministry has officially confirmed its support to the project and role the project will have in the enhancement of bilateral cooperation in the shared river basin, specifically for the negotiations of the inter-ministerial bilateral cooperation agreement for the protection and sustainable use of the shared water resources.

Latvian Environment, Geology and Meteorology Centre	Will use the Western Dvina TDA and RBMP data, share hydrogeological and hydrological information and experience with the relevant Belarusian institutions, where it concerns surface and ground water bodies' delineation in the context of transboundary aquifers. The data exchange will help improvement of modelling exercises for the shared basin.
<i>International organizations</i>	
Clear Baltic Coalition	<p>The Coalition Clean Baltic (CCB) is a non-profit association of 22 organizations in countries on, and near, the Baltic Sea, including Belarus and Latvia. It has been working on environmental issue related to the Baltic Sea since 1990. River Basin and Wastewater Management is one of three priority work areas for CCB. As such, they will be supportive of the project.</p> <p>An effort will be made to establish cooperative links with CCB since it has undertaken similar project cooperative efforts in environmental protection, nature conservation and sustainable development. As an example, CCB has already linked similar projects in Belarus with support from environmental groups in Sweden.</p>
<i>Belarus</i>	
Ministry of Natural Resources and Environmental Protection (MNREP) and its district branches	The Ministry will be engaged in the project as the national implementing agency (NIM Implementing Partner) and chair the project Steering Committee. The Ministry is the key sectoral partner for the national-level project components and the main developer for the bilateral outcomes and activities with Latvia (project Component 1). Ensures regular monitoring of project progress and, with UNDP, takes measures to address problems in implementation. Monitors implementation of activities aimed at sustainable use of bioresources in the Western Dvina River Basin. Takes the lead on project activities aimed at ensuring the improved management financial sustainability of protected areas, as well as other key interventions for Outcomes 2.1, 2.2 and 2.3 . Ensures co-financing where it concerns conservation and sustainable use of biological diversity associated with wetlands and development of the protected area system.

<p>Ministry of Forestry and its district branches (Belgosles, Forestries)</p>	<p>Participates in project development and planning where it concerns sustainable use of anti-erosion forests, water protection forests, conservation of habitats within the forest lands, game species. Will ensure sustainability and replication for water protection forestry measures. Will be engaged in development and implementation of hunting regulations under the project. Will ensure ownership and sustainability for relevant project outcomes through their incorporation into forestry management plans. Co-financing by the Ministry of Forestry will be provided through the Belarus Forest Programme (implementation of sustainable forestry principles in the forests that protect water resources, sustainable hunting of waterfowl).</p>
<p>Ministry of Agriculture and Food</p>	<p>Participates in project development and planning where it concerns protection and sustainable use of fish stock (Outcome 2.3). Implements fishery regulations and will be actively engaged in development of recreational fishing concept development. Provides project co-financing for the Outcome 2.3 where it concerns fish stocking with aboriginal species, restoration and maintenance of spawning grounds and other activities related to the sustainable use of fish resources.</p>
<p>Ministry of Energy</p>	<p>The Ministry oversees the construction of Biešankovičy hydroelectric power station on Western Dvina River. An agreement was reached with the Ministry of Energy on the implementation of special measures during the construction of the dam (providing for construction of a fish ladder), which allows for the possibility of fish migration, as well as arrangement of special spawning grounds on the river. The Comprehensive Stakeholder Engagement Plan for the project will include a mechanism for interaction with the construction process, and a fish ladder work schedule will be developed to ensure fish migration, and an assessment will be made of its performance. The Stakeholder Engagement Plan will also describe other actions required by the project and the Ministry of Energy to coordinate the parallel co-financing, that includes construction of a fish ladder, purification plants, creating conditions for fish spawning and other fish conservation activities.</p>
<p>Vitebsk district executive committee</p>	<p>Participates in the development of the Western Dvina Basin Management Plan and its implementation through regional development plans. Provides project co-financing. Co-financing will be committed for the improvement of the quality of surface waters (construction and repairs of water purification plants, creation of recirculating water supply systems, etc.), conservation and sustainable use of biological and landscape diversity, development of the system of wetland PAs.</p>

National Academy of Sciences (Scientific and Practical Center – NPC – on Bioresources; Institute of Botany, etc)	Provides its substantial technical expertise and resources for the scientific assessments needed to implement project activities under all project components. Provides in-kind co-financing in the form of laboratory, equipment, and research facilities.
Project PA management authorities	Key partners for PA management improvement and financial sustainability (Outcomes 2.1 and 2.2). Participate in Ramsar site management plans development. Ensure community buy-in and relevant private sector engagement. Provide project in-kind co-financing.
Local communities	Local communities will be actively engaged in development and appraisal of the Western Dvina River Basin Management Plan and Ramsar sites management plans.
Private sector	The project will engage users of fishing and hunting grounds where project activities will be carried out, as well as tour operators in project areas. Krasny Bor hunting enterprise, which conducts a broad range of activities for the conservation of wild animal species and development of ecotourism, will provide co-financing for the restoration of spawning grounds, stocking of water bodies with native fish species, invasive species control, etc.
Vitebsk Oblast division of the Belarusian Hunting and Fishing Society	Co-financing for game conservation and sustainable use, planting of fish, restoration of spawning grounds
NGOs (“Ahova ptushak Batskaushchiny” – APB BirdLife Belarus, “Bagna”)	Community engagement, positive project image and public opinion, project impact monitoring. Co-financing activities for the development of ecotourism and sustainable regional development

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

Annex F: Overview of consultations with the project stakeholders

Name and type of institution	Date of consultation	Nature and outcomes of consultations
<i>Latvia</i>		

Ministry of Environmental Protection and Regional Development of the Republic of Latvia	Several e-mail and skype consultations between August 2019 and February 2020	Engagement in regional SAP and coordination of national RBMPs; baseline programs and parallel projects; cooperation and coordination mechanisms for the project. PIF input relevant to Latvia and bilateral cooperation. Project clearance for submission. Agreed on the official letter of support from the Ministry. As a result, the Ministry has officially confirmed its support to the project and role the project will have in the enhancement of bilateral cooperation in the shared river basin, specifically for the negotiations of the inter-ministerial bilateral cooperation agreement for the protection and sustainable use of the shared water resources.
Latvian Environment, Geology and Meteorology Centre	Several skype consultations between August 2019 and February 2020	Preliminary agreement on the use of the existing Daugava TDA and RBMP data and threat-problem analysis for the proposed project problem tree. Options and prerequisites for the use Western Dvina TDA and RBMP data for the update of the Daugava 5-year RBMP. Discussed content of the proposed project where it concerns surface and ground water bodies' delineation in the context of transboundary aquifers. Preliminary agreement on the data exchange for modelling.
International organizations		
Clear Baltic Coalition	November 13, 2019	Parallel projects in the field of relevance, possible cooperation, linkage and synergies.
Republic of Belarus		
Ministry of Natural Resources and Environmental Protection of the Republic of Belarus and its territorial bodies (Ministry of Natural Resources, Vitebsk Regional Committee of Natural Resources and Environmental Protection)	Regular meetings and phone calls between April 13 to November 1, 2019	Discussions and agreement on the content of the main project components. Cooperation with the Latvian counterparts on Component 1: feasibility of a regional TDA, parallel preparation of the national RBMPs, prospects for the bilateral cooperation agreement, SAP development as a road-map for the implementation of the bilateral agreement. Baseline and incremental support to the pilot protected areas, relevant project indicators. Detailed discussion of the role of the Ministry as a national implementing partner for the project, and its role as a Chair of the Project Steering Committee. Discussed proposed changes to the project implementation modality from UNDP CO full support to NIM. Engagement of key stakeholders (level of state executive authorities). On-going and pipeline baseline programmes. Preliminary agreement on co-financing.

<p>Ministry of Forestry and its subordinate organizations (Belgosles, floristries of Vitebsk State Forestry Production Association)</p>	<p>May 13, 2019</p> <p>Regular phone calls and meetings between May 13 to November 1, 2019</p>	<p>On-going and pipeline baseline programmes and financing of the project-related government policy measures associated with the protection and sustainable use of forests having protective effects of preventing erosion, water protection, water regulation; rare and typical habitats on forest lands, as well as wild animal species that are hunted. Discussed prospects for including proposals for their protection in forest management projects. Discussed the proposed project interventions associated with the protection of water protective forests.</p> <p>Discussed prospects of the project and implementation of proposals for the protection and sustainable use of hunted species (hunted wildlife management plans, identification of no-take zones for springtime migrating wetland birds). Options for including developments of the project into the forest management projects.</p> <p>Preliminary agreement on co-financing of the project.</p>
<p>Ministry of Agriculture and Food</p>	<p>June 25, 2019</p>	<p>Discussed possible GEF increment in erosion control on erosion-prone soils in the Western Dvina basin.</p> <p>Discussed future project activities aimed at the development and piloting of technologies to prevent pollution of waters by diffuse runoffs from agricultural lands in the main specially protected areas.</p> <p>Discussed preparation of the concept of recreational fishing, prospects of introduction of innovative fisheries and aquaculture practices in the fisheries management system of Belarus.</p> <p>Preliminary agreement on co-financing of the project.</p>
<p>Ministry of Energy</p>	<p>May 7, 2019</p>	<p>Discussed with the representatives of the Ministry and design organizations a possibility of integration of the Western Dvina RBMP in the design solutions for the construction of Biešankovičy hydroelectric power station, as well as consideration of biodiversity conservation during its construction (set up of fish pass entrances, water treatment facilities, appropriate conditions for fish spawning and other fish conservation measures)</p> <p>Preliminary agreement on co-financing of the project.</p>

Vitebsk District Executive Committee	June 4, 2019	<p>Discussed preparation of the Western Dvina RBMP and the role of the regional executive committee in implementing activities of the future Western Dvina RBMP and prospects of their inclusion in regional schemes and plans.</p> <p>Confirmed interest in the implementation of the project and readiness to organize and ensure operation of the Western Dvina River Basin Council.</p> <p>Preliminary agreement on co-financing of the project.</p>
PA management authorities (Braslaw Lakes national park, reserves “Koziansky”, “Osveisky”, “Selyava”, “Sinsha”)	<p>May 24, 2019</p> <p>Regular phone calls and meetings between May 25 to November 1, 2019</p>	<p>Development and implementation of the management plans for Ramsar sites and other protected areas, designation as Ramsar sites the following national parks: the Braslaw Lakes national park, reserves “Selyava”, “Yanka”, Sinsha, “Mokh swamp”, and “Lebediny Mokh”.</p> <p>Confirmed the list of priority actions under the management plans (Outcome 2). Defined co-financing for PA-related activities.</p>
Local communities located in the Western Dvina river basin: Vierchniadzvinsk District Council of Deputies	August 14-16, 2019	<p>Possible means of engagement in the preparation of the Western Dvina basin management plan, as well as management plans for Ramsar sites.</p> <p>Agreed a common stance on ensuring sustainable use of biological resources of the Ramsar site “Osveisky”, as well as partnerships between the public, private business and governmental organizations that make use of these resources (fishing, hunting, ecotourism).</p>
<p>Private sector:</p> <p>Hunting farm "Krasny Bor" Interservice LLC</p>	May 22, 2019	<p>Co-financing and participation in project activities (restoration of spawning habitats, pond stocking with native species of fish, regulation of the number of invasive species) in the rented fishing and hunting sites, as well as expanding the range of tourism services provided in the project sites of the region.</p> <p>Reviewed possibility of implementing project activities to restore the fish stocks at Lake Osveiskoe.</p>
<p>State-public associations:</p> <p>Viciebsk regional organization structure of the Republican State Public Association “Belarusian Society of Hunters and Fishermen”</p>	June 4, 2019	<p>Participation in co-financing and implementation of the project activities associated with the protection and sustainable use of hunted wildlife and stocking. Support provided and expressed interest in restoration of spawning habitats in the project water bodies. Reached an agreement on joint actions to restore and protect sturgeon and whitefish species, as well as European eel, in the water bodies of the region.</p>

Non-governmental environmental organizations (NGO “Akhova Ptushak Batskaushchyny”, NGO “Bagna”)	May 15, 2019 Regular phone calls between May and September 2019	Discussed participation of non-governmental organizations in the project. Reached an agreement on participation in the project of the NGO “Akhova Ptushak Batskaushchyny” to build in the public positive attitudes to the project and engage in monitoring the activities of the project. Reached an agreement on co-financing of the project activities associated with the regional partnership of local authorities and civil society under the parallel EU projects.
National Academy of Sciences of Belarus (Scientific and Practical Center for Bioresources; Institute of Experimental Botany, etc., Institute of Fisheries), Belarus State University	20 March, 2019 Regular meetings and phone calls between March and August 2019	Expert-level consultations to discuss planned project activities related to conservation and management of freshwater ecosystems in the Western Dvina river basin. Discussed threats and challenges of biodiversity conservation in the region and ways to address them. Discussed issues associated with project activities and monitoring of their outcomes.
Inter-ministerial Working Group for Cooperation with the Global Environment Facility chaired by the Minister of Natural Resources and Environmental Protection	August 15, 2018	At the meeting of the inter-ministerial working group, presented a project proposal, including its planned concept, objectives, goals and activities. Reviewed project for its compliance with the national priorities and international obligations and commitments of the country under the multilateral environmental agreements. The inter-ministerial working group decided to approve the project and recommended to design the project’s PIF.
National Academy of Sciences of Belarus (Scientific and Practical Center for Bioresources; Institute of Fisheries), Belarus State University, Central Research Institute for Integrated Use of Water Resources	Working meeting on 10 April, 2018 Regular meetings and phone calls between April 11 to July 10, 2018	At the meeting of lead experts in conservation and sustainable use of biodiversity held at the National Academy of Sciences of Belarus, presented the project concept. Followed by expert-level consultations on the development of the project problem tree and the detalization of the GEF intervention.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

Measures to ensure equal opportunities for men and women have been an integral part of the social policy of the Belarusian state. Belarus ratified a number of international documents on gender equality. Belarus ranked 28th among the 149 countries that participated in the WEF Global Gender Gap Report 2018.

At the same time, social and political life in Belarus lacks influential women. In Belarus, a woman never served as a chair of regional executive committee, the highest executive position of one of the six administrative regions in the country. Patriarchal thinking dominates social system in which male remains the primary authority figure central to social organisation and the central role of political leadership. The majority of female entrepreneurship in Belarus mainly develops in the form of small companies in retail and wholesale trade, catering, educational, and professional services. One of the causes of selective business or political representation of women hides in patriarchal mentality of many Belarusians.

International rankings and organisations recognise that Belarus has made considerable progress in aligning social status of men and women. However, regardless that women in Belarus can occupy high business and political posts, such practise is not widespread. In the rural setting where the proposed project will be implemented, Belarusian society still remains full of gender stereotypes.

During the project PPG stage, an outreach and communication strategy will be developed for the full-sized project to ensure appropriate involvement of all relevant social groups, detail their involvement in the project and take into account basic gender equality principles. Key indicators for gender equality considerations and involvement of ethnic/religious minorities and vulnerable groups will be their active participation during development of the project such as, the percentage of women present at national stakeholders meetings, the number of ethnic/religious minorities involved in project activities, etc. Project output products will consider gender mainstreaming and inclusion and representation of all ethnic and religious groups found in the region during implementation. In line with the Results Architecture for GEF-7, the project will report on direct project beneficiaries disaggregated by gender, as a co-benefit of the GEF investment. The preliminary assessment is that at least 15,000 people (of whom 7,000 are women) derive direct benefits from implementation of targeted measures adopted within the Western Dvina River Basin Management Plan (RBMP) and specifically those living in the vicinity of freshwater habitats that will receive improved protection/management status, which can be easily verified through a dedicated survey. The benefits surveyed will be classified into groups (environmental, health, and economic). A more comprehensive assessment and a corresponding description of the methodology will be available at the PPG stage

The FSP management planning will ensure the participation of all social groups and detailing their participation in the project based on the principles of gender equality.

The main directions for ensuring gender equality in the project will be:

- (I) gender considerations for the project Steering Committee, the national Western Dvina Advisory Council in Belarus and the joint Western Dvina/Daugava Basin Commission;
- (II) gender considerations for workshops, trainings, etc;
- (III) gender considerations for national expertise, specifically the national regulations development;
- (IV) ensure project-born benefits for women: 50% of women involved in the sustainable use of natural resources are expected to get direct benefits from such participation;
- (V) gender considerations in all strategic documents developed by the Project.

By CEO endorsement, as a result of a thorough gender analysis and as recommended in the pre-SESP, a gender strategy will have been produced as one of the key PPG products.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? TBD

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

TBD

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

The private sector engagement is planned for the entire project cycle. Examples of private sector participants include users of fishing and hunting grounds as well as tour operators who provide services in organizing domestic and inbound tourism.

It is planned that work will be carried out on setting up fish breeding grounds, introducing sturgeon, whitefish, and eel into reservoirs in cooperation with users of fishing grounds. These efforts will increase the productivity of fishing grounds, improve the quality of services for amateur anglers and ultimately improve their economic performance.

Users of hunting grounds will be involved in the process of preserving wetland bird species (ensuring desirable breeding conditions, restoring waterfowl habitats), which will ultimately increase the productivity of hunting grounds.

Tour operators working within the project areas will contribute to the increase of the flow of tourists who will be attracted by the development of infrastructures in the Ramsar territories. The specific mechanisms for private sector engagement will be explored and defined during the Project PPG stage.

5. Risks

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

While the detailed risk log for the project will be elaborated during the PPG stage, the following key risks are most likely to be confirmed for the project:

Risk	Level	Response, Management and Mitigation
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<p>The project may appear too ambitious compared to the resources and timeframe available</p>	<p>M</p>	<p>At the project concept stage, the scale of the proposed activities seems comparable with the amount of GEF resources available and the size of co-funding. The PPG phase design will include a thorough analysis of cost-effectiveness, and confirmation of co-financing commitments. At the implementation stage, the needs for adaptive management will be identified as early as possible, adjustments to the project strategy will be justified and submitted for the required level of approval.</p>
<p>The sustainability and synergetic effect of various project impacts may be hampered by the sectoral nature of decision-making and institutional set-up at the national level, as well as by the lack of sustained political support for joint transboundary efforts in the Western Dvina River Basin</p>	<p>M</p>	<p>Early outreach, engagement, buy-in and stakeholder ownership will all be the response measures for this risk.</p> <p>For the transboundary cooperation, already at the project concept stage the mechanisms for synergies with the Latvian national and donor-funded efforts have been identified and will be engaged during the project implementation stage.</p>
<p>Changes in the regulatory legal acts regarding the protection and sustainable use of freshwater ecosystems may not be endorsed given the limited project timeframe</p>	<p>L</p>	<p>This threat is assessed as low, given the close connection of the project with national programs and strategies in the field of conservation and sustainable use of biological diversity. To further reduce the risk, early engagement and buy-in from the relevant governmental stakeholders will be ensured, and public information and outreach will be ensured from the early stages of regulatory reforms.</p>
<p>Lack of support by the local communities, the general public and relevant sectoral stakeholders of the amateur fisheries regulations</p>	<p>M</p>	<p>This risk will be reduced and minimized via early consultations, inclusion of stakeholder representatives in working groups for the relevant project activities.</p>
<p>Spawning restoration and habitat improvement efforts may not be supported by the local community members and tenants of fishing grounds</p>	<p>M</p>	<p>The project will raise awareness of the fact that the restoration of spawning grounds and protection of habitats aims to improve water quality and ecosystem services, leading to increased fish productivity. That means direct benefits to local community and tenants of fishing grounds and financial viability of sustaining the improved conditions.</p>
<p>Efforts to restore populations of globally threatened animal and plant species will not have a positive effect. There are external risks for migratory fauna.</p>	<p>L</p>	<p>Most of the globally threatened species for which measures are planned to be implemented are inhabitants of the country's inland waters, and external risks here are minimal. However, minimal risks remain for migratory bird species associated with the degradation of their wintering grounds in Africa, and therefore the consequences of possible negative changes will be regularly monitored.</p>

The project impact can be affected by the climate change. Specifically, summer droughts and related climate change-induced impacts on the hydrological regime of aquatic ecosystems will not allow for sustainable wetland restoration and management. The increase in air temperature will result in increased eutrophication.

M

The climate change effects will be taken into account during the TDA and RBMP formulation.

For Belarus, the most urgent problem is summer droughts and the associated decrease in water levels in water bodies. As a result, the area of shallow water, which are spawning grounds of fish, decreases. The proposed project will develop and implement measures to improve the resilience of the most significant freshwater ecosystems to droughts. As part of the project, measures will be developed and implemented to optimize the hydrological regime of water bodies (renaturation and change in the use of wetlands in their catchment), which will allow maintaining a hydrological regime of key freshwater ecosystems that is close to natural. An increase in water temperature causes eutrophication and negative changes in fish resources as a result of oxygen deficiency. This effect is significantly enhanced by anthropogenic eutrophication. The project plans to implement measures to reduce the effect of eutrophication through demonstration of engineering solutions for increased flow and better sedimentation.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

As a sole recipient of the GEF grant, Belarus will operate the project according to the UNDP NIM implementation modality (NIM), with the Ministry of Natural Resources and Environmental Protection of Belarus (MNREP) as the Implementing Partner^[1], in line with the Standard Basic Assistance Agreement (SBAA) between the Government of the Republic of Belarus and UNDP. The MNREP acting as the Implementing Partner (executing entity) for this project will be responsible for overall coordination of project implementation, efficient use of project resources and achievement of all the planned project results. The Implementing Partner will closely cooperate with UNDP to ensure successful implementation of all project activities and achievement of all the objectives and tasks. The UNDP Office in the Republic of Belarus will be responsible for monitoring the progress of the project, timely reporting and evaluation, budget management and organizing the preparation of mandatory and possible additional reviews and assessments, as required.

The project Component 1 will be implemented in close synergy with the parallel transboundary activities in Latvia, mostly related to the preparation of the next 6-year cycle Daugava management plan. The project will contribute to the building of a joint (Belarus-Latvia) understanding of the ecological status of transboundary water bodies and the impact of point and diffuse sources of pollution while addressing monitoring and information exchange improvements. It will promote transboundary cooperation both at the technical and political level between the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus and the Ministry of Environmental Protection and Regional Development of the Republic of Latvia.

UNDP together with the NIM implementing partner will ensure coordination and synergies of the proposed project activities with the following parallel projects in Belarus:

The UNDP-GEF project “Sustainable management of forest and wetland ecosystems to achieve multi-purpose benefits” was launched in the Republic of Belarus in 2017. The project objective is to introduce environmentally-oriented and financially sustainable approaches to the management of forests and wetlands, which will make it possible to obtain benefits in the conservation of globally significant biodiversity, climate and land use. The project includes 3 components: improving the institutional, financial and operational sustainability of forest and wetland protected areas, which are key to the conservation of species under threat of global extinction; sustainable management of forest and wetland ecosystems of high conservation value outside PAs; increasing the experience and knowledge in applying innovative approaches to habitat restoration and eliminating major threats to species that are disappearing on a the global level.

Both projects are aimed at preserving globally significant diversity based on the ecosystem approach, as well as enhancing institutional, financial and operational sustainability of protected areas. However, while the Wetlands project geographically focuses on “forest wetlands” and peatlands, the proposed project is aimed at the conservation and sustainable use of wetlands associated with the aquatic ecosystems. In addition, if the Wetlands project was aimed at solving environmental problems on the country level, this project is built on a regional and transboundary basin level, based on the development of a management plan for the Western Dvina Basin and the implementation of priority measures of the management plan Ramsar territories.

Both projects complement and reinforce each other, since the preservation of aquatic ecosystems is impossible without the conservation of wetlands and forests, and vice versa, the conservation of wetlands is impossible without maintaining the level of groundwater and surface water. Within the framework of the Wetlands project, measures are planned to ensure the institutional and financial sustainability of key PAs in the Polesye region in the south of the country, while the proposed project will achieve the synergetic effects in the Western Dvina basin in the north of the country. Both projects envisage the improvement of environmental legislation aimed at preserving globally endangered species and their habitats, developing a regulatory framework for biodiversity conservation, but in this project there is a bias in the development of regulatory framework for conservation and sustainable use of bioresources (fish stocks).

Both projects envisage active measures for the restoration of the wetland habitats, but if in the Wetlands project they were aimed at ecological rehabilitation of ineffective peatlands and preventing overgrowth of open bogs, while in this project they are aimed at restoring the hydrological regime of lakes, spawning grounds, preventing encroaching non-point pollution.

It should be emphasized that unlike the previous GEF projects aimed mainly at restoring and preserving wetland, peatland and forest ecosystems, this project is aimed at preserving wetlands and associated natural water bodies and watercourses, which allows, based on international experience, to begin solving the persistent issues in the field of conservation and sustainable use and biological diversity of freshwater ecosystems.

In addition, over the past decade a number of projects aimed at developing RBMPs for other transboundary rivers of Belarus have been implemented and are underway: *projects of the Ministry of Natural Resources of the Republic of Belarus, which have developed river basin management plans for the Western Bug and Pripyat, EU project for EUWI + water initiative "Protecting the environment of international river basins" (2018-2020), under which it is planned to improve the management plan for the Pripyat river basin, the UNDP / GEF project "Strengthening intergovernmental cooperation on joint management of surface water and groundwater in the transboundary basins of the rivers Bug and Neman" (2018-2021)*. The RBMP for Western Dvina will be developed using the methodology, experience and lessons learned from the Bug-Neman project. The coordinated methodological approaches will be applied to the parallel processes in the respective river basins. The implementation of RBMPs will be coordinated among these projects through the exchange of common experiences.

[1] Of the two countries cooperating in the project, Belarus is the only eligible recipient of the GEF funds. In the absence of a Basin Commission, there is no multilateral agency to act as an international implementing partner for the project, with full capacity and mandate to implement its two components (IW and BD). The Ministry of Natural Resources and Environmental Protection of Belarus is the leading governmental authority in the country responsible for multilateral cooperation in the Western Dvina (Daugava) basin and specifically for the development of the bilateral cooperation agreement with Latvia and the establishment of the joint Basin Commission; it also is the wetland resource management authority and oversees the protected areas in the basin.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

- National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD

- Others

Project activities correspond to the *National Strategy of Sustainable Socio-Economic Development of the Republic of Belarus until 2030* (NSSD-2030) as regards conservation of biodiversity and sustainable use of natural resources. The document defines a strategic goal in the conservation of the water resources of Belarus, which consists of improving the efficiency of the conservation and use of water resources and improving their quality to meet public needs and accommodate the impacts of potential climate change. According to NSSD-2030, Belarusian environmental policy priorities include improving the regulatory framework for the use and conservation of water resources in line with international practices, minimizing contamination of surface water bodies with wastewater, meltwater and rainwater, restoring disturbed aquatic ecosystems, assessing potential climate change impact on water resources, and effectively raising public environmental awareness. According to NSSD-2030, the index of the discharge of insufficiently purified wastewater to surface water bodies compared to 2015 must not exceed 50% by 2020, 30% by 2025, and by 2030 there must be no discharges of insufficiently purified wastewater.

The project activities fully correspond to the *National Strategy for the Conservation and Sustainable Use of Biological Diversity*, as revised in 2016. Project activities aim to address the objectives of the National Strategy regarding the conservation of aquatic ecosystems and their components, in particular, Objective 3 - ensure sustainable use of wildlife resources, including fish and game resources; Objective 6 - ensure the development of river drainage basins management plans, implementation of activities to reduce surface water contamination; Objective 7 - minimize the negative impact of invasive alien wildlife species on the populations of native species and ecosystems; Objective 8 - ensure the conservation and sustainable use of pristine and relatively pristine ecosystems and natural areas subject to strict protection; Objective 10 - ensure maintenance of the genetic diversity of the natural flora and fauna; Objective 11 - ensure the restoration of 15 per cent of disturbed and ineffectively used ecosystems; Objective 12 - improve scholarly knowledge on the present-day state of biodiversity.

Besides, the project contributes to the implementation of the *National Strategy for the Development of the System of Protected Areas until January 1, 2030*. In particular, as part of the project it is planned to achieve the following objectives of the National Strategy:

- completion of the establishment of the national environmental network, including through the inventory taking of water bodies and strict protection of lakes with high biological diversity;
- increasing the area of PAs up to 8.8% of the area of the country by 2030 through the organization of the protection of freshwater ecosystems important for biodiversity;
- managing PAs of international importance based on management plans (completion of the development of management plans by all Ramsar sites);
- increasing the number of tourists visiting PAs through the development of tourist infrastructure and relevant information support;
- sustainable use of natural and other resources of PAs, including through the optimization of approaches to the organization of recreational and commercial fishing;

- performance by the Republic of Belarus of its commitments under international biodiversity and landscape conservation treaties, and environmental heritage treaties.

The planned project activities contribute to achieving the objectives included in the *National Wetlands Conservation Strategy*. The project aims to improve the sustainability of Ramsar sites management through the development and implementation of PA management plans, establishment of management unit, designating existing wetlands of international importance as PAs and establishment of new Ramsar sites at large lake and lake-and-bog complexes, including the Braslav Lakes National Park, Selyava, Yanka, Sinsha, Boloto Mokh refuges, and Lebediny Mokh wetland.

As part of the project it is planned to improve spawning and fattening conditions of native fish species at Ramsar sites by preventing water pollution, restoring hydrological regime and spawning grounds, and improving the financial sustainability of key Ramsar sites through the development of ecotourism and wise use of biological resources at the local level (recreational and commercial fishing).

The planned project activities coincide with the main objectives of the *Water Strategy of the Republic of Belarus until 2020*:

- achieving a good condition of surface waters by reducing entry of dispersed effluents into aquatic ecosystems;
- mitigating floods and droughts by restoring the hydrological regime;
- broader use of water bodies for recreation, including through the development of eco- and agro-tourism, establishment of a tourist infrastructure, sustainable use of biological resources at the local level;

The project will directly support implementation of the following national LDN targets:

- increased share of environment-stabilizing land types (natural meadows, forest land, woodlands and forest plantations, bogs and water bodies);
- increased area of ecologically rehabilitated depleted peat fields and disturbed peat bogs;
- reduced wind and water erosion.

Project Outcome 2.1 will set core wetland areas under increased protection, while Outcome 2.2 deals with the restoration of wetlands and associated freshwater ecosystems within existing Ramsar PAs, the restoration of disturbed peatlands as spawning grounds and waterfowl nesting spots (with an added effect of reduced peatland fire threat), and the demo for restoration of anti-erosion vegetation cover, to prevent soil erosion and organic runoff.

8. Knowledge Management

Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

One of the most significant knowledge management opportunities for the project will be in the development of the river basin management plans (RBMP) for the Western Dvina in Belarus and a new 6-year RBMP for Daugava in Latvia. Systems for assessing the ecological condition of water bodies differ in Belarus and Latvia. The implementation of Component 1 of the project, as regards the identification (delineation) of surface and underground water bodies, the assessment of the ecological condition (status) of surface water bodies, and chemical composition of underground water bodies with due regard for the experience of Latvia, will contribute to the improvement of the assessment system in Belarus and the design of adequate activities to improve the condition of water bodies. The knowledge enhancement process leading to the formulation of the TDA will ultimately produce a number of knowledge tools and communication / dissemination materials. The participation of Latvia in the process of the development of the Western Dvina River Basin Management Plan in the territory of Belarus will make it possible to considerably improve both the plan itself and the programme of activities under the plan with due regard for the transboundary issues of the river basin. Using project results as they impact the information contained in the Western Dvina River Basin Management Plan in the territory of Belarus (with due consideration for the transboundary nature of the Western Dvina /Daugava River) will make it possible to improve the Daugava River Basin Management Plan in the territory of Latvia during its finalization and implementation as part of the following stage of the six-year cycle, starting from 2022.

The knowledge products of the project will be widely shared in the region, including through the opportunities for dissemination provided by the IW:LEARN network where the project intends to fully participate. 1 % of the IW allocation will be used for IW learn activities, including the production of project experience notes and for the project to participate in regional/global level events with direct benefits for the envisioned basin management approach.

The project will learn from a number of past and parallel project of direct relevance, first of on those financed by the GEF in International Waters focal area, and the EU-funded project in the region.

UNDP / GEF project (2009-2013) “Program for the environmental rehabilitation of the Dnieper Basin”. Within the framework of this project, a methodology has been developed for assessing the ecological status of transboundary water bodies in the Dnieper Basin, as well as proposals for the harmonization and implementation of EU Directives into Belarusian legislation have been prepared. The relevant methodological approaches will be applied in the development of the Western Dvina Basin management plan in a transboundary context.

EU / UNDP project (2011-2013) “Assisting the development of a comprehensive framework for international environmental cooperation in the Republic of Belarus”. Within the framework of this project, 12 drafts of regulatory legal acts, technical regulatory legal acts in the field of integrated river basin management, monitoring and assessment of surface water quality in accordance with the requirements of EU Directives have been developed.

The regulatory provisions and technical regulations developed under this project will be applied in monitoring and assessing the quality of surface waters in accordance with the requirements of the EU Directives.

The UNECE and UNDP project “Water Management of the Neman River Basin with Consideration of Adaptation to Climate Change” (2012-2015). Within the framework of this project, a forecast of changes in natural surface runoff and its characteristics in the Neman River Basin was developed for the first time in the context of climate change, as well as taking into account the predicted characteristics of water use. Strategic directions of adaptation of the Neman River Basin to climate change, including a list of measures for adaptation to climate change in the Neman River Basin, were developed and published.

When developing the management plan for the Western Dvina Basin, the principles and approaches in the context of climate change used in the development of the Neman river basin management plan will be applied.

EU project of the EUWI Water Initiative “Protecting the Environment of International River Basins” (2012-2016), within which a draft management plan for the Dnieper River Basin has been developed; relevant elements of this plan will be of use for the Western Dvina RBMP.

The TRABANT international technical assistance project “International River Basin Network in the Eastern Baltic Sea” was aimed at promoting the improvement of the water resources of the Eastern Baltic Sea and the integration of spatial planning issues into existing river basin management plans. Implementation of the TRABANT project in 2007–2008 was focused on interregional cooperation between the countries of the European Union and also with countries not members of the EU (Russia and Belarus) in the p. Vuoksa, Narva, Western Dvina and Neman River Basins. The project was aimed at comparing, evaluating and testing methods, as well as tools that are used in solving problems

of analyzing the status of river basins and their management, taking into account primarily transboundary problems. The developed tools and methods will find their application in developing a transboundary aspect management plan for the Western Dvina Basin in the Republic of Latvia.

Since 2006, UNDP, together with the Government of Belarus, has implemented a series of projects in which considerable attention has been paid to the conservation and sustainable use of wetlands. UNDP-GEF projects in Polesie, “Peatlands-1”, and “Peatlands-2” were mainly aimed at restoring disturbed wetlands, creating protected areas on the basis of wetlands, and optimizing the hydrological regime of the main globally endangered species habitats. The activities of these projects allowed the restoration of wetlands on an area of 56 thousand hectares, as well as preservation of key habitats in their natural state.

The UNDP-GEF project “Integrating Biodiversity Conservation Issues into Territorial Planning Policies and Practices in Belarus” (the “Biodiversity” project) ended in 2013. As part of this project, a system for introducing biodiversity conservation requirements into land management, forest management and hunting arrangements was developed and tested: regulatory, legal and technical acts in the field of biodiversity conservation were prepared and approved. These included rules and procedures for the protection of animal and plant species included in the Red Book of the Republic of Belarus; rules for the isolation and protection of typical and rare biotopes; and the development and maintaining of an interactive database of passports and security obligations.

Within the framework of this project, the experience of the “Biodiversity” project will be used in terms of inventory and taking rare freshwater biotopes (rivers, lakes, streams) under protection and the integration of requirements for their protection in forest management and land management projects in the Vitebsk region.

From 2013 to 2017, the UNDP-EU project “*Clima-East*: conservation and sustainable management of peatlands in the Republic of Belarus to reduce carbon emissions and adaptation of wetland ecosystems to climate change” was implemented in Belarus in the territory of the Zvanets swamps and Sporovsky. The main objective of that project was to test the mechanism for the removal and sustainable use of excess tree-shrub and grass vegetation in lowland swamps to preserve biodiversity and demonstrate innovative ecosystem approaches to mitigate climate change effects on wetland ecosystems. The resulting plant biomass was used for energy, agricultural, construction and other purposes, and the income generated from the sale of products from wetland biomass was used to improve the financial sustainability of environmental institutions.

It is planned that this project will use the developed model for the restoration of habitats of globally threatened animal and plant species, while ensuring the sustainability of protected areas by generating additional income from the organization of ecotourism, recreation, and amateur and commercial fishing.

The UNDP-GEF project “Developing Integrated Approaches to Wetland Management Based on the Principle of Multipurpose Landscape Planning with the Purpose of Receiving Multilateral Environmental Benefits” (“PEATLAND 2”) was implemented in Belarus in 2014-2017. The objective of the project was to promote integrated approaches to the protection and sustainable use of peatlands in order to prevent land degradation, reduce greenhouse gas emissions and preserve biodiversity.

The project has developed and approved the Sustainable Peatland Use Strategy and the Peatland Distribution Scheme for use until 2030. The scheme identified the use of 8,533 thousand hectares peatlands out of a total area of 2,381.7 thousand hectares of peatlands or 11% of the territory of the republic with geological reserves of 4.0 billion tons of peat. An inventory of natural wetlands has been carried out, the boundaries, area and current state of the wetlands have been determined.

An integrated approach to managing wetlands, taking into account the principle of multipurpose benefits, will be applied when developing a management plan for the Western Dvina River Basin, and the pattern of distribution of peatlands by use until 2030 will be an integral part of the plan. In addition, as part of the development of the Peatlands-2 project, this project will define the boundaries of wetlands and plantations that perform water protection and water regulating functions. This will enable them to be included in territorial planning schemes.

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Ms. Larissa Lukina	Head of the International Cooperation Department, GEF Operational Focal Point in Belarus	Ministry of Natural Resources and Environment Protection of the Republic of Belarus	3/18/2020

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

